Community Data-Driven Decision Making in Education

A Facilitator's Manual

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Background of the Agreement between USAID and the Peace Corps

The Participating Agency Program Agreement (PAPA) creates a framework through which both agencies can design innovative education programs. With the support of USAID, the Peace Corps is strengthening the capacity of local educators to improve the quality of education for the youth of their communities. In nearly all countries in which Peace Corps works, a lack of reliable educational data makes decision making and policy formation a difficult task for local leaders, parents, and school officials.

Moreover, as countries intensify their efforts to decentralize their education systems, the need for increased knowledge and skills about data and decision making at the community level has also increased. These CD3M materials are designed to promote data driven decision making at the coammunity level in countries where Peace Corps works. The targeted beneficiaries are school administrators, teachers, PTA members, community leaders, and parents.

An additional aspect of the CD3M project is the integration of information and communication technology (ICT) into the data collection, analysis, and presentation process. The workshop is designed to develop community competency in using ICT tools for the collection, analysis, and presentation of data. Such tools include mobile phones, databases, geographic information systems (GIS), and education management information systems.

Acknowledgements

This manual is intended to assist the Peace Corps and USAID staff in training staff and Volunteers on methods for conducting data-driven decision-making regarding progress made with community counterparts across the globe. Peace Corps Evaluation Specialist Ellie Shirley coordinated manual development and training session designs in conjunction with Jane Gore, chief of the Monitoring, Reporting, and Evaluation Unit within the Peace Corps Office of Programming and Training Support (OPATS). Numerous experts provided valuable insight, feedback, and contributions to the manual.

Table of Contents

Introduction to the Facilitator Guide

This *Facilitator Guide* is to be used when training Volunteers, their counterparts, and supervisors to serve as workshop facilitators in Community Data-Driven Decision Making (CD3M) in education. It outlines the potential format, sessions, materials, objectives, time, sequence, and content of a CD3M workshop.

The guide is based on pilot workshops conducted in Guatemala (May 2011) and the Philippines (June 2011) with Volunteers, their counterparts and supervisors, and Peace Corps staff. Training session ideas are included, as well as data collection tools designed and piloted by the participants of those workshops. It is expected that facilitators will adapt this guide and materials to contextualize the workshops for optimal effectiveness at their posts.

Goals and Objectives of the CD3M Workshop

By the end of the workshop, participants will be able to:

- Communicate with colleagues and community members about the importance of making data-driven decisions to improve education
- Identify strengths and gaps in existing data
- Adapt CD3M data collection tools to local needs
- Collect needed data using an appropriate data collection method
- Identify basic data analysis principles
- Use ICT to collect/store/share data
- Share information from the workshop and implement plans from the workshop with colleagues and community members

What is Community Data-Driven Decision Making in Education?

Data-driven decision making is part of our everyday lives. For example, we examine our children's immunization charts in order to indicate what vaccinations they have received, as well as what vaccinations are missing and expired. We use information, like a chart, to make decisions about what to do and what not to do. Data-driven decision making in education follows the same type of process: We use student performance, household, and school assessment data to inform decisions about the planning and implementation of school improvement strategies.

Educators are expected to be aware that concrete evidence (known as data) plays a crucial role in the implementation, assessment, and revision of school improvement and instruction strategies. Furthermore, educators must be able to determine whether or not the assessment data is a valid and reliable measurement of what is being taught. They need to be data literate—having a good understanding of what reliable and valid data are and how they can be used to inform teaching. For this to occur, school leaders must actively encourage and help educators understand the importance or relating assessment data to the school environment and classroom instruction.

In the U.S., the need for better decision making in schools has risen alongside standards-based reform and performance accountability systems. No Child Left Behind legislation requires school districts to test students, collect performance data, and use those data to identify strengths and weaknesses in their educational system. Schools that do not show adequate yearly progress (AYP) are identified as needing improvement and subject to immediate interventions. Many educators complain about the punitive uses of data and worry about government intervention. Moreover, few educational leaders seem to be able to articulate how they might use data in a more positive or effective way to improve teaching and learning.

Meanwhile, in countries where the Peace Corps and USAID work, the use of student data systems to improve education and help students succeed is also a priority. Data systems are expected to play an expanded and integral role in improving instruction and school management, yet schools have rarely used data in decision making. Many countries are in the process of developing technology-based education management information systems (EMIS) in their ministries of education. EMIS stores and disseminates student-level data such as attendance, behavior, performance, gender, enrollment, and matriculation, to local schools. Unfortunately, the flow of this important information is often slow and the data incomplete. This has hindered the ability of local school administrators to make well informed educational decisions.

Nevertheless, efforts to facilitate the collection, analysis, and use of data to improve school outcomes continue to grow. The desire to empower local education stakeholders with the knowledge and skills to capture and use this information is a key component of the decentralized model of education followed by many Ministries of Education where the Peace Corps and USAID work.

The CD3M process follows the cycle below:
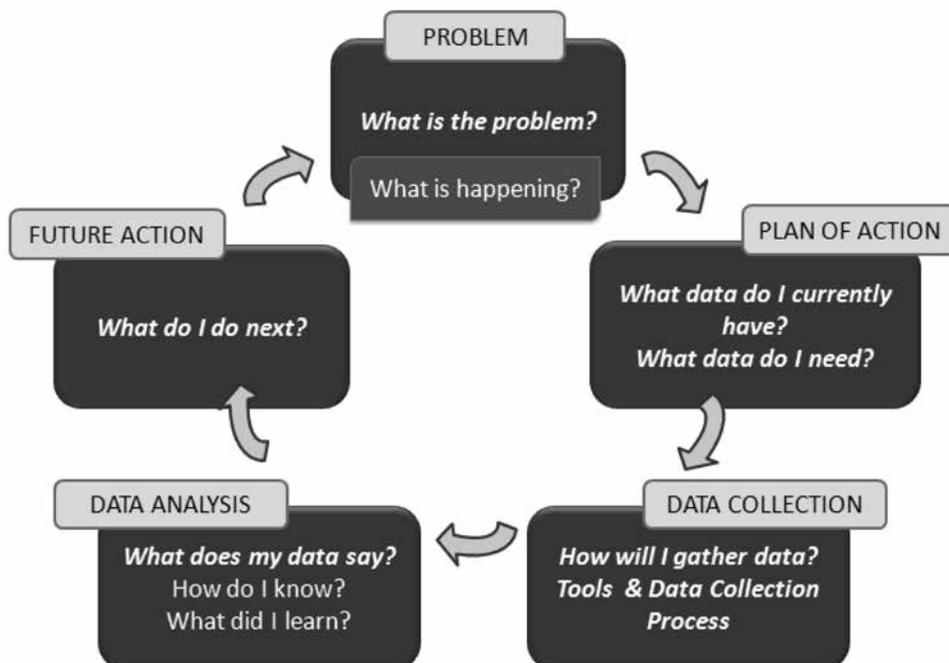
- Step 1: THE PROBLEM: We identify what is going on in the school community and a problem that community members want to address

- Step 2: PLAN OF ACTION: We ask ourselves what we already know and what data is available that we can analyze. We also need to articulate what is missing and what types of data we need to collect. This can be done by talking to teachers, students, and parents, and looking at student test scores. We need to identify the type of data that we will need to collect in order to answer the question. Multiple sources of data are necessary in order to better understand the problem of practice, as well as steps taken to address the problem. The data selected need to be appropriate for answering the problem being researched.

- Step 3: DATA COLLECTION: We need to map out a clear plan of how we will collect the new data. There are many ways to collect data. The collection process must have a concrete plan. How will the data be collected? Who will collect the data? How will the data be organized? How long will it take to collect the data? Are there data that already exist that I can draw from?

- Step 4: DATA ANALYSIS: This is where we look at the collected data and locate major themes, patterns, and insights. We identify what we are learning from the data

- Step 5: FUTURE ACTION: Finally, we will have to present the data and make decisions together as a community of how to answer the problem based on what the data says.

CD3M Facilitator Preparation

The manual and the accompanying session plans are intended as guides. Facilitators should anticipate and allow time to prepare and make final adjustments to session content and design. While the materials form the basis of the workshop, facilitators are encouraged to modify the order, time, examples, case studies, and materials to suit participants' needs.

While this manual provides a detailed outline of the design and content of the workshop, session facilitators are responsible for tailoring the content to suit country specific needs and resources. A team of at least two facilitators is preferable, at least one of whom should be familiar with the local culture and fluent in the local language, if possible. The facilitators should spend time prior to the workshop preparing the sessions and learning as much as possible about the training site and the participants. Using data from participant surveys and an application process in advance can help to adapt the workshop to the specific needs of the participants.

It is assumed that participants are familiar with and have developed a basic knowledge of education data but may need to develop or enhance skills in transferring this knowledge to others. Though some participants may not have access to computers or the Internet on a regular basis, it is likely that these will be relevant to, and available in, many posts.

The following flowchart can help one adapt the manual and prepare and conduct the training workshop modules:

1. • Needs Assessment & Planning

2. • CD3M Sessions Adaptation & Contextualization

3. • CD3M Workshop Preparation

4. • CD3M Facilitator's Roles & Responsibilities

5. • Conducting the CD3M Workshop

1 • Needs Assessment & Planning

Participant Assessment Prior to Organizing the Workshop

The assessment may focus on different aspects of the participants' work, including
- their relationships with their community and each other;
- he skills and knowledge they want to acquire or expand to be of better service to their community;
- the setting, including opportunities and obstacles the community faces; and
- ICT knowledge, comfort, and skill level.

Training Plan

Prior to conducting the workshop, the facilitator should outline a training plan to be reviewed by country staff and co- facilitators. This will help to ensure that all parties agree on the topics and objectives of the workshop. Information concerning the content and format of the workshop should also be available for participants to review beforehand, if possible.

Other items that the facilitators will need to do during the planning stage include the following (see color-coded steps 1–4 below):
- Select and contextualize relevant sessions.
- Create or modify the agenda.
- Design different session activities to account for a variety of learning styles.
- Consider the length of the day, any room changes, coffee and lunch breaks, and the intensity and sequence of modules.
- Build in flexibility and anticipate possible surprises on the first day of training.
- Identify the ICT tools and materials that are often used in the country context and promote their integration into the workshop. Software tools can be open-source and free. However, some software is proprietary, which means you have to get permission to use it and it may not allow participants to use all the features, depending on permissions.

2 • CD3M Sessions Adaptation & Contextualization

CD3M Session Grid

The following sessions are generic and will need to be contextualized and adjusted or taken out altogether depending on the time available, the participants' experience, and post-specific training needs.

There are 20 sessions overall: Sessions 1-3 introduce participants to CD3M. Sessions 4-15 are ordered according to the steps of the CD3M process cycle and should be followed. Sessions 16-19 can be conducted in any order. Session 20 is the final session. It is up to the facilitators to organize and include sessions that best meet the needs of the participants and the post. The sessions are divided based on the following categories:

INTRODUCTION TO CD3M SESSIONS
1. Welcome and Introductions
2. Evidence-Based Decision Making & Behavior Change
3. Introduction to Community Data-Driven Decision Making (CD3M)

SESSIONS ON THE CD3M PROCESS CYCLE
4. Developmental Evaluation (What is the problem?)
5. Quantitative Methods (What do we know? What's our plan of action to better understand the problem?)
6. Qualitative & Mixed Methods (What's our plan of action to better understand the problem?)
7. Student Learning Assessment Tools (What tools can we use to better understand the problem?)
8. Teaching Assessment Tools (What tools can we use to better understand the problem?)
9. Education Environment Assessment Tools (What tools can we use to better understand the problem?)
10. Quantitative Data Analysis (What does our data tell us about the problem?)
11. Qualitative and Mixed Methods Analysis (What does our data tell us about the problem?)
12. Accessible ICT Data Collection & Analysis Tools (Excel)
13. Data Sensitivities (What do we need to take into consideration to present our findings?)
14. Presenting Findings (How can we present our findings?)
15. Future Action (How can we act upon our findings for change and decision making?)

SUPPLEMENTAL CD3M SESSIONS
16. Mobile Device Assessment Tools 1
17. Mobile Device Assessment Tools 2
18. Gender Analysis Tools I
19. Professional Development Needs Assessment

WRAP-UP / ACTION PLAN SESSION
20. Action Planning & Closing Ceremony

Calendar Options for the CD3M Workshop

The selection and sequencing of the sessions in the manual should be based on participants' expressed needs and time allotments. Moreover, participants' experience working with statistics, databases, data collection, and analysis will affect the amount of time spent on these skills. Some participants may wish to spend more time working with Microsoft Excel and other software packages. In addition, there is no reason that concurrent sessions could not be held, provided there are two skilled facilitators or advanced participants who could ensure a session takes place. This is especially the case when you have participants with widely varied ICT skills levels. The participants could choose which of the sessions they believe would be most useful for their activities. The following calendars show options for workshops of varying length and focus. In addition, facilitators need to be prepared to work in a variety of situations, in some cases with little or no electronic technology. PowerPoint, laptops, and even whiteboards and markers may not be available in some communities. However, in other ICT available contexts, facilitators may want to integrate more technology components and provide more examples of how technology can be used for making decisions.

A Five-Day Workshop

A five-day workshop would allow participants to experience most, if not all, of the sessions. However, counterparts and supervisors are rarely able to get that much time away from their work. Volunteers also often have responsibilities that prevent them from attending a workshop of this length. Other considerations, such as travel time, safety and security, and cost will play a role in determining if a five-day workshop is a viable option. In some cases, it may be preferable to include some participants on some days but not on others.

Example of a Five-Day Calendar

Day 1	Day 2	Day 3	Day 4	Day 5
Welcome and Introduction	Quantitative Methods (What do we know? What's our plan of action to better understand the problem?)	Education Environment Assessment Tools (What tools can we use to better understand the problem?)	Data Sensitivities (What do we need to take into consideration to present our findings?)	Gender Analysis Tools
Evidence-Based Decision Making & Behavior Change	Qualitative & Mixed Methods (What do we know? What's our plan of action to better understand the problem?)	Quantitative Data Analysis (What does our data tell us about the problem?)	Findings (How can we present our findings?)	Professional Development Needs Assessment
Lunch	*Lunch*	*Lunch*	*Lunch*	*Lunch*
Introduction to Community Data-Driven Decision Making (CD3M)	Student Learning Assessment Tools (What tools can we use to better understand the problem?)	Qualitative and Mixed Methods Analysis (What does our data tell us about the problem?)	Future Action (How can we act upon our findings for change and decision making?)	Presentation of Action Plans Certificates Workshop Conclusion
Developmental Evaluation (What is the problem?)	Teaching Assessment Tools (What tools can we use to better understand the problem?)	Accessible ICT Data Collection & Analysis Tools (Excel)	Mobile Device Assessment Tools 1 & 2	

A Four-Day Workshop

A four-day workshop would allow participants to experience many of the sessions and also allow the facilitator and participants to tailor the workshop to their needs. As with the five-day workshop, it may be difficult for some counterparts and supervisors to take that much time away from their work, requiring some prioritizing of sessions. Travel time, safety and security, and cost will also play a role in determining if a four-day workshop is a viable option. In some cases, it may be preferable to include some participants on some days but not on others.

Example of a Four-Day Calendar

Day 1	*Day 2*	*Day 3*	*Day 4*
Welcome and Introduction	Quantitative Methods (What do we know? What's our plan of action to better understand the problem?)	Education Environment Assessment Tools (What tools can we use to better understand the problem?)	Findings (How can we present our findings?)
Evidence-Based Decision Making & Behavior Change	Qualitative & Mixed Methods (What's our plan of action to better understand the problem?	Quantitative Data Analysis (What does our data tell us about the problem?)	Future Action (How can we act upon our findings?)
Lunch	*Lunch*	*Lunch*	*Lunch*
Introduction to Community Data-Driven Decision Making (CD3M)	Student Learning Assessment Tools (What tools can we use to better understand the problem?)	Qualitative and Mixed Methods Analysis (What does our data tell us about the problem?)	ICT or Mobile Device Assessment Tools 1 & 2
Developmental Evaluation (What is the problem?)	Teaching Assessment Tools (What tools can we use to better understand the problem?)	Data Sensitivities (What do we need to take into consideration to present our findings?)	Presentation of Action Plans Certificates Workshop Conclusion

A Three-Day Workshop

A three-day workshop would allow participants to experience some of the sessions, especially in order to experience the CD3M process cycle and also allow the facilitator and participants to tailor the workshop to their needs. As with the 4- and 5-day workshop, counterparts and supervisors may not be able to get that much time away from work and considerable prioritizing of sessions will be required. Travel time, safety and security, and cost will also play a role in determining if a three-day workshop is a viable option. In some cases, it may be preferable to include some participants on some days but not on others.

Example of a Three-Day Calendar

Day 1	Day 2	Day 3
Welcome and Introduction	Qualitative & Mixed Methods (What do we know? What's our plan of action to better understand the problem?)	Quantitative Data Analysis (What does our data tell us about the problem?)
Introduction to Community Data-Driven Decision Making (CD3M)	Student Learning Assessment Tools (What tools can we use to better understand the problem?)	Qualitative and Mixed Methods Analysis (What does our data tell us about the problem?)
Lunch	Lunch	Lunch
Developmental Evaluation (What is the problem?)	Teaching Assessment Tools (What tools can we use to better understand the problem?)	Present our findings?) Findings (How can we present our findings?)
Quantitative Methods (What do we know? What's our plan of action to better understand the problem?)	Education Environment Assessment Tools (What tools can we use to better understand the problem?)	Action Planning Certificates Workshop Conclusion

Questions to Consider When Adapting the Workshop Design
Following are important questions facilitators may wish to consider during the design of the workshop:
- What do the participants want and need?
- What skills do they already have?
- What is the time frame for the workshop?
- What are the training priorities?
- How will this knowledge be applied?
- What ICT materials are available and applicable to the context?
- What will happen once the workshop is finished?

3 • CD3M Workshop Preparation

Using a Wikispace or Blog
An efficient way for the facilitator and participants to make contact prior to the workshop is through the creation of a wiki or blog to share pertinent background information. It is a good way to build enthusiasm for the workshop and allows participants and facilitators to share in the planning. During the workshop, these webpages will allow participants to review information presented during the sessions, obtain clean copies of slides and handouts, and reflect on the various activities. After the workshop has concluded, participants can easily keep in touch with one another via the webpage and share successes, challenges, and lessons learned. Finally, the facilitator or a member of the Peace Corps staff conduct follow-up monitoring of the impact of the workshop on the participants' work with their communities.

Detailed Sessions Plans and Handouts
Detailed session plans include all the information needed by facilitators to deliver a workshop on CD3M. However, as mentioned earlier, they serve only as a guide. The facilitator(s) should anticipate and allow time to prepare and make adjustments to session content and design. While these materials form the basis of the workshop, facilitators are encouraged to modify the order, time, examples, case studies, and materials to suit participants' needs. This is especially the case when taking technology availability into consideration. In an ICT-favorable environment, the facilitator should attempt to integrate technology into session activities and into case studies. In an environment where ICT is not prevalent, the facilitator should revise modules to include paper-based tools and simple technologies.

Materials
Presentation materials should be created prior to the training sessions and existing materials reviewed to see if they need to be edited or updated. Presentation software, laptops, electrical attachments, and other technology will need to be compatible with the technology and equipment available at post or wherever the training is held.

Content and Materials Preparation
This manual contains session plans, worksheets, handouts, case studies, and background reading. Facilitators will need to study the manual and decide which materials are appropriate for the expected participants and which materials may need to be adapted. If the sample session plans

are not appropriate to the context in which the participants work, more suitable sessions, using the sample as a template, can be developed. Some facilitators may wish to provide participants with extra handouts and worksheets so they will have copies to take back to their communities. A decision about the need to translate written materials should be made several weeks before the workshop to allow sufficient time for translation. Key materials must be selected, translated, and reproduced.

Translation Issues

Translation issues will depend on the language situation in the particular country. If all participants are unable to speak English well, the workshop should be conducted using translations in both languages when possible.

Large group presentations of new information or summaries of sessions tend to be more problematic for participants less confident about language. When translation is appropriate, there are some options facilitators may choose beyond simultaneous translation. Bilingual facilitators can provide translation as necessary. Having written materials translated in advance may make this option more viable. Simultaneous listing in English and the local language during brainstorming or other large group activities may also enhance the learning experience. Finally, participants who have advanced language proficiency can be paired with those lacking proficiency in the language of the workshop.

Needs Assessment and Evaluation Forms

The needs assessment, evaluation, and feedback forms should be created and photocopied prior to the workshop. These can also be placed on a wiki, blog, or other type webpage prior to the workshop.

Rewards

Candy or other similar incentives can be used to encourage and reward participation, serve as an icebreaker, or create a relaxed atmosphere when desired. Facilitators may want to consider including candy as a part of their materials for several sessions throughout the workshop.

Mobilizing Communities for Decision Making in Education

The CD3M materials consist of sessions targeting Volunteers, their counterparts, and supervisors. These groups will play an important role in bringing about change in their communities. Working at the community level is central to education decision making in countries where Volunteers serve. Workshop materials on CD3M can be integrated into any comprehensive national or local plan to improve the education of youth or used to examine specific educational issues identified by one's community.

4 • CD3M Facilitator's Roles & Responsibilities

Facilitator Instructions and Tips

Facilitators should have training in participatory teaching methods to use the CD3M materials effectively. Facilitators must create a participatory learning experience that allows participants to learn from each other through sharing, discussion, and feedback. One task of the facilitator is to create a suitable environment in which this can occur.

The following tips should prove helpful for CD3M facilitators.

1. This manual provides a practical training process that participants can replicate with their communities. As facilitators select and make modifications to the sessions to fit the participants' needs, they should keep this community context in mind and encourage participants to share ways to make the content, methods, and materials as accessible and appropriate as possible for those with whom they live and work.

2. Facilitators may want to designate a 15-minute time slot each day to offer the group "tips for conducting an effective CD3M workshop in your community." The first few minutes after lunch is a particularly good time for this activity—people tend to return from lunch on time so they don't miss any of the facilitators' secrets.

3. There will be many new terms and definitions that participants will be exposed to and expected to understand. Facilitators can create a "Word Wall"— a section of the training room where new words and short definitions are posted on strips of paper. This becomes the CD3M workshop glossary.

4. The CD3M training session plans and handouts are necessarily generic and need to be adapted to suit local post and participant needs. The manual offers several optional and alternative activities, but it is up to the facilitator to tailor activities to the needs of the group and within his or her time allotment.

5. In the design of the CD3M workshop, participants join together in pairs or small groups to practice the planning process by selecting a real community priority and designing a project around it. The more time participants have for hands-on practice, the richer their experience will be and the more confident they will feel in leading a similar process with community groups.

6. Since participants will be working together for considerable portions of the workshop, facilitators should observe the dynamics and ensure that all participants are sharing the work and supporting each other. The facilitator should vary activities with small groups, pair work from time to time with large group discussions, and offer mixed group activities. Also, the facilitator should bear in mind that the participants will work at different paces.

7. The room arrangement is particularly important in the CD3M workshop. If possible, the facilitator should select a large room that allows project teams to spread out and create a

comfortable work space. This also permits the facilitator to call the group together quickly to discuss an important question or insight that has emerged.

8. As with any multiple day workshops, it's a good idea to begin the morning with a warm-up exercise and close the afternoon with a summary and reflection on the day's work**.**

9. The CD3M workshop should close with some sort of celebration (for example, a special meal, and the award of certificates, speeches, and so forth). This final activity reinforces celebration and appreciation as essential components of community action.

Facilitator Tasks During the Workshop

Following are specific facilitator responsibilities during the implementation of the workshop:

- **Management**
  - Plan, organize, and run effective training sessions.

- **Mentoring**
  - Provide guidance and support to individual participants.

- **Intervention**
  - Help design strategies to assist participants' use of new competencies.

- **Planning**
  - Prepare participants for challenges of implementing goals.

- **Encouragement**
  - Support participants in meeting their learning objectives.

- **Change agents**
  - Challenge participants to think creatively.

Facilitator Capabilities

Facilitators should serve as resource persons assisting the participants to achieve their professional goals. Facilitators should be able to explain technical concepts and terms simply and keep participants thinking of potential uses for data in decision making. Facilitators should contextualize the sessions to ensure that participants' needs, concerns, and circumstances are being met. Whenever possible, facilitators should use examples and cite resources relevant to the professional interests and needs of the participants.

A good facilitator does all of the following:
- Views participants as experts with information and skills to share.
- Allows participants to learn from each other while he/she helps guide the process.
- Believes people learn by doing, experiencing, practicing, and feeling, rather than by memorizing, repeating, and recording information.
- Sees many possible answers to a situation or question.
- Thinks it is important for all to participate and be involved in the learning process.

5 • Conducting the CD3M Workshop

Session Design

Each session begins with a brief description and rationale for its inclusion into the workshop material. The sessions are outlined as follows:

- Time: The estimated time it will take to facilitate the activity.
- Learning Objectives: Specific skills and abilities the participants will gain from the session.
- Methods Used: Participatory-education methods used throughout the session.
- Materials: Materials needed to complete the session.
- Facilitator Preparation: Any preparation needed prior to the session.
- Facilitator Notes: Special notes about the session for the facilitator.
- Activities: Step-by-step instructions to facilitate the session.
- Discussion Questions: Step-by-step instructions for group discussion about the activity.
- Session Wrap-Up: Points to review with the participants at the end of the session.

The 4MAT Cycle Methodology

Each of the workshop sessions is designed around a particular theme using the 4MAT cycle methodology. The four steps in the 4MAT cycle are: motivation, information, practice, and application. Each step of the cycle is an inseparable part of the whole and builds on and expands the materials of the previous step.

Motivation

In this step, the facilitator provides a concrete experience. The topic is presented in a way that prepares participants and sparks interest. The role of the facilitator is to motivate, to engage participants and allow them to enter into the experience being introduced. Participants are given the opportunity to reflect on that experience. Examples of activities used in this step include problem scenarios, presenting a poem, reading an excerpt from a book, looking at pictures, discussing experiences, listening to songs, and utilizing webpages.

Information

In this step, material is presented to assist participants and the facilitator with accomplishing their objectives. The role of the facilitator is to inform and move participants from specific personal reality to the theoretical. Participants link their experience with the content at hand. The activities used in this step may include lectures, taking notes, and presentation of new concepts through diagrams, tables, and charts.

Practice

In this step, participants are given the opportunity to practice what they have learned in a safe and reinforcing environment. The role of the facilitator is to coach, organizing materials and activities

so the participants can test their understanding. They have learned skills and concepts and now they are asked to expand on those lessons. Participants are given the opportunity to extend what they have learned by selecting and individualizing their efforts. Among activities/tools used in this step are worksheets, pair work, small group work, project planning, writing, creating cartoons, and case studies.

Application

Now participants take the opportunity to demonstrate their ability to perform the objectives. The role of the facilitator is to evaluate and remediate. Participants are required to apply and refine in a personal way what they have learned and then share it with others. Activities in this step include gathering materials and implementing project plans; sharing written work; critiquing and observing other participant presentations; and reporting back.

Facilitator/Participant Roles

The role of the facilitator and participants switches during the 4MAT learning cycle. Initially, the facilitator takes a lead role, planning the experience and the reflective discussion that follows. In the second step, the facilitator teaches, linking the experience and reflection into the concepts to be taught and then teaching the required skills and concepts. In the third and fourth steps, the participants take the initiative and take possession of the skills and concepts they have learned. They try them out for themselves and share the results with each other. This is where the facilitator steps back and allows the participants to practice and apply the information.

Suggested Resources for the Workshop

The availability of resources will vary from post to post and facilitators will need to be flexible and prepared to conduct sessions in a variety of ways, quite possibly with few if any of the suggested materials below. The following list contains the best-case scenario:
- Computer and Internet connection
- Screen, projector, speakers
- Writing tools and markers
- Notebook for each participant
- Flip chart paper or chalkboard
- Handouts
- Laptops (if indicated) for the ICT-related sessions

Suggested Time

There are enough materials to conduct between 24 and 40 hours of training over three to five days.

Recommended Number of Participants

Since the program is highly participatory and provides time for trainees to build and practice new skills, it is recommended that the training not exceed 25 participants.

Participatory Facilitation Methods

Below are brief descriptions of the facilitation methods primarily used throughout the workshop.[1]

Brainstorming

Brainstorming is a method that invites new ideas, motivates, and encourages participation. All participants should be encouraged to respond without worry. Each response is written on a flip chart for the entire group to see. Participants should be encouraged to think "out of the box" in order to look at an issue look from a different perspective.

Group Discussion

Group discussion elicits participants' responses about a particular topic or issue and provides opportunities to enhance knowledge or correct misinformation. The effectiveness of the group discussion often depends on the use of open-ended questions that go beyond a simple "yes" or "no" answer. These questions seek to bring out feelings or thoughts about a topic or an activity.

Role-Play

Performing role-plays during a session can be an effective method for practicing new skills. It is important to remind participants that they are playing characters and not themselves. Situations should be as realistic as possible and allow participants to experience a real-life situation.

Case Studies

Case studies allow the participants to analyze a real situation and apply it to the issues in their communities and schools. Participants should examine the strengths and weaknesses of the case as well the positive and negative outcomes of its implementation. They can analyze the activities and strategies of the case and make recommendations and consider the strategies they would employ if they could. Facilitators can adapt to include more or less ICT-related sessions, depending on the context.

Warm-Up/Icebreaker

Warm-ups and icebreakers help participants connect with one other at the beginning of each session. Games can also be used at the end of the day or between sessions to lighten the mood and give participants an opportunity to relax after or before a tough session/day. The *Guide* includes a copy of "Favorite Peace Corps Icebreakers" which has warm up activities and ice breakers for a variety of activities. Additionally, various participants can volunteer, or be assigned, to warm-up the others in the morning or after lunch each day.

Doorways III: Teacher Training Manual On School-Related Gender-Based Violence Prevention and Response, USAID Office of Women in Development. March 2009, pp 7-13.
http://www.usaid.gov/our_work/cross-cutting_programs/wid/

Collecting Feedback to Improve the Program

Self-reflection and feedback from participants and co-facilitators are useful to help improve facilitation skills and the overall workshop. Facilitators should conduct an evaluation after each session or at the end of the day. There are several different ways to determine how the program is going. Here are some suggestions:

Self-assessment

The following are questions the facilitator may wish to ask him/herself after each session.
- What went well?
- What was difficult?
- Were the objectives of the session met?
- How will I do it differently next time?
- What did I learn from today's session that I can apply in the next sessions?

Observation

If there are co-facilitators, each can take a turn observing how the group is working together while the other is presenting. If there is only one facilitator, he/she can still observe how the group is reacting and working together. Try to observe the following:
- Are all the participants attending the training?
- Who is actively participating and who is not?
- Who talks the most and the least?
- Are participants listening to each other?
- Are participants working together or dividing into smaller groups?
- What is the mood of the group?
- How do participants respond when others voice their opinions?
- Are participants getting feedback from each other and the facilitator aduring the sessions?

Feedback from Participants

Participants should be encouraged to share their views on the sessions. Facilitators can go around the room at the end of the day and ask participants to share one thing they liked about the day's session and one suggestion for improvement. Following are some possible questions for gathering feedback:
- What is the most important thing you learned in this session?
- What did you enjoy most about this session?
- What did you find difficult about this session?
- What suggestions do you have to improve the next session?
- Are there any questions or issues not covered that you would like to discuss?

Workshop Monitoring Options

As the CD3M workshop intends to introduce and reinforce participatory methodologies, the facilitator should include monitoring throughout the course of the workshop. For example, create monitoring groups to carry out some type of monitoring or reflection activity at the end of each day. Group members conduct their activity and report on the results the following morning. This technique not only involves the participants but also provides monitoring data throughout the workshop.

Another option is to post three wall envelopes in the training room decorated with a simple face and exclamation. Participants are invited to place any comments or questions in the appropriate pockets. Once or twice each day, the trainers check the pockets, share the messages with the group, and address any issues or questions.

A third monitoring idea is to create a set of questions on which workshop participants may reflect at the end of each day. Participants would answer questions individually and share some of their observations with everyone, a small group, or with other individuals if they wish. They can share in the following ways: discussion; entries on flip charts that include comments, insights, pictures of lessons learned, confusing activities, or wish lists; or anonymous question cards to be read and discussed the next day.

Evaluating the Impact of the Workshop

It is also recommended that a follow-up evaluation be sent to participants six weeks to two months after the workshop. This may include a few open-ended questions that will help gauge the impact of the workshop. Some examples may include the following:

1. What specific ideas from the CD3M workshop have you used? Describe the setting.
2. What have you done or created that was sparked by an idea or event at the workshop?
3. In what ways did the workshop affect your relationship with your colleagues and community? Give one or two specific examples.
4. In what ways have you shared any of the content of the workshop with others in your community? Be specific.

Session 1: Welcome and Introductions

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Communicate with colleagues and community members about the importance of making data-driven decisions to improve education

Session Rationale: This is the first day of the workshop and it is important that the objectives, agenda, expectations, norms, and anticipated results be clearly understood by the facilitators and participants. Participants should feel welcome and have an opportunity to get to know one another and explore initial concepts around making observations based on evidence.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites:

Version: October 2013

Contributing Posts: PC/Philippines
PC/Guatemala

Session: Welcome and Introductions		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. A Peace Corps representative (country director, APCD, etc.) and other education stakeholders (district education officer, inspectors, etc.) should be invited to open the workshop and have their presence confirmed beforehand. When inviting the representatives and stakeholders, provide them with a written letter that highlights the goal, objectives, and anticipated outcomes of the CD3M workshop. Paraphrase from the "Motivation" section below when talking to them about the workshop.
2. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
3. Revise the School Description Case Study (Part 1) in order to reflect the realities of schools in your context. Please change the name of the school and the types of school infrastructures, teacher performance, student learning, and other school environmental factors as necessary
4. Revise the School Description Case Study (Part 2) in order to reflect more positive and innovative school improvement, teacher performance, student learning, and school environment initiatives that you have witnessed in your community or other communities.
5. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Flip chart
    2. Markers
    3. Pen/pencil
    4. Paper
    5. Coins/bill-notes (small denominations) (one coin/bill per pair of participants)
- **Handouts**
    Handout 1: School Description Case Study – Part 1
    Handout 2: School Description Case Study – Part 2
- **Trainer Materials**
    Trainer Material 1:   Session 1 PowerPoint Slides

Session Learning Objectives:
Participants will
1. Explain the purpose of the workshop.
2. Introduce a new acquaintance.
3. Explain their own expectations of what they will gain from the workshop and identify what session(s) in the workshop might meet their needs.
4. Make observations based on memory and compare them to observations made on objects they have in front of them in order to articulate the need to examine and make interpretations with tangible information.
5. Discuss how evidence can help someone better understand what is going on in the classroom, at the school, and in the school community.

Phase / Time / Materials	Instructional Sequence
Motivation 45 minutes Trainer Material 1: Session 1 PowerPoint Slides Trainer Material 2: Workshop Purpose	**Introduction to the Workshop** 1. Invite the country director, other staff representative, and education stakeholders to make welcoming and opening statements for this workshop on CD3M (10 minutes). 2. Introduce yourself and welcome all of the participants to the CD3M workshop. Say or paraphrase the following (5 minutes): • *"We are so pleased that you are here for what we hope is a dynamic, participatory workshop that enhances your skills and gives you some great ideas for applying those skills back in your communities.* • *"We are here to talk about how we can make evidence-based decisions at school and community levels. This workshop looks at how we, as community members, can make decisions about different parts of our education system at the local level by looking at information that is available to us. If we lack the information that we feel we need, then we can collect it in order to make informed decisions. This workshop also will give us a process and tools to be able to make decisions as well as how to present those decisions for future action. This is also known as community data-driven decision making in education."* 3. [SLIDE 2]: Give a general overview of the workshop purpose and tone. Post the purpose on a flip chart and project the PowerPoint slide. > **Purpose:** PCVs and their partners will build knowledge and skills on how to collect and use evidence to improve the school community environment so they can use these tools when they return to their schools. 4. Say or paraphrase the following: *"The **purpose of the** workshop is to present the CD3M process cycle in order to help communities better understand what is going on at the school. This can help communities then make decisions based on evidence. This means that this workshop will provide ways for students, teachers, head teachers, parent teacher associations, parents, and community members to make decisions concerning the school based on evidence. By the end of this workshop you will be better equipped to help communities conduct evidence-based and gender-awareness*

Phase / Time / Materials	Instructional Sequence

	decision making in education. The workshop should be practical for each participant. One of the most important things we hope you all will do after this workshop is to share what you have learned with other colleagues and community members in order to start the CD3M process. We would like to see as many of you as possible take on the responsibility of using data to improve the way decisions are made regarding the education of your children. So, please help other educators to learn what you learn here. As a brief bit of background, the workshop is part of an agreement between the Peace Corps and USAID to create materials that can be used in various communities worldwide."
	
	5. Tell participants that we are going to participate in a short activity where everyone will introduce him/herself. Indicate to participants that they are going to work with a partner. Explain to participants the purpose of this activity is to provide a metaphor to better understand the CD3M process we will learn about during the workshop.
	
	6. Distribute a blank paper and pen/pencil to each pair.
	
	7. Ask each pair to introduce themselves to each other and then to brainstorm about a specific coin or bill-note that we use to pay for things every day.
	
	8. Tell pairs to draw both sides of the coin/bill-note from memory, including as much detail as possible.
	9. After the pairs have finished drawing, ask each pair to stand up, introduce themselves (name, where they come from) and to share their sketches.
	   • During the presentations/introductions, ask the following questions: *"How do you think you did with your drawings? Were you able to remember all the details? What were things you were not sure about? Do you feel like the coin/bill-note you drew matches reality?"*
	
	10. Ask: *"What are some of the reasons the actual coin/bill-note and the drawings may not match?"*
	     Note:
	     Possible answers might include: We drew the coin/

Phase / Time / Materials	Instructional Sequence

	bill-note based on faulty memory. We take the coin/bill-note for granted because we are around them all the time. We assume that we know. We haven't had a pressing need, or opportunity, to examine a coin/bill-note with the care needed to remember more details.
	
	11. Present and pass out multiple coins/bill-notes throughout the room. Allow participants a couple of minutes to observe. Ask participants to compare their drawings to the coins/bill-notes. Invite comments from the participants. Then ask everyone to think of their coin/bill-note as an absolute reality and their drawing as an interpretation.
	
	12. Ask: "*How do your drawing and the real coins/bill-notes compare? What lesson might you apply from this activity for our workshop on CD3M (making decisions based on evidence)?*"
	    Note:
	    Possible answers may include: Our memories and idea of what is correct and accurate may not always be reliable. We make assumptions; therefore, it's important to acknowledge that assumptions exist and can be used to make decisions about what we think the school should look like, how it operates, and how children learn at school. Our assumptions may not be accurate and could inadvertently cause harm or could impair our children's ability to learn.
	
	13. Close this activity by saying or paraphrasing: "This activity looked at one example of a familiar reality (coins/bill-notes). We will learn how to do our own research to look at situations that are related to our school environment in order for us to make informed decisions about how we can improve our education systems on a local level."

Phase / Time / Materials	Instructional Sequence

Information
 	
20 minutes
 	
Trainer Material 1: Session 1 PowerPoint Slides
 	
Trainer Material 3: Workshop Agenda
 	
Trainer Material 4: Workshop Norms
	Overview of Workshop Objectives, Agenda Review, Expectations, and Norms
	Participants learn how the workshop is organized.
	
	1. [SLIDE 3]: Present the agenda on the PowerPoint slide and/or on a piece of flip chart paper.
	
	    Agenda A: Five-day training
	    Agenda B: Four-day training
	    Agenda C: Three-day training
	
	2. Present the different sessions of the workshop by first pointing out the flow of the overall workshop. Paraphrase or say the following: "*The CD3M workshop is designed to take us all through a CD3M process cycle. This means that we will*
	  • "*1) Get a general orientation on what evidence-based decision making is, with a focus on the challenges and needs to change behaviors and attitudes. This will also involve a session that presents, defines, and describes the importance of CD3M, as well as the process cycle itself.*
	  • "*2) The next set of sessions will lead us through the CD3M process cycle. We will start off by identifying problems we face, as well as what we already know about these issues. Then, we will explore research (quantitative, qualitative, and mixed method approaches) to help us set a plan for how we will go about understanding in more detail specific parts of our problem. We will examine a variety of different tools that we can adapt to our own contexts in order to collect detailed information about the problem. The next sessions will focus on how we evaluate and assess the information we collected, as well as how we can present our findings, taking into consideration the need to be context-sensitive. The overall goal of CD3M is for us, as a community, to be able to take action to improve upon the problems we have identified, researched, and understood in more depth and detail.*
	  • "*3) Given the specific agenda and time frame, we will also explore other tools we can use via ICT, mobile devices, and other assessment tools for determining the quality of education being delivered at school, ways in which we*

Phase / Time / Materials	Instructional Sequence
	can do gender analyses at school, and also how to create professional development programs based on our findings. • *"4) Finally, we will close the workshop by creating an action plan of one to two concrete CD3M process cycles that we can conduct and anticipate how we will engage the community to be part of this evidence building and decision-making process."* 3. Present the overarching objectives of the workshop on PowerPoint slides/flip chart paper and ask a participant to read them: [SLIDE 4]: By the end of the CD3M workshop, participants will: • Effectively communicate with colleagues and community members about the importance of making evidence-based decisions to improve education at the community level (CD3M) • Identify strengths and gaps in existing data • Adapt data collection tools to local needs • Identify basic data analysis principles • Use ICT to collect/share data • Share information from the workshop and implement plans from the workshop with colleagues and community members **Workshop Norms** Participants co-create workshop norms: 1. Explain to participants that we all need to co-create our workshop norms in order for maximum participation, to minimize interruptions, and create an environment of mutual respect and learning. 2. Offer the first norm, for example, *"Ask questions when we don't understand a word, a term, a concept, an approach, etc."* 3. Write this on a flip chart. 4. Ask participants to list other norms they recommend. • Possible answers and messages to highlight: o Participatory: although some portion of each day will be an information presentation, much of each day will revolve around you – your contributions, discussions, reflections

Phase / Time / Materials	Instructional Sequence
	o Respect each other's responses o Silence cellphones o If you must text or answer a call, please leave the room (but please do not do this frequently) o Be on time o Attend each day of the workshop o Please do not frequently leave and enter the room
Practice 10 minutes Trainer Material 5: Workshop Expectations Flip chart and markers	**Explore Expectations** Participants will state their expectations for the workshop and the facilitator will show where they fit into the workshop program. 1. Ask participants what they hope to get out of the workshop. 2. Record answers on flip chart. 3. Note how/where the proposed agenda is going to address participant expectations. If some expectations are not part of the agenda, propose modification to the agenda or explain why expectations can't be met through this workshop.

Application
 	
45 minutes
 	
Trainer Material 1: Session 1 PowerPoint Slides
 	
Handout 1: School Case Study – Part 1
	Benefits of Information Gathering (20 minutes)
	Participants begin to discuss their opinion on the uses of evidence, particularly in relation to education.
	
	1. [SLIDE 5]: Explain the case study that you want participants to read. Provide the instructions on the PowerPoint slide. Quickly explain that it is a study of the characteristics of a school. Distribute Part 1 of the case study.
	
	Post Adaptation: Give a name for the school. Add more specific content that highlights realities for your school.
	
	2. Ask participants to read part 1 of the case study on the handout that you provide.
	3. [SLIDE 6]: When they are done with part 1, ask the following questions:
	  • What are your overall impressions of the school?
	  • Is the school functioning? How do you know?
	  • Are the students learning? How do you know?

Phase / Time / Materials	Instructional Sequence
	• Are the teachers performing well? How do you know? • Are girls being treated in the same way as boys? Are students from the rural areas being given the same treatment as those who live in town? How do you know? 4. Distribute part 2 of the case study 5. Ask participants to read part 2 of the case study 6. [SLIDE 7]: Ask the following questions: • Have your impressions of the school changed? How? What do you think now? • What do you think the value of asking questions could be? Doing observations? Looking more in-depth at the school? • What do you think this tells us about what could be going on at schools in your community? • How do we know? In your opinion, how was the information collected? • How do you think we could use technology to collect this information, if possible? 7. To conclude the session, paraphrase the following points: • *"The case studies provide us with preliminary information about the school. However, they do not provide us with in-depth details about the reasons "how", "why" and "what". If we were to make big changes at school, they may not work because we may not have all the necessary information.* • *"We may think that school is doing really poorly, but once again, if we don't go in depth to better understand what is going on, then we could potentially make decisions about the school that could be harmful and unjust.* • *"We need a clearer understanding of how we can go about doing research and collecting more information in order to make informed decisions that help improve the school environment, teaching and learning for all."*
Handout 1: School Case Study – Part 2	

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Presented in the Motivation section of this session **Learning Objective 2:** Participants introduce each other during the coin/bill-note observation exercise. **Learning Objective 3:** Participants explicate their expectations during the Practice section of this session. **Learning Objective 4:** Participants achieve this objective during the coin/bill-note observation exercise and debrief. **Learning Objective 5:** Participants read and respond to case study questions in the Application section of this session to explore the notion of evidence.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:
Smith, C., Bingman, B., McLendon, L., Comings, J. 2007. Evidence-based Practice: A Workshop for Training Adult Basic Education, TANF and One Stop Practitioners and Program Administrators. Boston, MA: National Center for the Study of Adult Learning and Literacy. Retrieved from www. ncsall.net/fileadmin/resources/teach/prac_res_guide_session1.pdf

Handout 1: School Description Case Study (Part 1)

The Union is a regional K-5 elementary school located in the rural farming town of Alta Verapaz, Guatemala. The Union was built in 1990 to provide early education to the children of Alta Verapaz and the surrounding communities. It is a six-classroom schoolhouse; each class serves close to 70 children. The enrollment rate for the area is 20 percent and 450 children are enrolled. More than 70 percent of the students' female siblings are not enrolled in school. The chalkboards in classrooms are chipped, have holes in the middle, and the overhead projectors are shared by classrooms – teachers have asked for technology and other materials for their classrooms. Report cards are sent out in the middle and end of the year; year-end grades are the scores children received in the mandated, countrywide assessments. Testing happens in grades 3 and 4; results show that children are reading in Spanish slightly below grade level, with science skills below average and math scores well below average. The attendance rates of students are not well kept, and when parents or guardians have been asked to come to school and talk about the unexcused absences, these meetings were either not documented or did not take place.

Handout 2: School Description Case Study (Part 2)

After visiting The Union for two days; observing in classrooms and talking with teachers and students, it is clear that the school is trying hard to be fully functional and resourceful with the materials that it does have. Because of the state of the blackboards, teachers share overhead projectors to project their lessons in their classrooms. Because they must be shared, teachers have created multi-grade classrooms, encouraging children of different age groups to work together, peer teach, and be more engaged in classroom learning. Teachers have included a 20-minute period of "recess" into their daily schedules. Teachers use this time to collaborate, brainstorm, and receive feedback on lesson plans. They also work together to get materials they need for their classrooms. Additionally, teachers have decided to set aside 10 minutes of this time to create and manage after-school community based projects (i.e., bringing food to the sick, planting vegetable gardens, collecting trash around town, etc.). This has increased the amount of parental involvement in the school, beginning when parents started to come to after-school activities with their children. Teachers have also reported an increase in parent involvement within classrooms–storytelling to groups of children and aiding children one on one. Through the hands-on, open-ended experiences the teachers facilitated through the planting of the vegetable gardens, they have decreased the amount of repetitive, rote instruction used in the classrooms.

Session 2: Evidence-Based Decision Making and Behavior Change

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Communicate with colleagues and community members about the importance of making data-driven decisions to improve education

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Session Rationale: Carrying out strategic behavior change is important for facilitators and is at the core of grassroots development work. There needs to be a shift in behavior in schools from opinion-based to evidence-based decision making. This session introduces the concepts of opinion/evidence-based decision making and how it links to behavior change.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 2 hours, 30 minutes

Prerequisites:

Version: October 2013

Contributing Posts: PC/Guatemala
PC/Philippines

Session: Evidence-Based Decision Making and Behavior Change		
Date:	**Time:** 2 hours, 30 minutes	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Create an opinion and evidenced-based concept map of a school in which you work, have worked, or visited frequently. This will help to describe the instructions in the Practice 1 session. (Read Practice 1 for instructions on creating this type of concept map)
3. Determine if you will use just the PowerPoint slides and/or a combination of PowerPoint and flip charts to present certain information (i.e. definitions, concepts, instructions, etc.)
4. Read Handout 1
5. Read the story "An Parent's Unwillingness to Send his Daughter to School" as well as the accompanying script (Handouts 2 & 3)
6. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Paper
    2. Flip chart paper
    3. Markers
    4. Projector, laptop computer, screen, and electricity
- **Handouts**
    Handout 1: Determinants that Influence Behavior
    Handout 2: A Parent's Unwillingness to Send His Daughters to School
    Handout 3: A Parent's Unwillingness to Send His Daughters to School Script
- **Trainer Materials**
    Trainer Material 1: Session 2 – PowerPoint Slides
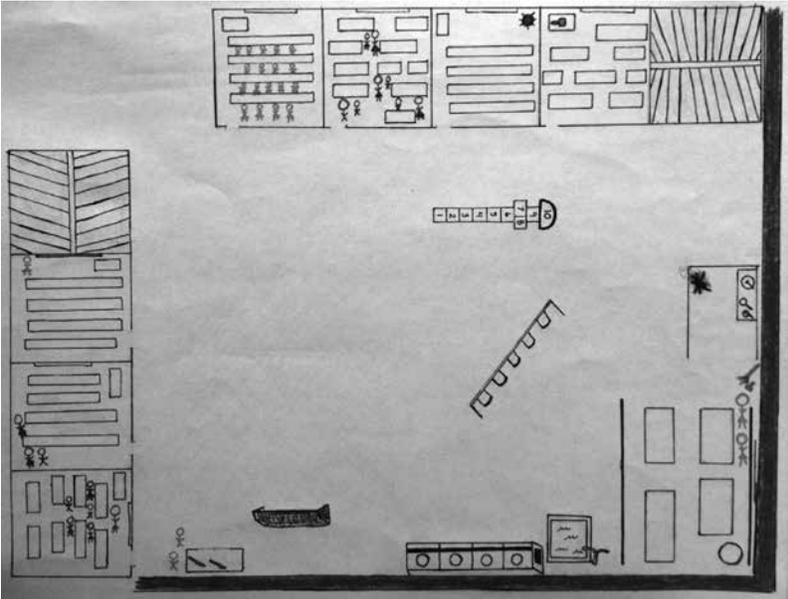   Trainer Material 2: Five Stage Cards
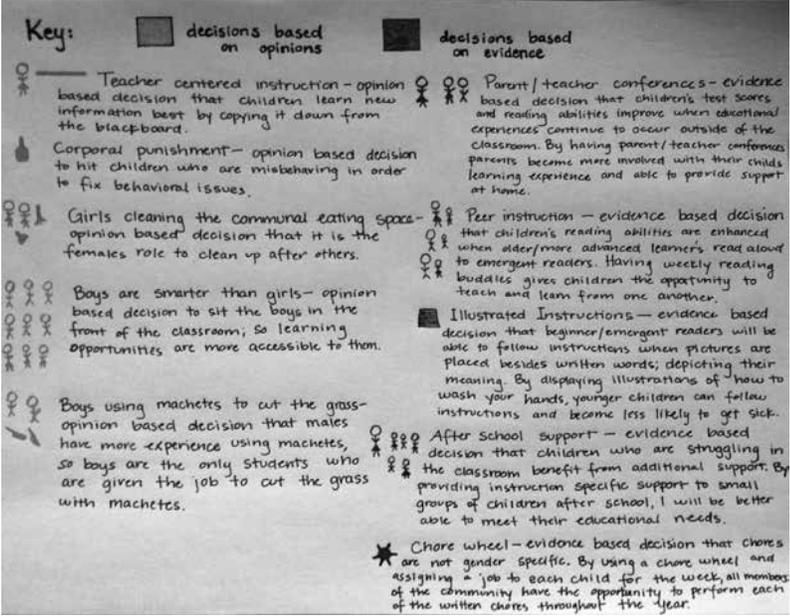

Session Learning Objectives:
Participants will
1. Define opinion-based and evidence-based decision making, as well as identify decisions made in their schools that are opinion and evidence-based.
2. State the advantages of basing decisions on evidence found at the school level.
3. Explain how different factors that enable or prevent behavior change are linked to internal and external determinants.
4. Apply an understanding of barriers to behavior change in a school setting with making direct links to evidence.

Phase / Time / Materials	Instructional Sequence
Motivation 10 minutes	**Making Decisions Based on Evidence – Other Sectors in Your Community** Participants will take part in an activity where they indicate different sectors and different daily tasks where they use information (also known as evidence) to make an informed decision about their choices. 1. Ask participants to think about a scenario in which they make decisions in their daily lives. For example, how do you go about choosing something to purchase at the market? How do you decide when to go to the health center/hospital? How do you choose when to plant crops for the season? 2. Ask participants to describe their decision-making scenario to a partner, considering the following questions: • *What factors do you use to make judgments and choices in this scenario?* • *Are you always 100 percent sure about your choice? If not, what choice do you make?* 3. In the large group, invite 2-3 participants to explain their scenarios and their answers to the questions. 4. Say or paraphrase the following: "*We make choices and decisions every day. Some of these choices are made based on what we've been told in the past. Some of the choices are based on what we think is right. Some of the choices are based on our opinions. Some choices are based on looking at the most up-to-date information and making a selection based on how pertinent that evidence is in our lives. Decision making is based on carrying out choices based on evidence that we have at our disposal.*"
Information 1 10 minutes Flip chart Markers Training Material 1: Session 2 PowerPoint slides	**Making Decisions Based on Opinions vs. Evidence** Participants will create definitions for the terms "opinion" and "evidence." 1. Post the t-chart paper with the words "Opinion" and "Evidence." Ask participants to create definitions for each term. Invite participants to indicate their definitions and write them on the t-chart: <table><tr><th>Opinion</th><th>Evidence</th></tr><tr><td></td><td></td></tr></table>

Phase / Time / Materials	Instructional Sequence
	2. [SLIDE 2]: Present the PowerPoint slides and say or paraphrase: "*Opinions are people's beliefs that they learn about when growing up. Some opinions are based on real information, while others are based on feelings, thoughts, and emotions without any information to show that they are true. In a way, opinions, though they may feel to be true, may not be so and are based on that which is less than absolutely certain. Evidence is any information of proof and truth that helps people better understand an idea, a thought, a make a conclusion.*"
Practice 1 30 minutes Flip charts / Markers Training Material 1: Session 2 PowerPoint slides	**Make Opinion and Evidence-Based Decisions at Your School** Participants indicate different opinion-based and evidence-based decisions that are made at their schools (by head teachers / principals, teachers, students, and parents) 1. Explain to participants that they will create concept maps of their school, working in groups. These maps should reflect different opinion-related decisions that are made, in addition to different evidence-based decisions that are made at the school. The opinion-based decisions should be color coded and the evidence-based decisions should be coded another color. 2. [SLIDE 3]: Provide the following instructions (see visual on the PowerPoint). Get together in your school group. Take a piece of flip chart and draw the school plan, as well as the school yard. Write down and make drawings of different decisions that are made in these areas. Decisions that are opinion-based should be a certain color while those that are evidence-based should be another color. Identify different decisions that are made every day; create a legend/key where they explain how each decision is made.

Phase / Time / Materials	Instructional Sequence

	3. [SLIDE 4]: Present the sample concept map shown on the PowerPoint.
	
	4. Present some ideas of things you have noticed that are opinion-based and evidence-based decisions at school.
	  • Ideas for opinion-based decision making: 1) *Opinion-based evidence tells me that students need to memorize texts in order to be able to read; therefore, we recite texts over and over again and that means students are reading; 2) Another opinion-based decision that I have come across is that girls are not as quick to learn as boys; therefore. as a teacher I focus more on catering my instruction toward the boys; 3) One opinion-based decision that I see from time to time is that corporal punishment is necessary in order to fix behavioral problems; therefore, when students are misbehaving, I hit them.*
	  • Ideas for evidence-based decision making: *1) Looking across my students' previous tests, they struggled with adding and subtracting negative numbers, I therefore will hold a review session to bolster these skills; 2) Three out of the five teachers in my school have arrived late to school three times this week. I need to have a meeting with the faculty to talk about the roles and responsibilities of a teacher; 3) According to the class registers, student*

Phase / Time / Materials	Instructional Sequence
	attendance dropped 30 percent during the rainy season last year, for the next school year we need to engage parents and explain the importance of sending their children to school throughout the whole school year. **Post Adaptation:** Think of other opinion-based and evidence-based decisions that you have noticed in the schools that you have visited and been a part of in the context of where this workshop is being conducted. Add these ideas. 5. [SLIDE 5]: Present the legend of the school concept map. 6. While participants are creating their maps, circulate to help them think of ideas that are opinion-based and evidence-based. 7. Ask participants to post their school opinion/evidence-based maps on the wall. 8. Invite participants to take 5 minutes to walk around and read each other's maps. 9. Reconvene participants in the large group. Ask a couple of members to present their impressions of the maps. Ask the following questions: *"Is there anything that surprised you about what you and your colleagues view as opinion-base and evidence-based decision making? What types of elements seem*

Phase / Time / Materials	Instructional Sequence
	to be present across the maps in the evidence-based decision making? What types of elements seem to be present across the maps in the opinion-based decision making? Why do you think that we make decisions based on our opinions?" 10. Say or paraphrase: *"Having concrete evidence is a necessary tool to be able to make decisions that help the school community. Opinion-based decisions can potentially harm children, teachers, and create an unhealthy environment at the school level."*
Information 2 30 minutes Training Material 1: Session 2 PowerPoint slides Flip chart table of definitions of behavior, change, and behavior change	**Stages and Determinants of Behavior Change** Participants learn the definition of behavior change and why it is useful to shift to a more evidence-based decision making process in education. 1. Indicate to participants that we are now going to shift topics slightly. Say or paraphrase the following: *"We discussed how we can all make decisions sometimes based on opinions and sometimes based on evidence that we have around us. When opinions are not founded on evidence, they do not always accurately reflect informed choices and may have unintended consequences. Informed decision making creates less of a probability of negative outcomes at the school level. We are now going to be talking about how we can shift our behaviors at school to be more evidence-driven. This requires a shift in the way we usually do things, otherwise known as Behavior Change."* 2. [SLIDE 6]: Present the PowerPoint slides and/or flip chart of the following table: <table><tr><td>**Behavior** An action, a deed</td><td>+</td><td>**Change** To alter, modify, transform</td><td>=</td><td>**Behavior Change** The process by which individuals and/or communities modify their actions or ways.</td></tr></table> 3. Explain the "equation" above by saying or paraphrasing: *"A behavior is an action or a deed that people do and exhibit. At school this could be how students act in class, what types of teaching strategies teachers most frequently use, or how parents take part in the school environment (or not). It is something*

Phase / Time / Materials	Instructional Sequence

Training Material 2: 5 Stage Cards
 	
Handout 1: Determinants that Influence Behavior
	that is observable and specific (time, place, quantity, duration, frequency). We can measure a behavior and it has a direct link to some type of outcome. For example, when head teachers encourage and set structures for school to start on time, then the most likely outcome is that students will show up to school on time and in their classrooms on time. Change is rather straightforward, referring to something that is altered, modified, and transformed. Therefore, behavior change refers to the process by which individuals and/or communities alter/modify their actions and responses. An example of behavior change at the school level could be, for example, a female student who does not participate in class. However, when the teacher creates a child-friendly environment and has more pair work activities, then the girl interacts regularly and participates with her partner in instructional activities."
	
	4. Say or paraphrase the following: "*Behavior change at the school is essential for CD3M. Communities (head teachers, teachers, students, parents) need to be able to make changes at their school based on evidence in order to improve their environment. If we go into a school, state a problem, state the solution to the problem, and carry out the solution without the buy-in and support of the community, it is highly possible that the effort will not be sustainable when we leave. Grassroots development means that we have to work on behavior change as the core to creating sustainable change.*"
	
	5. Give five participants large pieces of paper (or flip chart paper) with the five stages of behavior change written on them (Pre-contemplation, Contemplation, Preparation for Action, Action, and Maintenance).
	
	6. Ask them to put in order would they consider the appropriate sequence for these stages and ask the audience if they think this is correct.
	
	7. [SLIDE 7]: Ask participants to explain their understanding of each term.
	
	    Note:
	    Possible answers might include:
	    • Pre-contemplation is the process that happens before someone starts actively thinking a lot about changing the behavior. Contemplation is the process of thinking about changing the behavior. Preparation

Phase / Time / Materials	Instructional Sequence
	for Action refers to the thinking of different things that one can do to change and act. Action is the process an individual uses to change his/her behaviors (actions that s/he takes). Maintenance includes those things that someone does to maintain the behavior change and shift, especially in times when s/he reverts back to a previous behavior. • This is a process, is a continuum, and is fluid. We can also go back and forth on the continuum depending on what factors are affecting us as individuals or external factors that prevent us from action. **Introduction to Factors that Influence Behavior Change** Participants read about the factors that influence behavior change. 1. Say or paraphrase the following: "*I am going to pass out an informational handout that is titled 'Determinants that Influence Behavior Change.' A determinant can be defined as a factor that influences something both positively and negatively.*" 2. Pass out Handout 1: Determinants that Influence Behavior to participants and ask them to take 5 minutes to read it individually. 3. When participants are done reading, ask them if they have any questions or confusion about the different factors. Be ready to paraphrase and provide examples for each type of determinant. To check for understanding, ask participants to give examples for the different types of determinants.
Practice 2 25 minutes Handout 2: A Parent's Unwillingness to Send His Daughters to School	**Identifying Determinants** Participants use the "A Parent's Unwillingness to Send His Daughters to School" story to identify determinants of behavior. 1. Distribute the text "A Parent's Unwillingness …" and ask two volunteers to read the accompanying handout in script form. 2. Read the script out loud with the two participants. 3. Ask participants to review the story (text in front of them) and identify which determinants the parent was experiencing. Explain that they should jot down their answers so they can share them.

Phase / Time / Materials	Instructional Sequence
Handout 3: A Parent's Unwillingness to Send His Daughters to School Script	4. In the large group, ask for answers. The answers are listed below:

Answers to Find the Determinants:
1. Why did the father not want to send his daughters to school?
(1) They would be marrying men who would look out and care for him. (Intentions)
(2) His son was enrolled; boys are smarter than girls. (Attitude)
(3) He was afraid that they might be sexually assaulted. (Perceived risk)
(4) Being that they are females, their domestic responsibilities are more important. (Perceived Social Norms/Culture)
(5) Poor families only send their sons to school. (Culture)
(6) They would not have time to produce goods that the family sells. (Perceived Consequence)
(7) Other fathers weren't sending their daughters. (Self-efficacy)
(8) He believed that no one would want to marry his daughters because they'll want a wife who wants to stay at home. (Perceived Consequences)

	5. Ask participants which three determinants they think are the most powerful and why. Link back to the story.
Training Material 1: Session 2 PowerPoint slides	6. [SLIDE 8]: Present the PowerPoint slide and/or flip chart with the three most powerful determinants.
	7. Explain or paraphrase the following: Based on behavior change research the following are the three most powerful determinants:

A) _Perceived consequences_ (positive and negative) – what a person thinks will happen, either positively or negatively, as a result of practicing the behavior. Will this be good for me?
B) _Self-efficacy, skills_ – an individual's belief that he or she can exhibit a particular behavior; the set of skills or abilities necessary to perform a particular behavior - Can I do this? How difficult will it be for me?
C) _Perceived social norms_ – perception that people important to an individual think that s/he should do the behavior. What will others in my community think if I do this?

Phase / Time / Materials	Instructional Sequence
Application 50 minutes Trainer Material 1: Session 2 PowerPoint slides Flip chart Markers	**Small Group Activity** In small group discussions, participants apply behavior change ideas to the school environment that was based on evidence-based decisions (moving away from opinion-based decisions). 1. Say or paraphrase: "*Let's take some time to think about what we've learned about evidence-based decisions, behavior change, and apply it to a context we all have in common: School. Participants will work in groups. Half of the groups will focus on behavior change at the student level, while the other half will focus on the organizational behavior change level (school level).* 2. [SLIDE 9]: Present instructions on the PowerPoint slide and/or on a flip chart and present them:

A. Define the behavior you would like them to adopt (and maintain from now on). Take some time to develop clarity on *what the behavior is, exactly.* They can refer to Handout 3 to get some ideas of behaviors that they want to change.

Example at student level: Do not identify a negative and general behavior, such as "too many children do not attend school regularly." Define the behavior you want students to adopt as "90 percent of students attend school at least 80 percent of the time."

Example at organizational level: Do not identify a negative and general behavior, such as "parents are not participating in the school environment." Define the behavior you want to adopt as "At least 100 parents participating in the mid-term and final-term student grade announcements and schoolwide community sensitization meetings."

B. What are the determinants that you believe have been keeping them from adopting this behavior thus far? What is your concrete evidence?

C. How can you communicate, *using evidence*, to help them overcome any barriers or hindrances to adopting the new behavior? Is there any way to use technology to do this?

Phase / Time / Materials	Instructional Sequence
	3. In groups, participants conduct the activity and the facilitator circulates to help groups with difficulties. (20 minutes)
	4. Invite each group to report on what behavior they focused on and how they might communicate with evidence to help the student/school overcome barriers to adopting positive behavior. (10 minutes)
	5. Ask for an example of a successful education project that has overcome hindrances and shown evidence of changing participants' behavior. (15 minutes)
Assessment	**Learning Objective 1:** Participants come to consensus on the concepts and definitions of opinion and evidence-based decision making in Information 1 and Practice 1.
	Learning Objective 2: Participants locate advantages for school evidence-based decision making in Practice 1.
	Learning Objective 3: Participants explore and apply behavior change determinants in Information 1 and Practice 1.
	Learning Objective 4: Participants scaffold their learning of evidence-based behavior change to their school contexts in the Application section.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Handout 1: Determinants That Influence Behavior

<u>INTERNAL DETERMINANTS:</u> **the forces inside an individual's head that affect how he or she thinks or feels about a behavior.**

Self-efficacy: an individual's belief that he or she can exercise a particular behavior.

Perceived Social Norms: perception that people important to an individual think that s/he should exercise the behavior; norms have two parts: who matters most to the person on a particular issue, and what s/he perceives those people think s/he should do.

Perceived Consequences: what a person thinks will happen, either positive or negative, as a result of a behavior.

Knowledge: basic factual knowledge about an issue, such as what the actual health effects of a behavior can be.

Attitudes: a wide-ranging category for what an individual thinks or feels about a variety of issues. This over-arching category would include self-efficacy, perceived risk, and other attitudinal factors.

Perceived Risk: a person's perception of how vulnerable they feel, particularly to the negative consequences of a behavior.

Intentions: what an individual plans or projects s/he will do in the future; commitment to a future act. Future intention to perform a behavior is highly associated with actually performing that behavior.

<u>EXTERNAL DETERMINANTS:</u> **those forces outside the individual that affect his or her performance of a behavior.**

Skills: the set of abilities necessary to perform a particular behavior. Key skills for a student's education behavior might include communication skills, writing, etc.

Access: encompasses the existence of services and products, their availability to an audience and an audience's comfort in accessing desired types of products or using a service.

Policy: laws and regulations that affect behaviors and access to products and services.

Culture: the set of history, customs, lifestyles, values, and practices within a self-defined group. May be associated with ethnicity or with lifestyle, such as "gay" or "youth" culture.

Actual Consequences: what actually happens after trying out and exercising a particular behavior.

Relationship Status: commonly affects health behaviors relating to sexually transmitted diseases. Type of relationship, as categorized by the sexual partners and their community. Common categories are short-term/long-term; casual/serious; monogamous/ multiple partners.

Handout 2: A Parent's Unwillingness to Send His Daughter to School

One day in August Mr. Thomas, a father of five daughters and a son, was walking by the local primary school with one of his daughters. She was carrying a load of branches that would be used to make a fire to cook. The head teacher waved him down and asked, "Why isn't this girl in school? You should really send your daughters to school, Mr. Thomas. They need to learn. They need to grow. One day they will take care of you." Mr. Thomas smiled and told the teacher that his five daughters will all marry great men and the men will take care of him when he is old and in need of care. He also added that since other fathers don't send their daughters to school, why should he? The head teacher explained the risk of relying on other people he doesn't even know, as Mr. Thomas' daughters were still quite young. She also let him know that things are changing and many fathers have begun to send their daughters to school.

September came and the head teacher saw Mr. Thomas with two of his daughters walking near the schoolyard. The teacher greeted Mr. Thomas and asked why his daughters were still not enrolled in school. Mr. Thomas replied, "My son is enrolled in the school, he is here to learn – what he learns he can teach to my daughters at home." The teacher asked Mr. Thomas, "Why can't the girls come to school and learn as well?" Mr. Thomas insisted that his son was the smartest of all his children and that everyone knows that boys are smarter than girls. He also explained that if he sent his daughters to school, no one will marry them because they'll want a wife who is happy to stay at home. The teacher told him, "The test scores of children in my school do not show that boys are smarter than girls." She encouraged Mr. Thomas to look around the school and notice how many girls were learning in each classroom. She also explained that daughters, who become future wives, can help contribute to the family and help create a safe and healthy household.

October arrived and Mr. Thomas saw the head teacher one day after school near the market. Mr. Thomas knew what she was going to say to him, so he called out before she could, "No, I have not enrolled my daughters in school yet. Who will protect them? What if they get abused or sexually attacked at school? How am I supposed to protect them when they are not near me?" The teacher told Mr. Thomas that she understood his worries, that she had once shared his concerns before sending her own daughters to school. She chose to learn more about the school; she began working there and soon found that the school provided her children the opportunity to learn in a safe place. Children were monitored while they are at school, and there was a very strict policy ensuring that children are safe.

In November, Mr. Thomas came to school to pick up his son early. The teacher noticed Mr. Thomas standing outside his son's classroom and asked him why he was taking his son out of school early today and why he hadn't enrolled any of his daughters yet. Mr. Thomas told said he was on his way to the market and needed his son's help to carry goods home. He continued, "My daughters are at

home, where I need them. They look after the younger children and do other chores that help my household run." The teacher replied, "All of the students in my school have chores to do when they get home, they still help their families. At school they learn how to read and do math; these skills are helpful to families as well."

In December, Mr. Thomas was walking by the school and called out to the head teacher, "My family is poor. I cannot send my daughters to school because we do not have enough money. I need them to help me every day. All of the families that I know who are poor send a son to school, but sending more children will never bring my family the money we need." The teacher told Mr. Thomas that she used to notice this trend more in the past, but the enrollment rates show that more and more families are sending their daughters to school and families are still able to get their chores done. Mr. Thomas interrupted, "But how will they have the time to weave baskets and other household goods? I rely on that money for our family to survive." She responded, "Your children will still be able to complete these tasks. On top of that, they will be able to help by reading labels at the market and using their math skills to create a budget for your family."

January began and Mr. Thomas enrolled his two oldest daughters in the elementary school. One sunny day Mr. Thomas ran up to the head teacher with a smile on his face. He told her, "My daughters are enrolled and are learning English so quickly. I thought that they would not get their chores done, but when they get home from school they seem focused and finish all of their tasks. I thought we would not be able to trade goods with people in the community as often, but now the children know more families and our trades have increased in value. In addition, they are able to teach us about what we are buying at the market and whether or not it is a good price!" The teacher replied, "It has been my pleasure teaching your daughters and I am happy that it has benefited your family in so many ways! Your oldest daughter has scored high on tests, even better than most boys. If she keeps this up, she could apply for a job or teach at a school – she could help take care of you one day, in case something happens." Mr. Thomas laughed, "I am just glad to know that she is in a safe place, as you have promised. I don't spend as much time worrying about the future of my family; I know that together we will always get by. I am just so glad that I ran out of excuses before I denied my children the chance to learn and better themselves."

Handout 3: A Parent's Unwillingness to Send His Daughter to School Script

Formatted as a play

NARRATOR: One day in August, Mr. Thomas, a father of five daughters and one son, was walking by the local primary school with one of his daughters carrying a load of branches that would be used to make a fire to cook their meal. The head teacher waved him down and asked,

HEAD TEACHER: Why isn't that girl in school? You should really send your daughters to school Mr. Thomas. They need to learn. They need to grow. One day they will take care of you.

NARRATOR: Mr. Thomas replied …

MR. THOMAS: My five daughters will *all* marry great men and the men will take care of me when I am old and in need. Other fathers don't send their girls to school, why should I?

NARRATOR: So the head teacher explained to him …

HEAD TEACHER: There are risks of relying on other people you don't even know, especially considering that your daughters are quite young. Things are changing, Mr. Thomas. Other fathers are sending their girls to school!

NARRATOR: September came and the head teacher saw Mr. Thomas with two of his daughters in the schoolyard. The teacher greeted Mr. Thomas and asked,

HEAD TEACHER: Why haven't you enrolled your daughters in school yet?

NARRATOR: Mr. Thomas laughed and said,

MR. THOMAS: My son is enrolled; he is here to learn – what he learns he can teach to my daughters at home.

NARRATOR: The teacher pushed further …

HEAD TEACHER: But why have you only enrolled your son, why can't your daughters learn at school as well?

MR. THOMAS: My son is the smartest of my children; everyone knows that boys are smarter than girls. Also, if I send my daughters to school, no one will want to marry them because a husband wants a wife who is happy to stay at home.

HEAD TEACHER: The test scores of the students in my school do not show that girls are smarter than boys. Children must go to school and practice their study skills. Look how many girls are studying in each classroom of the school! Girls who study can become wives who contribute to the family in many same and new ways. They will be able to create a safer and healthier household.

NARRATOR: The teacher then realized that Mr. Thomas' words reflected his personal belief system and that in order for him to enroll his daughters he would need to be provided with proper information and the chance to see the number of females in attendance at the school.

NARRATOR: October arrived and Mr. Thomas saw the head teacher one day near the market. Mr. Thomas knew what she was going to say to him, so he called out before she could,

MR. THOMAS: No, I have not enrolled my daughters in school yet. Who will protect them? What if they get abused or sexually attacked at school? How am I supposed to protect them when they are not near me?

NARRATOR: Noting his fear, she thought for a moment before adding,

HEAD TEACHER: I understand your worries. I once shared the same concerns before I sent my daughters to school. So I chose to learn more about the school, I began working there and soon saw that the school provided my children the opportunity to learn *in* a safe place. Children are monitored while they are at school and there is a very strict policy ensuring that all children are safe.

NARRATOR: In November, Mr. Thomas came to school to pick up his son early. The head teacher noticed Mr. Thomas standing outside his son's classroom and asked him,

HEAD TEACHER: Why have you come to take your son out of school early today and why haven't you enrolled any of your daughters yet?

MR. THOMAS: I need my son to help carry goods home from the market today. I cannot do it alone. This is also why I haven't enrolled my daughters. They have daily responsibilities at home and if they were attending school, they wouldn't have the time to take care of their siblings or perform the other responsibilities that women must do.

NARRATOR: So the head teacher explained to Mr. Thomas that all of the students still completed their daily chores at home, school does not interfere with family responsibilities. Many families have reported that their children are able to help the family in more ways than before!

NARRATOR: In December, Mr. Thomas was walking by the school and called out to the head teacher,

MR. THOMAS: My family is poor!

NARRATOR: And the teacher retorted,

HEAD TEACHER: Many of my students' families are poor!

MR. THOMAS: I cannot send my daughters to school because we do not have enough money. I need them to help me every day. All of the families that I know who are poor send a son to school, but sending more children will never bring my family the money it needs.

NARRATOR: So the teacher explained to him,

HEAD TEACHER: This trend has changed. Enrollment rates show that more and more families are sending their daughters to school. Families are still able to get their needs met.

NARRATOR: Mr. Thomas then interrupted,

MR. THOMAS: But we are poor! My daughters help provide for our family by weaving baskets and other household goods. We won't get that money if they are in school and have no time to produce goods to sell.

NARRATOR: To which she replied,

HEAD TEACHER: Children who go to school are still able to complete those tasks. On top of that, they can help by reading labels at the market and using their math skills to create a budget for your family.

NARRATOR: January began and Mr. Thomas enrolled his two oldest daughters in the elementary school. One sunny day Mr. Thomas ran up to the head teacher with a smile on his face. He told her,

MR. THOMAS: My daughters are enrolled and are learning English so quickly. I thought that they would not get their chores done, but when they get home from school they seem more focused and finish all of their tasks. I thought we would not be able to trade goods with people in the community as often, but the children know more families now and our trades have increased in value. In addition, they are able to teach us about what we are buying at the market and whether or not it is a good price. I thank God that I ran out of excuses before I denied my children the chance to learn and better themselves!

NARRATOR: With a smile, the teacher replied,

HEAD TEACHER: Oh, Mr. Thomas, it has been my pleasure teaching your daughters! I am happy that it has benefited your family in so many ways! Your oldest daughter has scored high on tests, even better than most boys. If she keeps this up, she could apply for a job or teach at a school – she could help take care of you one day, in case something happens.

Pre-contemplation	**Contemplation**
Preparation for Action	**Action**
Maintenance	

Session 3: Introduction to Community Data-Driven Decision Making (CD3M)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning Objective: Communicate with colleagues and community members about the importance of making data-driven decisions to improve education

Session Rationale: Development projects often fail because they do not meet the needs of the community. Just as development projects supported by the local community are more successful and sustainable, school systems also need the support of the local community. Without local participation in the education system, it is less likely that schools will be able to provide a quality education for all. Community members (head teachers, teachers, parents, and students) in education have a significant role in supporting and improving their education systems at the local level.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites:

Version: October 2013

Contributing Posts: PC/Guatemala
                                PC/Philippines

Session: Introduction to Community Data-Driven Decision Making (CD3M)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Consider adapting the "Community Involvement Role-Play" to your context. Read Handout 3 and think of an example from your context. Adapt the materials, time permitting, to reflect your context and a real-life example of education decision making.
3. Read the "Community Involvement Role-Play" section – Re-read it again and be sure you feel comfortable explaining the instructions and following the procedures. Be ready to ask and answer the guiding questions.
4. Read and re-read the "Literacy Boost" case study. Be ready to help participants understand the benefit of community involvement when making decisions about teaching children to read.
5. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
*   **Equipment**
    1. Flip chart
    2. Markers
    3. Tape
    4. Projector, computer, screen, electricity
*   **Handouts**
    Handout 1: CD3M Fact Sheet
    Handout 2: Eight Modes of Community Involvement
    Handout 3: K+12 System Example
    Handout 4: Literacy Boost for Community Involvement

Trainer Materials
    Trainer Material 1:   Session 3 - PowerPoint)
    Trainer Material 2:   Agreement Signs for Anticipation Guide
    Trainer Material 3:   Forced Choice Statements
    Trainer Material 4:   Flip chart of "Community," "Data-Driven," and "Decision Making"

Session Learning Objectives:
Participants will
1. Define and state the benefits of community data-driven decision making.
2. Indicate how groups of people currently are involved in making decisions in their communities and at school.
3. Express different ways community members can engage and make decisions around schooling and their children's learning.

Phase / Time / Materials	Instructional Sequence

Motivation
 	
20 minutes
 	
Trainer Material 2: Agreement Signs for Anticipation Guide hung in room
 	
Trainer Material 3: Forced Choice Statements about Decision Making
	Forced Choice/Anticipation Guide Activity
	Participants respond to statements concerning the importance of who participates in decision making and how they do so.
	
	1. Post anticipation guide signs in the four corners of the room (strongly agree, agree, disagree, strongly disagree). Participants are asked to take out paper and pen.
	
	2. [SLIDE 2]: Display each of the following statements separately on a piece of paper and ask respondents to determine their level of agreement or disagreement. Ask participants to write a one-sentence justification for their choice:
	   • *Parents who are not literate lack the ability to make good decisions about education.*
	   • *Teachers know what to do to cater to all students' learning needs.*
	   • *The Ministry of Education here in [country] collects quality information that is building national faith in the education system.*
	   • *Parent-Teacher Associations (PTAs) should follow the advice of schools because professional educators know what is best for students.*
	   • *Here in [country], leaders encourage people who are not in positions of authority to participate in decision making.*
	
	3. After participants have written their responses, read and point to each statement, each time asking participants to move to their respective corners of agreement or disagreement and to bring their justifications with them.
	
	4. Select certain participants to respond to the following question for each of the statements: *"Why are you here? What examples can you give that support your reason for agreeing/disagreeing?"*
	
	5. [SLIDE 3]: Paraphrase or say each of the following statements:
	   • *"Parents who are not literate HAVE the ability to make good decisions about their children's education. They know what is going on in their children's lives at home. Parents can be sensitized to better understand what they can do to help*

Phase / Time / Materials	Instructional Sequence
	teachers so students are learning better. Parents are a valuable resource for teachers and can make decisions that promote their children's learning.
	• *"NOT ALL teachers know what to do to cater to all students' learning needs. Most teachers teach the way that they were taught, which means that in most places teachers use a teacher-centered approach that favors call and response instruction. This does not usually cater to students who have different learning styles or learning abilities. Teachers need evidence to help them see how their instruction impacts students and what student learning is going on in their classroom in order to make decisions about their teaching.*
	• *"The Ministry of Education collects quality data that MAY BE building national faith in the education system. The data that is available can be helpful for schools to make decisions about general trends or if the Ministry has school-specific data, this can help the school make decisions as well. However, schools can also collect their own evidence and information to make decisions at the local level.*
	• *"PTAs should SOMETIMES follow the advice of schools because professional educators know what is best for students. PTAs also know what is best for students. This is especially true when collecting data about teachers' attendance, teachers' behavior, the allocation of student funds, and how the community can help promote teachers' and students' well-being. When PTAs have this type of information and know what it means, they can make the best decisions for the school (teachers and students combined).*
	• *"In your country, leaders MAY or MAY NOT encourage people who are not in positions of authority to participate in decision making. People who are not in a position of authority, such as parents and students, are valuable human resources that need to be taken into consideration to make decisions. If parents are not happy with a school, they may not send their children to classes and support the school. If children are not taken seriously, they may not be motivated to learn. Involving different stakeholders in the decision-making process is an important step in order to foster a positive school environment and attain positive learning outcomes."*

Phase / Time / Materials	Instructional Sequence
Information 40 minutes Handout 1: CD3M Fact Sheet	**Introduction to CD3M** Participants will define and articulate the importance of Community Data-Driven Decision Making (CD3M). 1. Say or paraphrase the following: "*Community Data-Driven Decision Making is a big term that can be complicated and confusing to people. In order for all of us to be on the same page, we are going to define this concept in simple terms. If we do not understand what this concept means now, then we will probably be confused during the whole workshop!*" 2. Distribute Handout 1: CD3M Fact Sheet. Explain that this document helps to explain what CD3M is, as well as the benefits of using this type of approach in education. Ask participants to read the fact sheet. (5 minutes)
Trainer Material 4: Flip chart of "Community", "Data-Driven" and "Decision Making" Training Material 1: Session 3 – PowerPoint slides	3. Post the flip charts with one term per flip chart. Ask participants to turn to a partner and, using the handout, explain each element in their own terms. After a couple of minutes, ask participants to present their working definitions of each term. Write the ideas on the flip chart. | Community	Data-Driven	Decision Making
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Training Material 1: Session 3 – PowerPoint slides	4. [SLIDE 4]: Present the PowerPoint slide. Paraphrase, say, and reinforce (especially if these ideas have not been presented above): • *"At the school level, community can refer to students, teachers, head teachers, parents, and other individuals who are directly involved in the school life.* • *"Data-driven refers to looking at data. Data is collected pieces of information. Examples of data include school achievement, student assessment information, graduation rates, attendance rates, dropout rates, student performance on test/quizzes, student performance on homework and other activities, people's perceptions, behaviors at or about school, tracking and capturing school inventory supplies, etc. Data can be classified into different groups, for example, by*

Phase / Time / Materials	Instructional Sequence
	female/male, by class, by grade, by performance, etc. This is what is meant by evidence-based. • *"Decision making is the process of making choices based on evidence."*
Handout 2: Eight Modes of Community Involvement	5. Indicate that if we were to string these three concepts together, what would this look like? Ask participants to give their own definitions of CD3M in their own words. 6. [SLIDE 5]: Present a common definition of CD3M on the PowerPoint slides and repeat it three times:
Training Material 1: Session 3 – PowerPoint slides Flip chart Markers	**Community Data-Driven Decision Making:** School stakeholders who collect and use data to understand what is going on at the school in order to make decisions to improve the school environment, teaching, and learning process.
	7. Reflecting back on the session on evidence-based decision making, ask participants to articulate what they feel would be the benefits of CD3M. • [SLIDE 6]: Possible answers and key messages to paraphrase: *CD3M could help understand details and specific information about the school in order to improve student achievement for different types of students (boys/girls; different socioeconomic groups; etc); improve teaching quality; share best practices among schools; communicate education issues more effectively; get parents more involved in the school; increase dialogue within the education community; and/or find the root causes of problems.* **Eight Modes of Community Involvement** Participants begin to think about how education decisions are made among different stakeholders in their schools and communities. 1. Distribute the "Eight Modes of Community Involvement" handout. Ask participants to read over the chart for a couple of minutes

Phase / Time / Materials	Instructional Sequence
	2. Post the eight modes of community involvement table on PowerPoint. 3. [SLIDE 7]: Say or paraphrase: *"The eight modes of community involvement range from the 'tell' mode, where project initiators give information and direction to the intended beneficiaries, to the 'empower,' 'embolden,' and 'demand' modes, where the communities themselves are progressively more responsible for planning, starting, and implementing the activities. The communities to be served should be meaningfully involved in program planning and implementation. Participatory involvement helps to ensure that the activities are important to those who will benefit."*

	Mode	Characteristics
Least Participation	Tell	Facilitator gives information and direction
	Sell	Facilitator gives information and expects agreement a
	Test	Facilitator has identified a "right" direction but wants confirmation
	Consult	Facilitator is unclear and wants ideas about the proposed solution
	Join	Facilitator delegates tasks or forges partnerships to solve problems
	Empower	Facilitator trains selected community leaders to guide communities in identifying problems and possible solutions, and in developing action plans
	Embolden	Facilitator encourages community to take initiatives in support of education reform
Most Participation	Demand	Village/community "orders" the education delivery that it wants; Donor agency provides financial and other support [1]

Phase / Time / Materials	Instructional Sequence

	4. Invite participants to think about the different modes and write down someone, a group of people or a type of community member in their community, who correspond(s) to each mode of community involvement.
	
	5. Ask participants to share their responses if they feel comfortable doing so.
	
	6. Brainstorm with participants concerning the following question: "*How do school administrators, teachers, parents and students make decisions in your community?*"
	
	7. Fill out the table below on a flip chart:
	
		School Admin	Teachers	Parents	Students |
					      |---|---|---|---|
					      | | | | |
					
					8. Invite participants to think about a recent decision that was made at their schools and identify the modes of involvement used in making the decision. Also ask which communities beyond the school were consulted, if applicable (PTA, local business interests, teacher associations, etc.).
					
					9. Help brainstorm by creating a two-column list on the flip chart with *modes of involvement* and *communities included* for select group responses. Participants identify how each community/group was involved in the decision.
					
						Decision Made	Mode of Involvement	Communities Included |
								      |---|---|---|
								      | | | |
								
								10. Think back to the previous sessions and say or paraphrase: "*Decisions need to be based on concrete evidence/data that clearly indicate what needs to change or remain by looking at specific details. Were these decisions based on evidence? Could we involve any other tools or communities to help us find out more before making the decision? We will provide processes we can follow in order to make sure that not only are our decisions based on evidence but that they involve different members of the community.*"

Phase / Time / Materials	Instructional Sequence

Practice
 	
35 minutes
 	
Handout 3: K+12 System Example
	Community Involvement Role-Play
	Participants role-play a real education issue that highlights the importance of community involvement.
	  Post Adaptation:
	  This activity works well using a real education issue in the Philippines. A Department of Education mandate to extend the number of years of required education was a recent controversial issue that all the participants were familiar with. The facilitator should choose a real education issue in the country.
	
	1. Explain that we are going to take part in a role-play activity based on a real education decision that was made.
	2. Distribute a series of quotes and display the Part I Department of Education Memo. (see Handout 3)
	3. Ask participants to read the quotes aloud and then, in small groups, discuss the guiding question(s).
	4. Discuss answers to questions with the group as a whole.
	5. Distribute Part II and ask participants to individually create quotes for each stakeholder, based on the Part II approach.
	6. Ask participants to share their quotes in small groups and have a note taker take notes on the discussion questions.
	7. Whole group discussion of select responses.

Application 25 minutes Handout 4: Literacy Boost for Community Involvement Training Material 1: Session 3 – PowerPoint slides	**Community Involvement in Creating a Culture of Reading – The Case of Literacy Boost** Participants explore the Literacy Boost early grade reading program, especially the community action component, to map out practical activities and decisions that communities can take to foster a love of reading and improve students' reading abilities. 1. Indicate that you are going to distribute a case study that highlights Literacy Boost, a community-involved early grade reading program implemented by Save the Children. It is a program that provides assessment data on children's early grade reading abilities and then involves the communities in decision making and materials generation to create a culture of reading in schools and in the community.

Phase / Time / Materials	Instructional Sequence
	2. [SLIDE 8]: Distribute Handout 4: Literacy Boost for Community Involvement. Before participants are reading, post the questions they should be answering: • How is the community involved in the decision making and learning process in the Literacy Boost program? • How is your community involved in creating a culture of reading for children in your community? 3. When participants have finished reading the handout, conduct a debrief session, asking the following types of questions: • What types of evidence is included in the Literacy Boost program? • How are parents involved in helping their children improve their reading skills? How do we know? • How is this similar to your community? • How is this different from your community? • What type of evidence from the Literacy Boost program initiatives could you try to undertake in your community? How would you start them up and maintain the activities?
Assessment	**Learning Objective 1:** Participants define and state the benefits of CD3M in the Motivation and Information sections. **Learning Objective 2:** Participants articulate common trends in decision making in their communities in the Motivation section and in schools in the Practice section. **Learning Objective 3:** Participants explain different ways that community members can help make evidence-based decisions to promote children's reading abilities.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:
Rugh, A., ad H. Bossert, 1998. Involving Communities: A Companion Guide. p. 142. Retrieved from http://pdf.usaid.gov/pdf_docs/PNACH065.pdf

Handout 1: Community Data-Driven Decision Making (CD3M) Fact Sheet

WHAT IS DATA DRIVEN DECISION MAKING?

Using and evaluating data are important steps to the school improvement process. Data are any information about the school that can be gathered, reviewed, and analyzed in order to produce useful knowledge (NCREL, 2004). Decisions are made by looking at the different pieces of information, facts, and data together (such as test scores, attendance rates, enrollment rates, facts about girls and boys, school conditions, achievement rates, teaching practices, and more). Basing needs on assumptions or routine perpetuates cycles and ineffective practices that most likely waste a school's money.

HOW DOES DATA DRIVEN DECISION MAKING RELATE TO CONNECTIONS TO LEARNING?

For too long, educators have made decisions under the assumption that problems lay in certain areas. The assumed problems were not identified through actual facts, therefore, the school improvements would address a problem that may or may not exist (NCREL, 2006). Data-driven decision making looks to eliminate this methodology and help schools identify and combat the real problems that are occurring. Data provides educators with an overview of the strengths and weaknesses in the targeted area (NCREL, 2006). By making decisions based on educated guesses, schools begin to create effective and efficient steps to positive school change. These data allow educators to make decisions and identify priority areas in their schools. Once these priority areas are determined, schools can then set realistic goals and move into action. Reviewing data, forming hypotheses, and creating action plans helps the school move toward the goal of creating positive change in the school.

Example:

- For example, in a school that does not use data-driven decision making, professional development may look scattered and unintentional. The staff may seem uninterested or find the information not useful because they see no use to their particular area.
- If the school uses data-driven decision making to determine professional development, the staff will benefit because professional development will be focused toward their needs (NCREL, 2004). Also, in a school that makes its decisions based on assumptions, budgetary problems may occur (NCREL, 2006).

http://www.doe.k12.de.us/dess/files/ctl_files/ToolKit_web/GetSet/Breaking_into_the_Circle/ DataDrivenDecisionMakingFactSheetFINAL.doc.

Citations and Resources

Bernhardt, V.L. 2004. Data analysis for continuous school improvement (2nd Ed.). Larchmont, NY: Eye on Education.

Lachat, A., & Smith, S. 2005. Practices that support data use in urban high schools. Journal of Education for Students Placed at Risk, 10(3), 333-349.

Love, N. 2002. Using data/getting results: A practical guide for school improvement in mathematics and science. Norwood, MA: Christopher-Gordon Publishers.

North Central Regional Educational Laboratory. 2006. Using data as a school improvement tool. Learning Point Associates.

North Central Regional Educational Laboratory 2004. Guide to using data in school improvement efforts: A compilation of knowledge from data retreats and data use at learning point associates. Learning Point Associates.

Streifer, P.A. (2004). Tools and techniques for effective data-driven decision making. Lanham, MD: Scarecrow Education.

www.centerforcrsi.org (The Center for Comprehensive School Reform and Improvement)
www.learningpt.org (Learning Point Associates)
www.ncrel.org/datause (North Central Regional Education Laboratory)

Handout 2: Eight Modes of Community Involvement

There are eight modes of community involvement, ranging from the "tell" mode, where project initiators give information and direction to the intended beneficiaries, to the "empower," "embolden," and "demand" modes, where the communities themselves are progressively more responsible for planning, starting, and implementing the activities. The communities to be served should be meaningfully involved in program planning and implementation.
Participatory involvement helps to ensure that the activities are important to the beneficiaries.

Least Participation	Mode	Characteristics	Example in your community
	Tell	Facilitator gives information and direction	
	Sell	Facilitator gives information and expects agreement	
	Test	Facilitator has identified a "right" direction but wants confirmation	
	Consult	Facilitator is unclear and wants ideas about a proposed solution	
	Join	Facilitator delegates tasks or forges partnerships to solve problems	
	Empower	Facilitator trains selected community leaders to guide communities in identifying problems and possible solutions and in developing action plans	
	Embolden	Facilitator encourages community to take initiatives in support of education reform	
Most Participation	Demand	Village/community "orders" the education delivery that it wants; Donor agency provides financial and other support [2]	

[3] Adapted from Rugh, A., and H. Bossert, 1998. "Involving Communities: A Companion Guide. p. 142.

Handout 3: K + 12 System Example

Part I

You are given this data and only this data:

Department of Education Memo No. 450, s.2011 –

Students will now begin enrollment in a K+12 school system. Kindergarten will be mandatory and there will be an additional two-year "senior high school."

Reaction comments from community members in Tarlac:

Stakeholder	Reaction
Name: John Carlo Age: 45 Profession: Farmer Children: 8 (4 elementary, 4 high school)	"I need my children to help with my rice harvest! I have no money for the additional transportation, food, and school fees if my children will be in school for two more years. Two of my children will be forced to drop out to help on the farm. I think this was a terrible decision that will hurt my family."
Name: Jenny Rose Profession: High school student	"I don't really care whether I'm in school for more years. I don't get to make choices like this anyway. I would rather start working to support my family, but I like being at school with my friends. It is less boring than working at my mother's sari store and I really like practicing my speaking with Maam Arcy, my English teacher."
Name: Elaina Age: 35 Profession: High school teacher Children: 2 (1 elementary, 1 high school)	"Ay naku! My students are already dropping out at an alarming rate and my school barely has enough classrooms and supplies to serve our current students. Two more years will only make the dropout problem worse. I agree that Filipino public schools need to become the strongest in Asia, but where are the details for this plan?"
Name: David Galicia Age: 55 Profession: DepEd administrator	"This program is greatly needed in the Philippines and is the only way to improve the prospects of our graduates. The program will only be successful with the participation of all stakeholders, so they need to accept that this decision has been made and support the initiative."

Part I Discussion Questions:
- What are some of the reasons stakeholders had negative reactions to the released memo?
- Which modes of community involvement does Department of Education use in its decision-making process?
- Which communities are involved in the decision making surrounding the K+12 change?

Part II

Considering what you read in Part I, play the part of John Carlo, Jenny Rose, and Elaina and David Galicia using the following data:

Department of Education Memo No. 450, s.2011

Students will now begin enrollment in a K+12 school system. Kindergarten will be mandatory and there will be an additional two-year "senior high school."

The following is the data that led DepEd to the adoption of a K+12 system:
- With the K+12 system, the Philippines will be on par with international standards. Washington Accords and Bologna Accords – international agreements for the recognition of professionals. Currently, Filipino graduates are not recognized abroad in many of their fields, including medical, engineering, and the sciences. (http://en.wikipedia.org/wiki/Washington_Accord)
-The Philippines is the only country remaining in Asia with a 10-year basic education system. (http://www.gov./2010/11/02/briefer-on-the-enhanced-k12-basic-education-program/)
-Studies in the Philippines have shown that an additional year of schooling increases earnings by 7.5 percent. (http://www.gov./2010/11/02/briefer-on-the-enhanced-k12-basic-education-program/)
-Studies validate that improvements in the quality of education will increase GDP growth by 2-2.2 percent. (http://www.gov.ph/2010/11/02/briefer-on-the-enhanced-k12-basic-education-program/)
-DepEd plans on using funds from the Philippine Charity Sweepstakes Office (PCSO) and the Philippine Amusement and Gaming Corporation (PAGCOR) to help finance the additional costs of the K+12 system. (http://www.abs-cbnnews.com/anc/10/06/10/luistro-deped-needs-more-money-k12-program)

Stakeholder	Predicted Reaction
Name: John Carlo Age: 45 Profession: Farmer Children: 8 (4 elementary, 4 high school)	
Name: Jenny Rose Profession: High school student	
Name: Elaina Age: 35 Profession: High school teacher Children: 2 (1 elementary, 1 high school)	
Name: David Galicia Age: 55 Profession: DepEd administrator	

Part II Discussion Questions:
- How are the Department of Education approaches in Part I the same or different from Part II?
- What additional data in Part II helped you predict stakeholder reactions?
- If your predicted responses were different in Part II, why do you think stakeholder views changed?
- Does the data presented by the Department of Education in Part II seem reliable and valid?

Handout 4: Literacy Boost for Community Involvement

Literacy Boost[1]

Background:
Literacy Boost is an approach created by the nongovernmental organization (NGO) Save the Children. The program aims to support the development of reading in young children. This program differs from most remedial literacy programs by focusing on the need for all members of the community to play an active role in the process of creating a culture of reading – by promoting print rich environments and reading activities.

Literacy Boost materials and training can be found and used in everyday interactions – whether in the classroom or at home – with activities that support the development of the five foundational skills that are needed to acquire literacy: letter knowledge, phonemic awareness, vocabulary, reading fluency and comprehension.

Currently, Literacy Boost is being used in many countries around the world and is a unique program as it:
- Can adapt to fit any national curriculum and be translated into the local language
- Creates materials and activities that fit to the culture of the community and its resources
- Uses entry level assessments to understand which core reading skills need to be focused on and exit assessments to track children's growth in these areas
- Trains teachers to monitor students' mastery of core reading skills
- Involves all members of the community, regardless of their literacy skills, in the process of supporting all forms of communication and growth in their community

Literacy Boost pursues the goal of literacy by doing three things: using assessments to identify gaps in the five core values, training teachers to teach national curriculum with an emphasis on the core skills, and preparing communities for reading action.

Community Involvement Components:
The Literacy Boost Community Action toolkit focuses on three action areas to create a culture of reading within the community and support children in the critical early grade stages, as they read:
1. **Parent activities** – Regardless of their reading ability, these activities engage everyone in tasks that promote children's reading skills and include singing, talking, playing, shopping, and doing chores around the house. Other methods and activities include workshops and strategies to help parents read with their children.
2. **Book banks and material creation** – Initially the program supplies the community with a variety of reading materials. Save the Children then provides guidance and support to teachers, parents, and other community members as they locally create print materials that are language- and age-appropriate for the children.
3. **Extracurricular reading activities for children** – These activities engage all community members in supporting good reading habits and skills for children. Some of these activities include reading camps, reading buddies, reading festivals, and story time.

These three community-based action areas promote and reinforce a culture of reading that highly values literacy and different forms of communication. By focusing on the community and the school, children receive the message from their teachers, peers, parents and other members of the community that reading matters.

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[4]   Dowd, A.J., Ochoa, C. (2011). *Literacy Boost Community Action*. Save the Children.

The Community

Literacy Boost has used community based data-driven decision making to initiate its grassroots movement – knowing that in order to improve the reading abilities of low-income children, it is vital that they have access to print materials and that parents and other caring individuals within the community become involved in the reading experiences children encounter. Save the Children has noted evidence of an increase in children's reading scores and parent engagement when utilizing three components of Community Action: parent activities and workshops, book banks and materials creation, and other reading activities for children.

Parent Activities and Workshops

In Malawi, children whose parents engaged in the program and attended monthly parent workshops showed learning gains and received higher reading scores than peers whose parents did not attend. Fifty percent of the parents who were in attendance were unable to read or write. Illiterate parents in this situation help illustrate the importance of parental involvement and the aid that the workshops provided in improving children's reading skills.

The responses from parents who participated in the workshops sheds light on the changes that are going on within the home and the ability of the programs to promote a culture of reading. In Pakistan, mothers are showing more concern about their children's education and placing value on reading activities for children. After attending a parenting session, one father added, "Because of what we discuss in the sessions, we now ask our children about school and make sure they attend Literacy Boost activities regularly." The reading camps have also received positive feedback. One mother said, "I like it when they borrow books to bring home, because they share the stories with us. We especially like the Pashto materials, because we learn along with our children."

Book Banks and Community-Created Materials

Book banks safely store reading materials that are created and used by students and other community members. Literacy book banks contain 100 to 250 books that are varied by reading level. Types of texts include: primers (emergent reading level); illustrated books for emergent and beginning reading levels; stories for emergent, beginning, and independent readers; fables for older children, teachers and other members of the community to read aloud; a set of guidelines for parents on how to read to and with children; and the *Community Strategies for Promoting Literacy Flip Book,* which provides simple activities for parents and children of all reading levels to support the development of reading skills. The collection of reading material is often stored in trunks, chests, or other mobile storage containers. This allows and encourages members of the community to access a variety of reading material with ease.

Save the Children's Literacy Boost Community Action toolkit is organized to support trained community volunteers and other community members to develop one-page stories, whether it be adapting foreign language books into local language or writing original stories. The toolkit outlines multiple techniques for staff, teachers, parents, and other community members to create entirely locally written, fully illustrated published material. By empowering community members to be a part of this process, parents and teachers are given the opportunity to work side by side, creating reading material that is relevant to their cultural values and designed to facilitate the development of their children's reading skills.

This aspect of the project reflects a change in attitude and understanding of how children learn and who we see fit to teach. Everyone in the community has the chance to be valued for their experiences, knowledge, and to notice their children's abilities by collaborating with individuals whom were once seen as "experts." While teachers may be trained professionally, that does not ensure that the methods they choose to use are child-centered. Whether parents are literate or illiterate, they have witnessed their child grow and reach different developmental milestones. This kind of information, as well as character tendencies, concerns at home, and general welfare tend to be matters that family members know best. When parents and community members are

asked about these aspects and share with educators, the likelihood that children will continue to develop and utilize foundational literacy skills increases, as the child's needs are being addressed in a holistic manner. While parents who are illiterate may feel more confident in a teacher's ability to teach their children and see them as experts due to formal training, it is vital to emphasize that education is not something that solely happens in the classroom – learning is an everyday occurrence and everyone has something of value to share and teach others. Once education begins to be viewed through this lens, the benefits that evolve from this point of view affect not only the children's literacy, but their family members and the community at large. We can all be teachers in some way if we choose to, but in order to make that choice, we need to feel valued for what we know and how we can help each other grow.

Community Activities
Literacy Boost's community action component includes several activities that help to increase the amount and variety of interactions that take place between young readers. These activities serve to motivate children's participation and foster their enjoyment in reading, both in and out of the school environment:

- **Reading Camp** – Older youth become camp leaders and are trained to guide a group of younger children through read-alouds, songs, games, and creative arts that are centered on the five core skills of reading.
- **Reading Buddies** – Younger students who are learning to read are paired with older primary students whose fluency and comprehension levels serve to model what "good readers look like." Reading buddies meet on a regular basis and borrow books from the book bank to practice reading and develop positive relationships that support literacy skills.
- **Read-a-thons/Reading Festivals** – These are motivating, fun, community reading competitions for children that encourage them to practice their literacy skills while maintaining a healthy culture of reading during breaks in the school year.
- **Story Time** – Children are invited to attend scheduled weekly or monthly story time activities where community volunteers read or tell stories to children. This activity serves to promote the need for different roles in the reading community and children are exposed to vocabulary, local knowledge, and are offered the opportunity to talk about texts or tales.

Literacy Boost's community action component focuses on the important aspect for improving children's reading abilities – parents, community members, and children themselves. Community action prepares and empowers parents to understand the importance of reading in children's learning and to become active participants of this process. It does take a village to raise a child and formal education does have a place within the community, but learning experiences are not limited to the classroom, they occur throughout the community on a daily basis. Once we acknowledge and accept this truth, we understand our need to involve the community in the holistic process of development, for ourselves and our children.

Session 4: Developmental Evaluation and CD3M Process Cycle (What is the Problem?)

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Adapt CD3M data collection tools to local needs and use them to conduct the CD3M process cycle

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Session Rationale: Developmental evaluation is the approach that supports using data continuously throughout an activity to make changes. The activity is more likely to be a success when it can be adjusted using real-time information along the way. This session incorporates the CD3M process cycle as a means to present user-friendly developmental evaluation stages. This includes asking evaluative questions and gathering information to provide feedback and support developmental decision making and course corrections along the emergent path.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites:

Version: October 2013

Contributing Posts: PC/Guatemala
PC/Philippines

Session: Developmental Evaluation and the CD3M Process Cycle		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the CD3M process cycle and be comfortable to present a variety of examples that fit into the cycle.
3. Prepare the CD3M case studies and be comfortable to help groups place the different items in the order that follows the CD3M steps.
4. If you have time, you may want to create a "Problem Concept Map" for a school you work at, worked with, or have visited frequently. This example could help participants when they need to complete Step 1 of the CD3M process cycle (Identifying problems).
5. Identify and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Flip chart
    2. Markers
    3. Tape
    4. Computer, screen, projector, electricity
- **Handouts**
    Handout 1: Traditional vs. Developmental Evaluation Worksheet
    Handout 2: CD3M Process Cycle
    Handout 3: CD3M – Step 1 – Problem and Questions Worksheet
- **Trainer Materials**
    Trainer Material 1:   Developmental Evaluation & CD3M Process Cycle PowerPoint Five cards of the extended CD3M example (three case studies total)

Session Learning Objectives:
Participants will
1. Explain what developmental evaluation is and how it differs from traditional forms of evaluation.
2. Be able to explain the importance of developmental evaluation.
3. Explain the steps in the CD3M process cycle.
4. Start to fill out the "problem" step of the CD3M process cycle in relation to their own school communities and identify questions they are interested in answering within their local school contexts.

Phase / Time / Materials	Instructional Sequence
Motivation 15 minutes Training Material 1: Session 4 Developmental Evaluation & CD3M Process Cycle PowerPoint Flip chart Markers Tape	**Developmental Evaluation** Participants reflect on the differences between monitoring and evaluation and recall their experiences with both. 1. Say or paraphrase the following: *"When we think about everything that 'data-driven decision making' really entails, we reveal that it is a process where we are trying to evaluate something in order to make a change. Going through each step of making decisions based on real data is really the same thing as doing an evaluation. So we're beginning our workshop with the concept of evaluation to set the stage for communicating later with your community members about the value of data-driven decision making. This might be the most 'theoretical' session of our workshop – we're starting with the big picture and some general concepts to lay the foundation to get into details as we move ahead."* 2. [SLIDE 2]: Post the PowerPoint slide or flip chart which underlines the major parts of this session: <table><tr><td>Collecting, analyzing, sharing, and making decisions/ changes based on data is a process we use in evaluation. We will provide a CD3M cycle to undergo this process. By the end of this session, you will be able to: • Communicate a positive evaluation approach to colleagues and community members • Use the CD3M cycle to identify a problem and evaluative questions you are interested in answering within your local school context</td></tr></table> 3. Brainstorm on a flip chart what participants think "evaluation" means. 4. [SLIDE 3]: Present the definition and concepts of "evaluation" on the PowerPoint: <table><tr><td>Evaluation is a specific study that helps determine program achievement. A well-planned, high-quality evaluation can help answer: • How well was the project implemented? • Were the desired changes achieved? • If the change was achieved, to what extent can it be attributed to the project?</td></tr></table>

Phase / Time / Materials	Instructional Sequence
	5. [SLIDE 4]: Explain or paraphrase the following: "*Developmental evaluation is a type of evaluation that emphasizes USING data to make meaningful change. It can be done within an organization, like a school.*" 6. [SLIDE 5]: Show the PowerPoint slide with the evaluation cartoon with the caption "Oh no! Our school will be assessed next month! I am being evaluated": 7. Ask discussion questions: Have you experienced an evaluation or assessment? Give us an example. How did you feel about being evaluated/assessed? Did you gain something from the evaluation/assessment? Was there a chance you could lose something as a result of the evaluation/assessment? • Participants will likely discuss how they felt threatened or nervous about being evaluated. Perhaps they felt some resentment or anger over the findings and consequences of the evaluation.

Phase / Time / Materials	Instructional Sequence

Information 1
 	
20 minutes
 	
Trainer Material 1: Session 4 PowerPoint
	Developmental Evaluation
	Participants learn how developmental evaluation differs from traditional evaluation.
	
	1. Explain Developmental Evaluation:
	   • [SLIDE 6]: Show visual on PowerPoint slide. Say or paraphrase: "*Traditional evaluation determines whether or not a project succeeded in meeting its goals, usually at the end. Developmental evaluation is the approach that supports using data continuously throughout a project to make changes. The theory is that the project is <u>more likely to be a success </u>when it can be adjusted using real-time information along the way.*"
	
	   • [SLIDE 7]: "*Developmental evaluation processes include* **asking evaluative questions** *and* **gathering information** *to provide feedback and* **support developmental decision making and course corrections** *along the emergent path. It is a framework for seeing and communicating about evaluation in a more positive, participatory way. This includes asking questions you want the answer to, in order to improve teaching/learning/school. Gathering information = data. Support decision making and change based on information.*"
	
	   • [SLIDE 8]: Role of a developmental evaluation promoter:
	     Build a team interested in making decisions, possibly changes, based on data
	     Help team ask the right evaluative questions
	     Gather/identify the right data

Phase / Time / Materials	Instructional Sequence
	Convert that data into actionable information Move ahead with decisions/change • [SLIDE 9]: Guiding principles of developmental evaluation: **A dynamic process:** Effective evaluation is not an "event" that occurs at the end of a project, but is an ongoing process that helps decision makers better understand the project; how it is impacting participants, partner agencies and the community; and how it is being influenced by both internal and external factors. **From start to finish:** Thinking of evaluation tools in this way allows one to collect and analyze important data for decision making throughout the life of a project — from assessing community needs prior to designing a project, to making connections between project activities and intended outcomes, to making mid-course changes in program design, to providing evidence to funders that yours is an effort worth supporting. **Management and Learning Tool:** Evaluation should not be conducted simply to prove that a project worked, but also to improve the way it works. Therefore, do not view evaluation exclusively as an accountability measuring stick imposed on projects, but rather as a management and learning tool for projects and for practitioners in the field who can benefit from the experiences of other projects
Practice 1 20 minutes Handout 1: Traditional vs. Developmental Evaluation Worksheet	**Determining the differences between traditional and developmental evaluation:** Participants will indicate characteristics of traditional and development evaluation. 1. Indicate to participants that they will receive a handout with different characteristics written on them. They have to indicate if they feel the characteristic refers to traditional evaluation or developmental evaluation. 2. Participants fill out the worksheet (5 minutes)

Phase / Time / Materials	Instructional Sequence
	3. Please refer to the answers below and review each contrasting statement about traditional vs. developmental evaluation: • Traditional Evaluation: Deliver judgments of success or failure • Developmental Evaluation: Provide feedback, generate learning, support direction or affirm change in direction in real time • Traditional Evaluation: Measure success against predetermined goals • Developmental Evaluation: Develop new measures and monitoring mechanisms as goals emerge and evolve • Developmental Evaluation: Evaluator is part of a team, a facilitator and learning coach, bringing evaluative thinking to the table; is supportive of the organization's goals • Traditional Evaluation: Evaluator is external, independent, objective • Traditional Evaluation: Evaluator determines the design based on the evaluator's perspective about what is important; evaluator controls the evaluation • Developmental Evaluation: Evaluator partners with those engaged in the change effort to design an evaluation process that fits the organization's mission. • Developmental Evaluation: Design the evaluation to capture change, partnerships, and new connections • Traditional Evaluation: Design the evaluation based on linear cause-effect logic models • Traditional Evaluation: Accountability focused on and directed to external authorities and funders • Developmental Evaluation: Accountability centered on the innovators' deep sense of fundamental values and commitments and learning • Traditional Evaluation: Evaluation causes *fear of failure* • Developmental Evaluation: Evaluation supports *hunger for learning*

Phase / Time / Materials	Instructional Sequence

Information 2
 	
15 minutes
 	
Handout 2: CD3M Process Cycle
 	
Training Material 1: Session 4 PowerPoint
	Introduction to the CD3M Process Cycle
	Participants will state the major steps in the CD3M process cycle, a developmental evaluation approach to CD3M.
	
	1. Explain or paraphrase the following: "*So where do we start the developmental evaluation process of CD3M? How do we get communities more involved and engaged in making evidence-based decisions in education? The thought of a starting point can seem daunting. We will try to work step by step together so that it becomes clear that the process of CD3M is user friendly and not complicated.*"
	
	2. [SLIDE 10]: Present the CD3M cycle on flip chart paper/ PowerPoint (and distribute the cycle as a handout to participants). Ask participants to read the handout. Once they are done, explain each step.
	
	3. Explain or paraphrase the following: "*The CD3M cycle is logical and user-friendly.*
	   • "*Step 1 – THE PROBLEM: Identify 'what is the problem' as well as 'what is happening?' This will help to articulate what is going on around you in the school community and what is a problem that you want to address.*
	   • "*Step 2 – PLAN OF ACTION: We ask ourselves 'What data do I currently have?' and 'What data do I need?' This informs us of what we know already about the problem and what data is available that we can look through and analyze. We also need to articulate what is missing and what types*

Phase / Time / Materials	Instructional Sequence
	of data we need to collect. This could be through talking to teachers, students, or parents. This could be from looking at student test scores. We need to identify the type of data that we will need to collect in order to solve the problem we have identified. Multiple sources of data are necessary in order to better understand the problem of practice, as well as steps taken to address the problem. The data selected need to be appropriate for answering the problem being researched. • *"Step 3 – DATA COLLECTION: We then need to map out a clear plan of how we will collect the new data. There are many different ways to collect data. The data collection process must have a concrete plan. How will the data be collected? Who will collect the data? How will the data be organized? How long will it take to collect the data? Are there data that already exist that I can draw from?* • *"Step 4 – DATA ANALYSIS: Now that we have new data, we ask ourselves, ' 'What does my data say? How do I know? What did I learn from this?' This is where we look at the collected data and locate major themes, patterns, and insights. This is where we will identify what we are learning from the data.* • *"Step 5 – FUTURE ACTION: Finally, we ask ourselves the question 'What do we do next?' This requires us to present so that community members can understand it. Together we will make decisions as a community concerning how to answer the problem based on what the data says.* • *"And then the cycle begins again where we will continue to see if the solutions we propose help to solve our problem!"*
Information 2 20 minutes Trainer Material 2: Five cards of the extended CD3M example (three case studies total)	**Case Studies of the CD3M Cycle** Participants will engage in case studies and place them in chronological order following the CD3M process cycle. 1. Indicate to participants that they will work in three groups. Each group will get a different case study highlighting a CD3M cycle. Explain that one case study highlights a CD3M about student learning, another about teacher performance, and another about girls' dropout rates in schools. Explain that the case study is written onto cut up strips of paper. The groups have to place the case study in the correct order that follows the CD3M cycle.

Phase / Time / Materials	Instructional Sequence
	2. Groups work to re-order their case studies. 3. Ask each group to give a summary of their case study in their own words using the CD3M cycle.
Application 40 minutes Flip charts Markers Tape Training Material 1: Session 4 PowerPoint Handout 3: Step 1 – Problem – Checklist	**CD3M Cycle – Problem Identification** Participants will use the CD3M Cycle checklist to begin articulating a problem they are facing in their schools. 1. Say or paraphrase to participants: *"Let's get started on the CD3M cycle for an issue in your school community. We will be working through the CD3M cycle throughout the whole workshop. At the end of the workshop we'll have a better understanding and a road map of a CD3M cycle that we can all do once we return home to our schools. The best way to start is at the beginning!"* 2. Let's start by thinking about some things that are happening at the school that you would like to investigate further. 3. [SLIDE 11]: Post step one of the CD3M cycle on a flip chart: PROBLEM **What is the problem?** What is happening? 4. Problem Concept Maps. Invite participants to once again create a concept map of the school. Have them map out the physical school structure. Tell them they will be identifying areas of the school where there may be problems that you would like to investigate. These should be elements that you could change with minimal resources and time. For example, children showing up late to school could be one problem that you indicate and draw/write at the school entrance. Another problem could be minimal involvement of parents at school. Problems surrounding infrastructure and other difficult-to-change issues should not be indicated here. The issues can be related to attendance, retention, teaching, learning, behavior, gender, teaching materials, and more. 5. Participants from each school take a flip chart and draw their concept maps.

Phase / Time / Materials	Instructional Sequence
	6. Once they have created their maps, ask participants to post them and conduct a gallery walk. 7. After the walk, ask participants to make comparisons and discuss their overall impressions. 8. Invite participants to return to their groups. Distribute the CD3M – STEP 1 – State the problem checklist. Indicate to participants to fill out in detail one of the problems indicated on your concept map. 9. Ask the following questions: *"What seems to not be working in your schools? Can you describe the problem in more detail for me? What do you already know? What do you think you may need to investigate further? What would you like to see change? What information do they need? How often? How can you use it? What will it take to get it?* 10. Thank participants for their work and explain that in the next sessions we will investigate further the type of evidence that we already have surrounding this problem, as well as the goal to solve the problem.
Assessment	**Learning Objective 1:** Participants discover developmental and traditional evaluation in the applicMotivation and Information 1 sections. **Learning Objective 2:** Participants discover the importance of developmental evaluation in the Practice 1 and Information 2 sections. **Learning Objective 3:** Participants master the CD3M cycle in the Practice 2 section and apply it to their own contexts in the Application section.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:
Michael Quinn Patton, "Developmental Evaluation." CES, June 1, 2009.

## Handout 1: Traditional vs. Developmental Evaluation

Instructions: Classify each characteristic by "Traditional" or "Developmental"

Characteristic	Type of Evaluation
Deliver judgments of success or failure	
Provide feedback, generate learning, support direction, or affirm change in direction in real time	
Measure success against predetermined goals	
Develop new measures and monitoring mechanisms as goals emerge and evolve	
Evaluator is part of a team, a facilitator and learning coach bringing evaluative thinking to the table; is supportive of the organization's goals.	
Evaluator is external, independent, objective.	
Evaluator determines the design based on the evaluator's perspective about what is important. The evaluator controls the evaluation.	
Evaluator partners with those engaged in the change effort to design an evaluation process that fits the organization's mission.	
Design the evaluation to capture change, partnerships, and new connections	
Design the evaluation based on linear cause-effect logic models	
Accountability focused on and directed to external authorities and funders	
Accountability centered on the innovators' deep sense of fundamental values and commitments and learning	
Evaluation causes *fear of failure*.	
Evaluation supports *hunger for learning*.	

Handout 2: CD3M Process Cycle

CD3M can follow a cycle process.

1) First the community members need to identify the problem and what is happening in their school communities that they feel needs to change.

2) Second, they need to better understand the evidence and information they already have. If they have enough information to make an informed decision that is specific and in-depth, they may not need to collect data. However, in most cases, they will need to identify what data they still need.

3) Third, they can then indicate how they will gather the data and with what tools. How will they collect, manage, and store the data?

4) Fourth, community members then attempt to look through the data and analyze it. This is where community members indicate what they learn from the data.

5) Fifth, together, communities create plans for future action in order to attempt to resolve the problem.

6) Finally, the cycle starts again by continuing to see how the solutions to the problems are taking root.
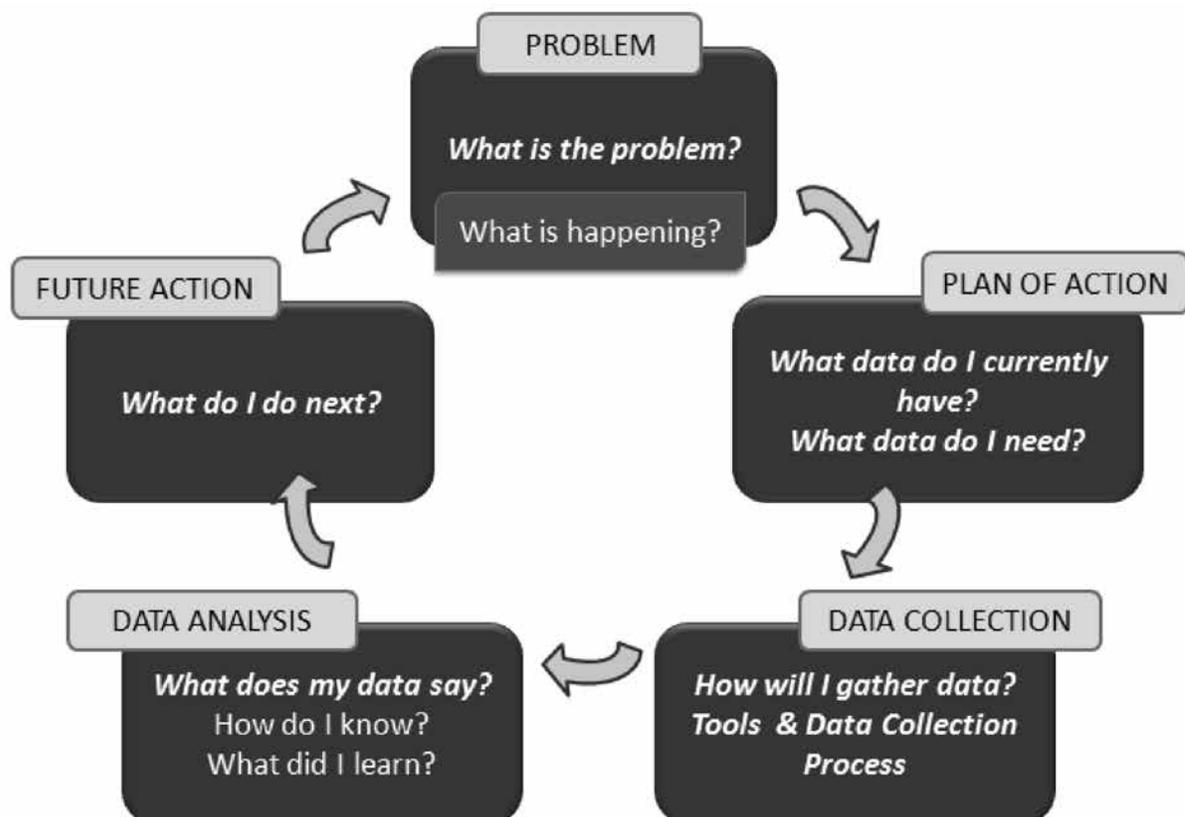
CD3M – STEP 1 – What's the Problem?
What is not working?   Describe the problem in detail here:
Given this problem, what do I want a potential outcome to be?   Describe in detail here:

Trainer Material 1: Five Stage Cards — CD3M Examples

Case 1: Student Learning

After spending two weeks teaching math equations to the children in my classroom, I gave a math assessment. Fifty percent of the children answered five or more of the 10 equations incorrectly. Children's reading and science assessment scores are typically at or below average, with math scores tending to be a bit above average.
The scores of the math assessment show that children do not understand how to correctly answer math equations, but when we are talking about and practicing how to answer math equations as a class, children can complete the task. This is the third math assessment I have implemented this year.
I will interview students individually as they work to solve math equations during class. Further, I will talk with other teachers in my school to see if they are encountering a similar issue. Over the next two days I will provide children with manipulatives (such as pebbles) to use as they work. During this time I will keep asking them questions about their thinking and taking notes about their responses.
Using the manipulatives, children were able to tell me about the processes to solve the problem; however, five (out of 30) of the children in my class needed support in identifying the number and its number value. Other students asked me to read the questions aloud. Other teachers in my school are experiencing a similar issue, many of whom are requiring children to complete 10 additional math equations for homework. After reading over the assessment, I noticed that while some children struggled to identify written numbers, many of the other children struggled to read written word problems. Children were able to answer the questions using the manipulatives when the problem was stated orally; however, children struggled to individually decode the written word problems.
For my next steps, I will continue to use a variety of different techniques: manipulatives and oral questions. I will also write out word problems in simple English. We will all work together to identify major key words in the problems to decode them into math principles.

Case 2: Teacher's Performance

Second grade assessment scores for the beginning and middle of the year have shown below average scores in all subject areas. Does this reflect Ms. Valeria's inability to connect to and teach the children of her class?
By reviewing the material covered in each assessment and Ms. Valeria's daily lesson plans, we can begin looking for gaps. By interviewing her students, fellow teachers, and the parents of her students, and checking the attendance records for her classroom, we can consider other factors that are influencing her performance.
Ms. Lucia, the school principal, will collect assessments, daily lesson plans, and conduct interviews with three of her students, two of her colleagues, and the parents of children who are picked up at the end of the day. She is also reviewing the attendance rates of Ms. Valeria and her students.

The material on the assessments was covered in Ms. Valeria's daily lesson plans. The children in the class attend regularly – during the rainy season more than 75 percent of the class attended school every day. Attendance records, as well as teachers, students, and several parents, reported that Ms. Valeria has missed school most Thursdays. Ms. Lucia showed Ms. Valeria the data she had collected and held a conversation with her about the pattern she noticed. Ms. Valeria informed Ms. Lucia that she does care deeply for her students, but on Thursdays she takes her youngest child to the doctor in the city to receive treatment for his chronic disease.

Ms. Lucia and Ms. Valeria created a plan so Ms. Valeria's students do not fall behind because of her absences on Thursdays. They find a youth in the community who can replace Ms. Valeria on Thursdays. Ms. Valeria will mentor the youth and provide her with a prescriptive lesson plan based on practice activities that the students need to complete. Ms. Valeria will meet with the youth on Thursday afternoon to gauge how the class went that day. On Friday, she will continue with instructions and help students with any content related difficulty encountered the previous day. Ms. Valeria will also meet regularly with Ms. Lucia to provide updates on student progress.

Case 3: Girl Student Attendance Rates

Every day at school there are far more boys in attendance than girls. Female unexcused absences happen more frequently, and they are more likely to drop out of school altogether.

School enrollments rates, attendance sheets, and teacher interviews will help confirm this occurrence. We can gain more information by checking the public census to see how many boys and girls live in the town and by interviewing parents whose children are frequently absent and/or have a sibling who no longer attends school – asking them what the child does when they are not in school and how they view education.

We will have each classroom teacher share his/her up-to-date classroom attendance sheets during a staff meeting to address this issue. We will talk to teachers about children who have dropped out and ask them to interview at least three parents to hear about their views on education – it would be helpful to hear some parents who speak positively about schooling.

During the next staff meeting we will review all attendance and enrollment rates and graph our findings. First we will look for patterns relating to the decreased attendance rates of girls. Then teachers will be encouraged to share the information they have gathered during interviews with parents. (Parents stated that older girls are needed to help out at home, providing care to younger siblings, and aiding in preparing food.)

We will identify students who are at a higher risk for dropping out of school and hold a schoolwide parent conference to talk about the importance in girls' education. At the meeting we will list determinates that parents may identify with and invite other parents to speak about why they value education and the benefits that it has yielded for their daughters and their families.

Session 5: Quantitative Methods (What's Our Plan of Action to Better Understand the Problem?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: This session introduces key terms and definitions related to using
                               quantitative methods in order to plan how to collect data.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                               monitoring and evaluation and an understanding of the sector that is
                               being featured in the workshop. Workshop materials are designed for
                               the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation

Version: October 2013

Contributing Posts: PC/Guatemala
                               PC/Philippines

Session: Quantitative Methods (What's Our Plan of Action to Better Understand the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning quantitative data methods and tools.
3. Review all handouts, especially the quantitative assessment tools.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, projector, and electricity
    2. Flip chart
    3. Markers
    4. Tape
- **Handouts**
    Handout 1: CD3M – STEP 2 – Plan of Action
    Handout 2: Structured Observation
    Handout 3: Pre – Post Test
    Handout 4: Structured School Observation
- **Trainer Materials**
    Trainer Material 1:   Session 5 PowerPoint

Session Learning Objectives:
Participants will
1. Explain data terms, including baseline, qualitative, quantitative, and mixed methods.
2. Indicate the data they already have, as well as what data they need to answer a context-specific question/problem.
3. Design a simple quantitative tool they can use in order to collect data to better understand their context-specific problem.

Phase / Time / Materials	Instructional Sequence
Motivation 30 minutes Flip chart Markers Tape	**Jumpstart Storytelling Activity – Following a Plan** Participants tell stories about how they have resolved problems/ questions in the past by using a plan of action. 1. Indicate to participants that we will all take part in a modified *Jumpstart Storytelling* technique to energize and motivate participants and to introduce and set a collaborative climate for discussion on the next steps of the CD3M process cycle. 2. Explain, paraphrase, and/or state the instructions: "*We will all think of quick 60-second stories that highlight a problem that we have faced and the steps we took to resolve that problem. It can be a problem based on education or another domain. I will divide participants into groups of four. Each person in the group has 60 seconds to tell his/her colleagues a story drawn from his/her personal experience: Tell a story about a plan of action that you created in order to better understand a problem (this could be related to education or to an entirely different field). For example, when I teach the sounds and letters in my first-grade class, I notice that students are really good about identifying the letters and sounds in alphabetical order. However, when I give them a test, they are not able to identify the letters in words or the letter-sounds correctly. This is my problem. My plan of action to better understand what was going on was the following:* A) "*I first examined the information that I already have. I know that students can name the letters and their sounds in alphabetical order. I know that when tested, more than half of the students are not able to identify the letters in a word and 75 percent are not able to identify the sounds of letters out of order.* B) "*Then, I recognized the different types of information that I need to better understand what was going on. I need to know what students are doing during my learning and practice activities for letters and their sounds. I also need to circulate more in the room and provide more pair-work or individual work to better gauge where my student learning levels are. Finally, I should give a lot of written exercises that I can collect so that I can also see what students are having difficulties. These three steps will help me better understand what is going on in my class and for specific students. This becomes my plan of action for better understanding the*

Phase / Time / Materials	Instructional Sequence
	larger problem." <u>**Post adaptation:**</u> Think of a context specific example of a problem and the steps you took to find out more about the problem and then how you went about solving the problem. 3. Continue explaining: "*At the end of each round, participants will move to another group and tell their stories again. Each participant will rotate and retell his/her 60-second story to the new audience. Participants are asked to informally self-assess and notice what changes and what doesn't with respect to their second telling. After the second round, each person is asked to recall the story that most impacted them, either because it was so compelling or because it was highly informative and relevant to the topic. Here's the fun part: the participants will find that storyteller and place a hand on his/her shoulder (or stand in back of the person). People will search for others and move around the room with trailing chains and clusters of people attached to them (or behind them). The storyteller who made the most impact will have the most hands on his/her shoulder (or the most followers behind him/her)."* 4. Start Round 1 of the storytelling 5. Indicate to participants to rotate and retell 6. Have participants create the clusters/chains 7. Invite the person with the most hands on his/her shoulder (or followers behind him/her) to come to the front and tell the story to the large group. 8. Conduct a debriefing with participants. Unpack and decode why this story was chosen. Draw out the major themes and key words and list them on a flip chart. Ask others to add to the list from this story and other stories they heard. Note any words or themes that resonate with the theme of the *community* using data to make decisions that improve education, as well as the concrete steps taken to better understand the problem.

Phase / Time / Materials	Instructional Sequence

	• Main ideas and things to bring up are the following:
	   o *Participants have helpful information that is already available to them. The plan that they determine should include how to build upon that information.*
	   o *Looking for more information should be linked to the information that already exists. If it doesn't, it's possible that you are taking your plan in the wrong direction.*
	   o *There are many different ways to collect new information.*
	   o *It's also necessary to indicate how the information will be collected, who will collect it, when it will be collected, and how it will be organized.*

Information 1
 	
15 minutes
 	
Trainer Material 1: Session 5 PowerPoint
 	
Flip chart
 	
Markers
 	
Tape
	Plan of Action
	Participants will discover Step 2 in the CD3M process cycle.
	
	1. [SLIDE 2]: Review the CD3M process cycle. Indicate that Step 2 sets a route/road map for how to obtain relevant data to better inform the problem. Say or paraphrase the following:
	   • *"I will need to develop a concrete strategy to answer my question/try to better understand the problem that I face.*
	   • *"I will need to identify the data (baseline data) that I have.*
	   • *"I will also articulate the type of data that I will need to collect. Multiple sources of data are necessary in order to better understand the problem. There are many different ways to collect data: interviews, journals, field notes, photos, memos, videos, observations, self-assessment, focus groups, lesson plans, samples of students' work, individual files, questionnaires, tests, report cards. The data selected need to be appropriate for answering the problem being researched.*
	   • *The data collection process must have a concrete plan. How will the data be collected? Who will collect the data? How will the data be organized? How long will it take to collect the data?*

Phase / Time / Materials	Instructional Sequence

	2. [SLIDE 3]: In the PowerPoint/on a flip chart, present Step 2 of the CD3M process cycle.
	
	PLAN OF ACTION
	What data do I currently have?
	What data do I need?
	
	3. Conduct a brainstorm on what you mean by the term "data." Participants can try to define data, as well as give examples of data.
	
	Data is/are…
	
	4. [SLIDE 4]: Main ideas and things to bring up are the following (and present the PowerPoint slide):
	   • *Data is more than just numbers, grades, and test scores.*
	   • *Data includes any information that helps us learn about what is going on at school.*
	   • *This can include student assessment performance, school assessments, graduation or promotion requirements, attendance rates, drop-out rates, perceptions, behaviors, actions, benchmarks, etc.*
	   • *Data is anything that can tell us new information and give us a new understanding of what is going on at the school.*
	
	5. [SLIDE 5]: Explain or paraphrase the following:
	   • *"Data literacy is the basic understanding of how data can be used to inform instruction. It is important because it enables educators to determine whether the data is a good measurement of student performance, for example. It also enables us to use good data in planning, implementation, assessment, and revision of instruction. Educators must understand that assessment of student performance is integral in the planning, implementation, assessment, and revision of instruction. Data literacy also implies that*

Phase / Time / Materials	Instructional Sequence
	the educator must be able to determine whether or not an assessment is a valid and reliable measure of what is being taught and to know what types of assessments are appropriate for district level vs. classroom or individual student level planning. • *"Baseline data is an important concept. It refers to data that we use to find out about an existing issue. Many or our research projects that we will work on will create some form of baseline data. It helps to establish a comparison point for later data collection in order to demonstrate whether a change has or has not happened. It also is aimed at providing information based on a potential intervention (a decision that the community will make to change a problem)."* 6. Ask participants the question: "*In the Jumpstart Activity that we all just participated in, what types of data did people indicate they already had? What data did they indicate that they needed to collect?*"
Practice 1 25 minutes Handout 1: CD3M – STEP 2 Flip chart Markers	**What data do I currently have? What data do I need?** Participants will brainstorm and indicate the data that they currently have and what data they need in order to better understand the problem indicated in Step 1. 1. Distribute Handout 1: CD3M – STEP 2 – What data do I have? What data do I need? 2. Explain the different parts of the handout. Tell participants that they are now going to fill out this form, referring back to the problem that they identified in STEP 1 of the CD3M process cycle. 3. Participants fill out their handouts. 4. Invite participants to share their completed handouts with a colleague. 5. Invite participants to come back to the large group. Ask them to identify the challenges that they had while filling out and thinking about how to go about ways to collect data to better understand the problem.

Phase / Time / Materials	Instructional Sequence
	6. Main ideas and things to bring up are the following (present on the PowerPoint as well). Say or paraphrase: • *"Having appropriate ways to collect data can be challenging. It may seem overwhelming to choose how to collect more information.* • *"This workshop is designed to give you different sets of tools that you can use, as well as different ways for you to conduct your data collection.* • *"There are sessions that also address what to do once we have data. Don't worry, we will get there.* • *"Remind participants that the workshop is structured around the CD3M cycle and that little by little we will gain the competencies and skills required to finish an entire cycle."*
Information 2 35 minutes Trainer Material 1: Session 5 PowerPoint	**Introduction to Quantitative Data & Methods** Participants are introduced to important terms and concepts about data in order to more accurately articulate the data that they will need to collect to complete Step 2 in the CD3M cycle. 1. [SLIDE 6]: Explain that there are three main ways to gather data in order to better understand a problem or a situation. Show the "methods scale" on a PowerPoint slide/flip chart and say: **"***There is a spectrum of types of data that you can collect which can tell us many different things about a problem or a situation:* • *"Quantitative methods refer to using numbers to answer questions. It's an approach that can tell us 'how much'* • *"Qualitative methods refer to using people's words, their actions, and their ideas. It's an approach that can tell us 'why' and 'how' something happened.* • *"Mixed Methods blends the two approaches together. We, therefore, use numbers, words, perceptions, and actions to tell us not only 'how much' but also 'why' and 'how' something may happen."* **Quantitative Methods** | **Mixed Methods** | **Qualitative Methods**

Phase / Time / Materials	Instructional Sequence

	2. [SLIDE 7]: For the purpose and sake of time, this session addresses the quantitative methods that can be used. Explain that a quantitative approach:
	  • Answers questions related to "how much?"
	  • Uses numbers to answer questions; and
	  • Categorizes data into patterns as the primary basis for organizing and reporting results.
	
	3. Invite participants to turn to a partner and think of at least one question that uses a quantitative approach. Invite them to report back. For example:
	  o *How many children have learned to read by Grade 2 in your country?*
	  o *How many Grade 1 and Grade 2 teachers in your country have received training in teaching reading?*
	  o *What is the teacher attendance rate? What is the student attendance rate?*
	  o *How many girls come to school on time? How many boys come to school on time?*
	  o *Where do girls and boys sit in the classroom?*
	
	4. [SLIDE 8 & 9]: Explain each of the five data quality standards. Consider these standards for data sets you already have and for data you want to collect. Say or paraphrase:
	  • *"As an example, 18 participants trained is not a measure of what people learned at the workshop. It is accurate data, but not valid when the question we want to answer is, 'What did people learn at the workshop?' Validity refers to the extent to which a measure actually represents what we intend to measure.*
	  • *"Reliability refers to the stability of the measurement process. That is, assuming there is no real change in the variable being measured, would the same measurement process provide the same result if the process were repeated over and over? Is there certainty in reference to 'What were the results of the training?'*
	  • *"Precise data have a sufficient level of detail to present a fair picture of performance and enable management decision making.*
	  • *"Integrity focuses on whether there is improper manipulation of data.*

Phase / Time / Materials	Instructional Sequence
	• *"Timeliness refers to frequency (do we get the data often enough to answer question/make decisions) and currency (is it up-to-date enough to make decisions with?)."* 5. [SLIDE 10]: Explain EMIS (Education Management Information Systems): • EMIS produce, manage, and disseminate educational data and information, usually within a national Ministry or Department of Education. • At the student and classroom level, there may be little or no performance data (data that examines a student's test or assessment scores) available and decision makers need to create their own data collection tools and do their own research to improve instruction. 6. Ask participants if this rings true in their experience – does the national EMIS provide them the data they need to improve classroom instruction? **Data Collection Methods** Various types of data collection methods are explained and discussed in terms of participants' countries. 1. [SLIDE 11, 12, 13]: Briefly explain each quantitative data collection method, using the slides. Ask participants to list 1-2 advantages and 1-2 disadvantages to using each method to collect quantitative data in a school setting in "*their country.*" Draw out responses about what type of data could be collected with each method, what settings might be most appropriate for each method, etc. Methods and introductory comments are: • Observation (structured): To gather accurate quantitative information about how a program actually operates, particularly processes • Questionnaires/surveys/checklists/assessment index: When you need to quickly or easily get lots of information from people in a non-threatening way • Pretests and post-tests: When you want to measure a change before and after a learning or training-type activity, in a setting where tests can be administered

Phase / Time / Materials	Instructional Sequence

Practice 2
 	
25 minutes
 	
Trainer Material 1: Session 5 PowerPoint
 	
Handout 2: Structured Observation
 	
Handout 3: Pre/Post Test
 	
Handout 4: Structure School Observation
	Assessment in Small Groups
	Participants consider a quantitative assessment tool—its strengths, weaknesses, and applicability to their schools.
	
	1. Explain to participants that they will review different types of quantitative assessment tools.
	2.
	3. [SLIDE 14]: Divide participants into small groups (school groups). Distribute one example of an assessment tool to each group. Ask them to look over the tool and discuss as a small group:
	   • What method?
	   • What are some strengths of this tool? Some weaknesses?
	   • How would you adapt this tool to your own school setting (if at all)?
	   • If it seems like small groups are done discussing their first tool, do two rounds – ask groups to pass their example tool to the group to the left, and then each small group discusses the second tool example.
	
	4. Ask each group to report out by focusing on the last guiding question: Could they adapt a sample tool they looked at to a data need in their own school setting? Why or why not?

Application 40 minutes Trainer Material 1: Session 5 PowerPoint Handout 1: CD3M – STEP 2	**Creating a New Data Collection Tool** Participants will update the CD3M – STEP 2 handout and draft a new quantitative data collection tool based on their problem indicated in STEP 1 of the CD3M process cycle. 1. [SLIDE 15]: In small groups again, ask participants to consider these guiding questions in order to begin drafting a quantitative data collection tool that they can really use in their own school setting to fill the data need in order to provide further data to the context specific problem that they already identified in STEP 1 of the CD3M cycle: • Form your research question: What do you need to learn from collecting and analyzing data?

Phase / Time / Materials	Instructional Sequence

	• Avoid collecting the same data in another way – revisit your inventory of data sets you already have and make sure that you really need to collect new data; confirm the "gap"
	• Consider methods: which quantitative method will be the quickest and easiest way to get the data you need? Is there a way to bring technology in to collect data?
	• Be objective: Avoid bias in your tool.
	
	2. After about 25 minutes, ask small groups to report back to the large group by telling us about their tool. Guiding questions:
	• Tell us about the tool.
	• Tell us about the data collection and organization *process*.
	  o Who will you collect data from using this tool?
	  o When will you collect it?
	  o Who will collect the data (implement the tool)?

Assessment	**Learning Objective 1:** Participants identify and define terms in the Motivation and Information 1 sections **Learning Objective 2:** Participants explain the data they have and need to inform their problem in the Practice 1 section **Learning Objective 3:** Participants use example quantitative tools to design a simple quantitative tool that attempts to find out more information about a context-specific problem posed in the Application section.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

Center for International Education. (2009). A Monitoring and Evaluation Plan for Multi-Grade Education. Amherst, MA: University of Massachusetts - Amherst

CD3M – STEP 2 – What data do I have? What data do I need?
What do I know already about my problem?   Describe how the data I have proves that this is a problem:
What else do I need to know about to better understand this problem?   Describe in detail here how I can go about getting that data? (Be specific, such as who, how, when, with what types of tools.)

Handout 2: Structured Observation

STUDENT OBSERVATION GUIDE

REGION _____ DATE _____

SCHOOL _____ GRADE_____ NO. OF STUDENTS _____

OBSERVER _____ TIME _____

INSTRUCTIONS: Observe students per class and note your findings. You may also provide any other relevant findings in the space provided.

1. Student is interacting with:	Most of the time	Some of the time	Not at all
The teacher			
Peers			
Groups			
No one			
2. The student uses the following in the interaction:			
English language			
Local Language			
Both languages			
Nonverbal language			
Does not communicate			
3. Students' behavior during observation period:			
Wait in line or around the teacher's desk			
Work individually at their desks			
Work with one or more classmates			
Are not doing anything at the moment of observation			
4. What do the students do? (indicate the behavior of students)			
Pay attention to the teacher's explanation			
Read silently			
Read aloud			
Copy from a book			
Copy from the chalkboard			
Practice writing letters			
Practice writing numbers			
Other writing drills			
Take notes from other students or lecture to other students			
Write letters (of the alphabet of instruction)			
Write words			
Write sentences			
Write paragraphs			
Work with books or workbooks			
Work at the chalkboard			
Are engaged in specific tasks assigned by teacher			
Tutor each other			
Discuss a topic			
Work on a project			
Work on another type of learning activity			
Any other comments			

Handout 3: Pre/Post Test

How to do the pretest and post-test assessment

INSTRUCTIONS
1. Before you conduct this math assessment, become familiar with the language and each section, collect the material that you need to conduct it, and practice giving the assessment to another adult in the community.
2. As you are conducting the assessment, you will be: giving children instructions, presenting show cards when necessary, listening to responses, and marking both correct and incorrect answers on *your* copy of the assessment. Assessors should be familiar with the material being covered and the language of the test before conducting it with individual children.
3. Assessing: Follow along with the children, but wait until they have completed the entire assessment before tallying up the total incorrect and correct responses per section. Add additional notes if you notice a pattern in their discrepancies.

PRETEST: Math pretest for Grade 2

1. Counting
a. This is a 100 chart. I am going to watch and listen as you point to each number and count up to 50.
b. If you told the child the number (it took the child longer than 3 seconds to respond), place an X over the number.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

2. Quantity Discrimination

a. I am going to show you some flashcards; I will show each for 2 seconds. I want you to point to the side of the flashcards that has *more* objects.

b. Show flashcard of stars (triangles and circles). On your copy of the assessment, circle the side of the flashcard the child chose. Place an X under the flashcard if the child answered incorrectly.
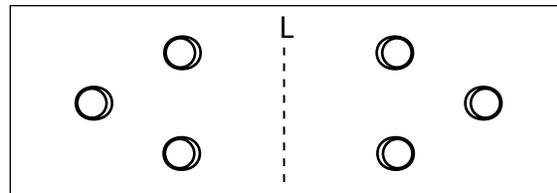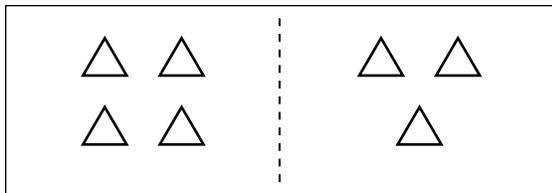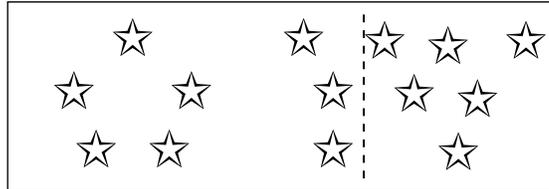
3. Counting and Grouping

a. I am going to give you this handful of pebbles – I want you to tell me how many pebbles there are; you can count them however you would like.

4. Writing

a. In front of you, I have placed a pencil and a piece of paper. I am going to say some numbers to you – after I say a number, I want you to write the number.

b. Numbers: 5, 9, 14, 20, 7, 100, 63.

c. Write the number that the child writes on your copy of the assessment – ALSO, note the way the child forms the number (this includes place value that is written first).

5. Word Problems

a. I am going to tell you a few story word problems. Your job is to pick the illustration that best matches what is happening in the story.

b. You have five cookies and give four away to your friends.
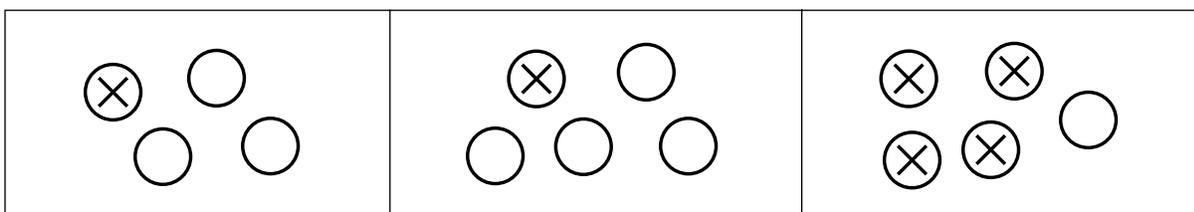
POST-TEST: Math Pretest for Grade 2

1. Number Identification
a. Show the student the following numbers. Say, *"Here are some numbers, I would like you to*
    read as many numbers as you can. I'd like you to start here (point to the right most number on
    the top row) *and go across* (point from right to left). *When I say 'begin,' read as many numbers*
    as you can. If you don't know the number, I'll tell it to you. Point to the first number – Are you ready?
    … Begin."
b. Tester starts the timer for one minute when you say "begin." On your copy of the assessment,
    put an X over any number the child missed and/or was told to by you. Circle the number that
    the child was working on when you said **"Stop."**

12	2	17	77	7
9	18	32	53	11
10	19	25	39	20
74	4	60	1	46
48	13	15	97	8

2. Quantity Discrimination
a. Now I am going to show you two numbers at a time. Which one is bigger? Point to and tell me
    the number.
    - Circle the number the child says is bigger for each set. Place an X over sets that the child
    answers incorrectly.

    20   7
    12   15
    3   13
    79   70
    11   10
    84   97

3. Counting and Grouping
   a. I am going to give you this handful of pebbles – I want you to tell me how many pebbles
       there are; you can count them however you would like.

4. Missing Numbers
a. I am going to show you a group of numbers, in each group there are some numbers missing. I
    want you to tell me the numbers that are missing in each set.
    - Write numbers into boxes – place an X over incorrect numbers

9	10		12		14

18		22	24		28

	20			50	60

5. Addition/Subtraction Problem
  a. Provide the child with pebbles or some sort of physical manipulative for solving problems: I am going to point to an addition/subtraction problem, I want you to say it out loud and tell me your answer.

- Skip problem if the child takes longer than 30 seconds to answer – if more than three are missing in a row, move to the next row. If this continues to occur, stop the exercise.
- Write down responses that the children give, place a star next to problems where children use manipulatives to aid them in problem solving.

2+3=	4+2=	8+2=	8+6=	16+4=	7+1=
5+5=	5+6=	10+3=	10+10=2+2=	5+7=	
6+6=	6+7=	7+3=	11+9=	15+5=	9+3=
4+5=	7+2=	3+9=	13+3=	1+5=	10+6=
10+5=	5+3=	5+2=	10+8=	11+8=	0+1=

  a. Repeat instructions that you provided for addition problems.

6-2=	10-6=	14-6=	20-4=	8-1=	13-3=
4-3=	8-4=	8-5=	20-10= 9-4=	12-7=	
12-6=	12-7=	9-6=	16-3=	20-5=	10-7=
10-3=	13-11=	5-2=	12-9=	20-9=	14-7=
14-8=	1-1=	12-3=	20-19=	19-9=	12-2=

Comparing Data

Pretest:
  1. Number identification: This section of the test gives you information about children's number knowledge. What numbers are they familiar with hearing or saying? Where do they begin to lose confidence in their number sense?
  2. Determining quantities: What understanding does the child have concerning the amount of objects? Can they compare? This section also gives you information about the vocabulary the child has in relation to mathematics and quantities.
  3. Counting: Does the child have a one on one correspondence? This section also gives you information about grouping and the child's ability to count by 2s, 5s, and add by 1s.
  4. Writing: Can the child hear a number and associate oral language with written language? How does the child write the number; do they use correct penmanship; which place value is written first?
  5. Word problems/addition & subtraction problems: This section gives you baseline information about children's ability to understand math functions. Do they understand what addition/subtraction looks like?

Post-test:
1. Number identification: Using a mixed chart to identify numbers, children display their number knowledge in a format that cannot come from memorization. This timed section shows specific numbers that children do not know and the overall strength in number identification – how far through the chart did they get?
2. Discriminating quantities: This section further assesses a child's ability to use vocabulary in a mathematical setting and comparing differing amounts. Here children are showing that they understand the quantities of a number (in their head) and can use numbers to identify amounts.
3. Counting: This section of the post-test should shed light on the amount of progress and growth that children have undergone throughout the math term – What amount does the child choose to count by now? How has this changed from the pretest?
4. Missing numbers: This section builds off the previous section of the assessment and gives information about children's ability to see counting patterns provide missing information. Instead of children choosing to count by a certain amount, they must notice the counting pattern and use to it fill in the blanks.
5. Word problems/addition and subtraction problems: In the pretest you gained information about children's ability to understand what the functions addition and subtraction look like. In this section you see if children can solve equations individually. It is important here to note when children use pebbles to help them and the process in which they use them. This section also gives you information as to which equations (doubles, doubles + 1, fast 10s …) children are most comfortable with and if children are using subtraction skills as freely as they may use addition skills.

The post-test is set up in the same manner as the pretest, emphasizing the same skills but in a new context that requires more abstract thought. By focusing on the same foundational skills in the assessments, you will be able to compare the data you've collected and notice patterns within sections; gaining information regarding children's growth, understanding, and where additional support in needed.

TEACHER AND SCHOOL ASSESSMENT (TSA) INDEX
Section 1: Classroom Environment

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
Physical Space	Physical classroom does not have displays, has very little to no student work on the wall, and does not have centers. Materials may not be present or are poorly maintained.	Physical classroom has some educational displays and some student work. It may have centers, but if so, they are not clearly defined or maintained. Materials are present but not well maintained and are not orderly.	Physical classroom includes developmentally and age appropriate education displays, such as pictures or word walls, has student work demonstrated on the wall, and has "centers." Materials are well managed, clean, and orderly.			
Classroom Management Techniques	Teachers do not use positive reinforcement, redirection or other methodologies. They primarily focus on behavioral problems. They may use corporal punishment. Teachers tend toward inconsistency. They frequently do not enforce rules.	Teachers sometimes use positive reinforcement, redirection, or other methodologies that promote positive behavior. Never use corporal punishment. They may focus primarily on behavioral problems. They have rules and are usually consistent about enforcing them.	Teachers consistently use positive reinforcement, redirection, contracts, and other methodologies that are conducive to positive behavior (such as grouping). Never use corporal punishment.			
			Total Points Section 1	0	0	0

Section 2: Teaching Methodology

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
Whole Language Approach	Teachers do not use the whole language approach appropriately. Teachers use compartmentalized instruction most of the time.	Teachers use whole language approach some of the time; for example, they incorporate thematic approaches and integrate all aspects of language arts into instruction, but may do so ineffectively or without proper planning. Teachers do set some time aside for specific and compartmentalized instruction.	Teachers use whole language approach most of the time; for example, they incorporate thematic approaches and integrate all aspects of language arts into instruction, effectively and with proper planning. Teachers do set some time aside for specific and compartmentalized instruction.			

Phonics	Teachers do not teach any phonics.	Teachers teach phonics, but may only use one medium, for example oral or visual.	Teachers consistently teach phonics using multiple mediums, including kinesthetic approaches.			
Phonemic Awareness	Teachers do not build phonemic awareness into their instruction strategies.	Teachers try to build phonemic awareness occasionally into their instruction strategies.	Teachers effectively build phonemic awareness into their instruction strategies.			
Reading Fluency	Teachers use only one or less of the following strategies or use more than one, but may use them ineffectively: read alouds, guided reading, shared reading, and independent reading.	Teachers use at least two of the following strategies and use one of them effectively: read-alouds, guided reading, shared reading, and independent reading.	Teachers use all of following strategies and use at least two of them effectively: read-alouds, guided reading, shared reading, and independent reading.			
Reading Comprehension	Teachers use two or less of the following strategies, but may use them effectively: recall questions, analytical/ comprehension questions, graphic organizers, simulation games or re-enactment games, summarization, and age appropriate assignments.	Teachers use at least three of the following strategies and use at least two effectively: recall questions, analytical/ comprehension questions, graphic organizers, simulation games or re-enactment games, summarization, and age appropriate assignments.	Teachers use at least four of the following strategies, and of these four, use at least three effectively: recall questions, analytical/ comprehension questions, graphic organizers, simulation games or re-enactment games, summarization, and age appropriate assignments.			
Writing Skills	Teachers do not provide students with writing opportunities other than copying or penmanship.	Teachers provide opportunities to students to write in class creatively some of the time, but without modeling or providing effective instructions or guidance. The assignments may not be developmentally or age appropriate.	Teachers consistently provide opportunities to students to write in class creatively using a variety of activities and model or provide effective instructions or guidance. The assignments are usually developmentally or age appropriate.			
Oral Language (Speaking and Listening) Skills	Teachers do not provide opportunities to students to speak in class other than echoing or rote memorization. Teachers do not model age and developmentally appropriate speaking skills.	Teachers provide opportunities to students to speak in class consistently, using at least one of the listening and speaking activities, such as paired reading, brainstorming, sharing news in class, and group projects. Teachers model age and developmentally appropriate speaking skills most of the time.	Teachers provide opportunities to students to speak in class during a variety of listening and speaking activities, such as paired reading, brainstorming, sharing news in class, and group projects. Teachers model age and developmentally appropriate speaking skills.			

ESL Approaches	Teachers do not use ESL approaches. Teachers do not model English outside of the classroom, and Standard 2 teachers and above do not use English a majority of the time, in the classroom.	Teachers use at least one of the following ESL approaches: 1) Frequently provide rich interpretation of what a student says (build confidence, repeat correctly), 2) Give sheltered instruction (use local language early on and gradually increase the amount of English), 3) Use language experience approach (LEA), 4) Vocabulary building activities and 5) Speaking opportunities. Teachers sometimes model English out of the classroom. Standard 2 teachers and above use English a majority of the time in the classroom.	Teachers use at least three of the following ESL approaches consistently and effectively: 1) Frequently provide rich interpretation of what a student says (build confidence, repeat correctly), 2) Give sheltered instruction (use local language early on and gradually increase the amount of English), 3) Use language experience approach (LEA), 4) Vocabulary building activities and 5) Speaking opportunities. Teachers frequently model English out of the classroom, and Standard 2 teachers and above use only English in the classroom.			
Student Diagnostics	Teachers are not interested or do not use diagnostic reading tools, even if available.	Teachers are interested in learning how to conduct diagnostic reading tools, or use resources available to them when they can do so. Teachers are open to utilizing this information to guide their planning.	Teachers know how to apply diagnostic reading tools and frequently use them to assess the level of their individual students and use this information to guide their planning.			
Student Assessments	Teachers do not use a variety of assessment tools, other than end-of-term exams and occasionally written tests.	Teachers attempt to conduct ongoing assessments to evaluate how students are meeting objectives. They sometimes use these to guide their planning, and sometimes inform students and parents.	Teachers use a variety of ongoing assessment tools, such as oral, written, student portfolios, observation, self-assessments, and others to evaluate how students are meeting objectives and to guide their own planning. They may use this to inform students and parents, as well.			
Maximizing the Library/ Resource Room	Teachers do not consistently write daily lesson plans.	Teachers sometimes use resources available to them or actively seek to build resources.	Teachers consistently use resources available to them and actively seek to build resources.			
			Total Points Section 2	0	0	0

Section 3: Curriculum Planning and Use

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
Daily Lesson Planning and Use	Teachers do not write daily lesson plans the majority of the time.	Teachers frequently write daily lesson plans but frequently do not follow them. Daily lesson plans follow Ministry criteria, but may not include objectives.	Teachers have a daily lesson plan and utilize them the majority of the time. Daily lesson plans follow Ministry criteria, including objectives.			
Weekly or Unit Lesson Planning and Use	Teachers may write weekly or unit lesson plans but frequently do not follow them.	Teachers sometimes write their weekly and/or unit lesson plans but frequently do not follow them. Daily lesson plans may deviate from the weekly or unit plan.	Teachers frequently write their weekly and/or unit lesson plans and utilize them the majority of the time. Daily lesson plans reflect weekly and unit plans.			
Long Term/ Annual Lesson Planning and Use	Teachers are not familiar with the annual plan, do not have one, or have not read, understood it, or incorporated it.	Teachers may read and understand their annual school plan but do not ensure that their weekly plans correspond. They only sometimes take an active role in writing or updating the plan.	Teachers read, understand, and utilize their annual school plan or and frequently take an active part in updating and/or writing the annual plan. Teachers actively ensure that their weekly and unit plans are implementing the annual plan.			
Utilizing Ministry-Provided Curriculum Tool	Teachers do not use the curriculum tool as a resource and only use textbooks provided.	Teachers use the curriculum tool as a resource. They also sometimes use it to guide their planning, and it may or may not be cited in daily lesson plans. Teachers sometimes use supplementary materials.	Teachers use the curriculum tool to guide their planning and teach to the curriculum objectives. They frequently cite it in their daily lesson plans. Teachers utilize the books that are provided, as well as other supplementary materials to meet curriculum objectives.			
Thematic Planning and Use	Teachers rarely use thematic planning approaches and rarely integrate language arts into other subjects.	Teachers sometimes use thematic planning approaches, including cross-curricula and diverse teaching strategies in their curriculum, and sometimes integrate language arts into other subjects.	Teachers frequently use thematic planning approaches, including cross-curricula and diverse teaching strategies in their curriculum, in particular to integrate language arts into other subjects.			
			Total Points Section 3	0	0	0

Section 4: Parental Involvement

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
Parent Teacher Communication	Teachers rarely communicate with parents and rarely attend PTA meetings, or there is no PTA.	There is a PTA and teachers sometimes attend PTA meetings. Parents are frequently informed if their child is having problems.	Teachers encourage parent participation in school activities and attend PTA meetings. Teachers try to hold regular parent-teacher conferences to share progress (focused on more than the problems).			
Parent Involvement	There is little to no parent involvement in school activities, other than occasional fundraising activities. There may not be a PTA.	There is a PTA, but it may only be active at key events. Parents occasionally participate in school activities through PTAs, fundraising, supporting and by coming to school events.	Parents regularly participate in school activities through PTAs, fundraising, supporting and coming to school events, and occasionally volunteering in the classroom, in a feeding program, or other school activities.			
			Total Points Section 4	0	0	0

Section 5: Inclusion Approaches

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
CLASSROOM ENVIRONMENT						
Creating Classroom Environment that Incorporate Students with Special Needs	Teachers do not incorporate any of the following strategies for incorporating special needs students in the classroom environment: 1) Student sits at middle to front of class, 2) Student has appropriate materials, 3) Student and teacher have a system for organizing materials, 4) Have hands-on activities and visual displays, 5) Uses appropriate and positive behavior plan and strategies; and 6) Student is protected from teasing and bullying and respect is encouraged.	Teachers incorporate one to two of the following strategies for incorporating special needs students in the classroom environment: 1) Student sits at middle to front of class, 2) Student has appropriate materials, 3) Student and teacher have a system for organizing materials, 4) Have hands-on activities and visual displays, 5) Uses appropriate and positive behavior plan and strategies; and 6) Student is protected from teasing and bullying and respect is encouraged.	Teachers incorporate at least three of the following strategies for incorporating special needs students in the classroom environment: 1) Student sits at middle to front of class, 2) Student has appropriate materials, 3) Student and teacher have a system for organizing materials, 4) Have hands-on activities and visual displays, 5) Uses appropriate and positive behavior plan and strategies; and 6) Student is protected from teasing and bullying and respect is encouraged.			

Utilizing Teaching Methodology that Incorporates Students with Special Needs	Teachers do not incorporate any strategies for incorporating special needs students.	Teachers incorporate one to two of the following strategies for incorporating special needs students: 1) Keeping the child engaged in a teacher provided learning activity; 2) Presenting child with sensory input applicable to his/her learning needs, 3) Teachers plans include adaptations for students with differentiated learning needs, such as the 3-tiered triangle; 4) Teachers set concrete measureable goals for student progress in skill acquisition in reading, math, writing, and other areas; 5) Teachers assess progress monthly for students with special needs; 6) Teachers allow students to express knowledge in a variety of ways; 7) Teachers employ peer tutoring and buddy work and train students on how to effectively be peer tutors; 8) Teacher employ a variety of educational techniques that allow hands-on learning, rather than pencil and paper work.	Teachers incorporate at least three of the following strategies for incorporating special needs students: 1) Keeping the child engaged in a teacher provided learning activity; 2) Presenting child with sensory input applicable to his/her learning needs, 3) Teachers plans include adaptations for students with differentiated learning needs, such as the 3-tiered triangle; 4) Teachers set concrete measureable goals for student progress in skill acquisition in reading, math, writing, and other areas; 5) Teachers assess monthly progress monthly for students with special needs; 6) Teacher allows students to express knowledge in a variety of ways; 7) Teacher employs peer tutoring and buddy work and trains students on how to effectively be peer tutors; 8) Teacher employs a variety of educational techniques that allow hands-on learning, rather than pencil and paper work.			
Teacher Attitudes Toward Students with Special Needs	Teachers are uncomfortable and/or have a negative attitude toward students with special needs. Teachers may want to keep them out of their class. Teachers do not protect them from fellow students.	Teachers do not express negativity toward students with special needs, and protect them from teasing and bullying. They are willing to have students with special needs in their class, but may not know how to work with them.	Teachers have a positive attitude toward students with special needs, encourage respect among students, and prevent teasing and bullying. Teachers express knowledge of learning differences for students of special needs and are interested in learning to work effectively to incorporate these students.			
			Total Points Section 5	0	0	0

Section 6: Preschool/Early Childhood Education

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
Use of Ministry-Recommended Learning Centers: Pre-Math, Block, Quiet, Art, Science, Language and Library, Music, Sand and Water, and Dramatic Play	There are few to no learning centers.	There are some learning centers that allow students to grow socially, creatively, emotionally, physically, linguistically, and mathematically, but they may not be clearly defined and/or are missing key materials. Teachers give students some time to explore diverse learning centers. Materials may or may not be developmentally or age appropriate.	There are clearly defined learning centers that allow students to grow socially, creatively, emotionally, physically, linguistically, and mathematically. Teachers give students adequate time to explore diverse learning centers. Materials in the learning centers are developmentally and age appropriate.			
Child-Centered Curriculum Planning and Methodology	Teachers frequently do not have lesson plans. Teachers are not implementing activities that are developmentally and age-appropriate, and frequently do not have activities that balance creative, social, emotional, physical, language, mathematics, and play.	Teachers have lessons plans but they do not reflect the interest of the students. Teachers sometimes have activities that are developmentally and age-appropriate, and they try to balance creative, social, emotional, physical, language, mathematics, and play.	Teachers have lesson plans and create them based on observation of children's play and their individual interests. Teachers actively observe play and take notes in order to guide planning. Teachers incorporate a balance of creative, social, emotional, physical, language, mathematics, and play in their lesson planning and implementation. The lesson plans are developmentally and age appropriate.			
			Total Points Section 6	0	0	0

Section 7: School Management

Indicators	Capacity Building Needed = 1	Capacity Developing = 2	Strong Capacity = 3	First Obser-vation	Second Obser-vation	Third Obser-vation
School Closure	School is closed more than 15 days per year.	School is closed between seven and 15 days per year.	School is closed less than six days per year.			
Teacher Absences	Teachers are frequently absent from classes (up to three days per month). There are no repercussions.	Teachers are absent up to two days per month. Management may monitor but inconsistently implements repercussions for absences.	Teachers are absent up to one day per month. Management actively monitors teacher attendance and there are consistent repercussions for absence (for example, salary may be docked or recommendations not provided).			

Staff Development Attendance	Principals do not monitor or observe teachers and classes. They do not promote staff development attendance.	Principals sometimes observe classes and teachers, but infrequently give feedback. Principals encourage but do not ensure that the majority or all of their teachers attend staff development activities (two per week/year).	Principals provide observation and feedback to teachers to help improve instruction. Principals ensure that the majority or all of their teachers attend staff development activities (two per week/year).		
Planning and Decision Making	Principals do not monitor teachers' weekly unit and lesson plans. They don't have their own school calendar of events and irregularly hold meetings (one or less per term).	Administrators/ principals occasionally monitor teachers' annual, weekly, unit, and daily plans, but infrequently or never provide feedback. They have a school calendar, but may not always implement activities consistently. They hold at least two meetings per term.	Administrators/ principals actively monitor teachers' annual, weekly, unit, and daily plans, and provide feedback on a regular basis. They have a school calendar that is planned together and implemented. They hold regular school/staff meetings.		
Student Attendance	Principals do not monitor school attendance or do not follow up.	Principals monitor student attendance and occasionally speak to parents when there are problems.	Principals monitor and encourage student attendance and speak to parents and school attendance officers when there are problems.		
PSE and BJAT Status	Historically, the school has had fewer than 40 percent of students who pass the BJAT and PSEs.	The school has had inconsistent or less than half (around 40-50 percent) of its students passing BJAT and PSEs.	Historically, the school has a majority of students passing both the BJAT and PSEs.		
School Maintenance	Administrator reports major infrastructure problems but may not follow up.	Principals/ administrators try to maintain school building, including bathrooms, and library/ resource centers by reporting issues and providing some level of follow up.	Principals/ administrators regularly ensure maintenance of school building, including bathrooms, and library/resource centers. May actively seek to improve school grounds and building and encourages community participation.		
			Total Points Section 7	0	0	0
			Total Points Section	0	0	0

	Low = 43 and Less	**Medium = 44 - 69**	**High = Over 69**			
	Low = 34 or Less	Medium = 35 - 55	High = Over 56			
	Capacity Building Needed = 1	**Capacity Developing = 2**	**Strong Capacity = 3**			

Session 6: Qualitative & Mixed Methods (What's Our Plan of Action to Better Understand the Problem?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: This session introduces key qualitative and mixed-methods data
                                   collection methods to be used for data collection.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                   monitoring and evaluation and an understanding of the sector that is
                                   being featured in the workshop. Workshop materials are designed for
                                   the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation
                                   Session 5 - Quantitative Methods

Version: October 2013

Contributing Posts: PC/Guatemala
                                   PC/Philippines

Session: Qualitative & Mixed Methods (What's Our Plan of Action to Better Understand the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning qualitative and mixed methods data methods and tools.
3. Review all handouts and be comfortable explaining them and help participants work with them during small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, and projector
    2. Flip chart
    3. Markers
    4. Tape
    5. Paper
- **Handouts**
    Handout 1: Qualitative Data Collection Methods
    Handout 2: Learning in Rural Education (LIRE) Case Study
    Handout 3: Similarities and Difference of Quantitative and Qualitative Research
    Handout 4: Benefits and Limitations of Quantitative, Qualitative, and Mixed Methods
    Handout 5: CD3M – STEP 2 – Plan of Action
- **Trainer Materials**
    Trainer Material 1: Session 6 PowerPoint

Session Learning Objectives:
Participants will
1. Define qualitative and mixed methods research.
2. Explain the benefits and limitations of quantitative, qualitative, and mixed methods data collection.
3. Explain different qualitative research tools.
4. Build a sample qualitative tool that will help them collect data at their school that will provide evidence for decision making on a school issue.

Phase / Time / Materials	Instructional Sequence
Motivation 10 minutes Trainer Material 1: Session 6 PowerPoint	**Qualitative and Mixed Methods Data Collection Methods** Participants reflect on their past data collection experiences. 1. [SLIDE 2]: Show the data collection methods graphic (on PowerPoint) and ask participants what pattern they see in the methods. Explain that this module infuses together both the quantitative methods we discussed in the last session, as well as the qualitative methods that we will be discussing together today. After a few comments, reveal bottom area that says "informal/ less structured to formal/structured." 2. Ask participants if they've used any of the data collection methods on the chart. Draw out their experiences – was it easy/hard? What data were they collecting? Were they able to use the data later?

Information
 	
25 minutes
 	
Trainer Material 1: Session 6 PowerPoint
 	
Handout 1: Qualitative Data Collection Methods
	Qualitative and Mixed Methods Data and Methods
	Participants will define qualitative data and explain methods to use in qualitative data collection.
	
	1. [SLIDE 3 & 4]: Explain that quantitative data does not help us understand the "why" and the "how" of a problem. Indicate that qualitative data is a very useful tool to describe rich detail of the natural world. Define the term "qualitative data" and post the definition on a PowerPoint slide/or flip chart paper: *Qualitative data consists of images, sounds, words, actions, perceptions that come directly from people. It helps explains the "how" and "why" of a problem. It answers questions in ways that cannot be put into numbers very easily. Therefore, often we also have to use qualitative data as part of the data that we need to collect in order to better understand our problem.*
	
	2. [SLIDE 5]: Ask participants to turn and talk to a partner and think of a question they could ask that would require qualitative data. Say or paraphrase the following examples:
	    • *"Example: What do you like best about teaching?*
	    • *"Example: What are the difficulties that you are facing in your classroom?*
	    • *"Example: How do parents help or hinder students' (girls' and boys') attendance at school?*

Phase / Time / Materials	Instructional Sequence

	3. Present the questions in the large group. Together, quickly brainstorm on ways that we could go about getting answers to some of these questions.
	
	4. [SLIDE 6-11]: Briefly explain each qualitative data collection method, using the slides. Ask participants to list 1-2 advantages and 1-2 disadvantages to using each method to collect data in a school setting in "*their country.*" Draw out responses about what type of data could be collected with each method, what settings might be most appropriate for each method, etc. Methods and introductory comments are:
	
	   • Participant Observation (structured and unstructured): To gather accurate information about how a program actually operates, particularly processes. Participant observation experiments require participation in daily activities or specific activities and for participants to record their personal observations throughout the experience. These observations provide a large amount of personal feelings. Since the observations are generally recorded without a researcher or scientist supervising, it eliminates any major bias concerning the participants' observations. However, this lack of supervision can also lead to a large amount of data that may not pertain to the experiment's end goal.
	
	   • Document Review: When you want impressions of how a program operates, uses applications, finances, memos, minutes, reports. Documents should be precise, inclusive and relevant to the issue being examined.
	
	   • In-depth interviews (structured and unstructured): When you want to fully understand someone's feelings, impressions or experiences, or learn more about answers from questionnaires. In-depth interviews are short- or long-term interviews between participants and researchers. Researchers ask pointed questions to participants to gather a deeper understanding of the participants' feelings and history. Questions can be subjective or objective based on the type of experiment. In-depth interviews are costly and time consuming and

Phase / Time / Materials	Instructional Sequence
	researchers must avoid adding personal bias into their interview observations. • Focus Groups: Explore a topic in depth with a small group, through discussion. Focus groups are a qualitative evaluation tool that brings together several participants to answer questions. Generally, the intended data of a focus group is not the answers to the questions, but the interaction between the participants. Focus groups can be observed internally by a researcher or externally using video and audio recording devices. Either method of observation can provide a different level of bias since the existence of a researcher can influence a participant's responses. • Community meetings (not really a method, more of a forum): Explore a topic with a large group to get a general sense of an issue. 5. Pass out Handout 1: Qualitative Data Collection Methods. Explain: "*In qualitative research we have to 'triangulate' our data, which means using multiple methods of data collection to check and verify our results in order to reach a conclusion. For example, if the conclusion is 'Students in the English class were not motivated by the teacher's examples,' it is more believable if the evidence comes from artifacts, interviews, observations, and classroom transcripts than if it is based on interviews only. Triangulation adds authoritative weight to the conclusion.*" 6. Ask participants to come up with a similar example using triangulation. Say or paraphrase the following: "*Think of a simple classroom problem that a teacher wants to solve in his/her classroom. What three methods would you suggest in order to get different data that can help us cross-check/triangulate? Please use the qualitative data methods sheet to help you.*" 7. Ask participants to share their answers.

Phase / Time / Materials	Instructional Sequence

Practice 1
 	
30 minutes
 	
Training Material 1: Session 6 PowerPoint
 	
Handout 2:LIRE Project Case Study
 	
Flip charts
 	
Markers
 	
Tape
	Case Study – Creating Qualitative Tools
	Participants will practice creating some simple and short qualitative tools.
	
	1. Explain to participants that in this practice session we will examine a case study and come up with some rough qualitative tools to attempt to answer the questions posed in the case study.
	
	2. Present Handout 2: LIRE Project Case Study to participants. Give them 5 minutes to read the handout and then review the case study together.
	3. [SLIDE 12-13]: Divide participants into four groups. Explain that each group is going to create a qualitative tool that is pertinent to the case study questions.
	   • Group 1: Document review tool (What visual documents would you look through in order to better understand community member involvement in the classroom?)
	   • Group 2: Focus group tool (divided by gender if necessary) (What types of things would you, as a group, do to better understand community involvement in the classroom? Who would you talk to?)
	   • Group 3: Semi-structured interviews with teachers, community members, and students (What types of questions would you ask to better understand community involvement in the classroom? Are there different questions you would ask to different groups?)
	   • Group 4: Classroom observation (What would you look for in the classroom to determine community member involvement?)
	
	4. Invite participants to post their tools on a flip chart.
	5. Invite participants to share their impressions of what worked, what was easy, and what was difficult. Make sure to say or paraphrase the following: "*Once these tools are finished, if we wanted to, we could use them and the data would tell a better story of how community members are involved in classroom instruction and provide support to multi-grade teachers. These different approaches triangulate the data.*"

Phase / Time / Materials	Instructional Sequence

Information 2
 	
20 minutes
 	
Training Material 1: Session 6 PowerPoint
 	
Handout 3: Differences and Similarities Between Qualitative and Quantitative Data
 	
Handout 4: Benefits and Limitations of Quantitative, Qualitative, and Mixed Methods
	Quantitative, Qualitative, Mixed Methods
	Participants will explain the benefits and limitations of using quantitative, qualitative, and mixed methods.
	
	1. Explain that there are similarities and differences between qualitative and quantitative data methods and approaches. Distribute Handout 1: Differences and Similarities Between Qualitative and Quantitative Research. Invite participants to read for five minutes. With a partner, they need to come up with another metaphor to complete Example 3.
	
	2. Participants read the handout. They also work in pairs to complete Example 3.
	
	3. Ask participants to present their Example 3. Also ask them to present the similarities and differences in their own words. Ensure that the following ideas come forward (or say/paraphrase the following)
	  • *"Quantitative research and qualitative research are two approaches to finding answers. With quantitative research you're finding numbers and statistics. With qualitative research you're finding qualities, analyzing words or things, and drawing conclusions. Many people disagree on which is the better approach and some utilize both. Whatever the case, there are key differences.*
	  • *"The data that's being collected is different in each method of research. Quantitative research relies on numbers and other numerical data. For example, 'How much money did you spend on groceries last month?' It's looking for specific numbers from which to draw conclusions. On the other hand, qualitative research relies on words, pictures, and objects. For example, 'Why do you spend the amount of money you do at the grocery store?'*
	  • *"Qualitative Data. One similarity between qualitative and quantitative research is that raw data is ultimately subjective. Even though numbers are unbiased, the researcher still has to choose some numbers and disregard others. So, while the numbers themselves are objective, the process of choosing them and justifying why they are more important than other numbers is subjective, which makes all*

Phase / Time / Materials	Instructional Sequence
	research subjective to some degree." 4. [SLIDE 14]: Say or paraphrase the following: *"The reality of quantitative and qualitative research is that most studies are mixed. In order to get a full picture of a topic, a good researcher needs to use a combination of the two, which includes numbers to articulate 'how much,' as well as explanations of the 'how' and 'why.' This is the key similarity between qualitative and quantitative research — they are both used in most academic studies. Using these methods together is what we mean by 'mixed methods.'"* 5. Distribute the Handout Research Methods – Benefits and Limitations. Ask participants to look at the slide/flip chart/handout and take 5 minutes to think of some answers to each box and start filling out their answers based on what they have learned:

Method	Benefits	Limitations
Quantitative		
Qualitative		
BOTH TOGETHER		

6. After 5 minutes, invite participants to share their thoughts. Make sure participants articulate the following ideas (if not, say or paraphrase the following):
   - *"Benefits of Quantitative: This type of data shows concrete numbers and can be represented visually so that it's easy to see what needs to be improved. Quantitative research involves the fast speed that data can be collected. This data can also be analyzed fairly quickly. In addition, using statistically valid random samples, a survey can quickly be generalized to the entire population. Another advantage involves the planning process for programs and messages. With the reliable, repeatable information that quantitative surveys can provide, a trusted set of statistics can give confidence when making future plans. Quantitative research can also be anonymous, which is useful when dealing with sensitive topics. Another major pro of quantitative research*

Phase / Time / Materials	Instructional Sequence
	is that it allows you to generalize your findings beyond the participant group. • *"Limitations of Quantitative: It lacks thick, rich description so we don't really know 'why' something is or is not working. We can make assumptions, but they may not be accurate and true. One con of quantitative research is the limited ability to probe answers. Also, people who are willing to respond may share characteristics that don't apply to the audience as a whole, creating a potential bias in the study. In addition, quantitative research experiments can be costly.* • *"Benefits of Qualitative: This data gives us descriptions that are rich and explain the 'how' and 'why' something is. Qualitative research allows one to explore topics in more depth and detail than quantitative research. Also, qualitative research is often less expensive than quantitative research, because you don't need to recruit as many participants or use extensive methods. Another pro of qualitative research is that it offers flexibility as far as locations and timing because you don't need to interview a large number of people at once.* • *"Limitations of Qualitative: It lacks visual presentation and numbers and sometimes the findings are not as concrete as what we would like. One major disadvantage of qualitative research is that it cannot quantify how many of your audience answer one way or another. This makes it extremely difficult to create any type of solid statistic. Another con is that you cannot generalize your findings. As opposed to quantitative surveys, qualitative research does not allow you to use your findings as a basis for a broader audience or the public in general.* • *"Benefits of using BOTH METHODS TOGETHER TO ANSWER THE SAME QUESTION: It improves validity of findings, gives more in-depth data, and provides individual experiences behind the statistics. It balances the numbers and the descriptions can explain the numbers. It also increases the researcher's capacity to cross-check one data set (quantitative) against another (qualitative). More focused types of tools can help discover underlying problems and seek solutions.* • *"Limitations of BOTH METHODS: This approach can be very*

Phase / Time / Materials	Instructional Sequence
	time consuming. It requires two different ways to manage your data. It also requires the researchers to be comfortable doing both skill sets. This is not often the case." 7. Ask participants: *"Which method do you think is better?"* 8. After soliciting some responses from participants, indicate that *"there is no right or wrong answer when discussing which research method is better. Still, this continues to be a hot debate. Which method is right often depends on what research you're trying to do, and which you feel is a better fit. Likewise, both methods can be done to ensure a mix of data that is valid, reliable, and robust."* 9. Before presenting the next practice activity, indicate to participants that a major responsibility comes with conducting research and acting on the CD3M process cycle. Say, *"We must always be able to protect participants' rights, such as obtaining informed consent and enlightening participants as to their individual rights. We cannot use data against people to hurt them, remove them from their jobs, and enact negative consequences on someone. If we do this, then we are potentially doing harm to those people are participate in the CD3M cycle."*
Application 35 minutes Trainer Material 1: Session 6 PowerPoint Handout 5: CD3M – STEP 2 – Plan of Action Flip charts Markers Tape Paper	**Creating a New Data Collection Tool** Participants will update the CD3M – STEP 2 handout and draft a new qualitative data collection tool based on their problem indicated in STEP 1 of the CD3M process cycle. 1. [SLIDE 15]: On a flip chart/in a PowerPoint, review STEP 2 of the CD3M process cycle. PLAN OF ACTION What data do I currently have? What data do I need?

Phase / Time / Materials	Instructional Sequence

	2. Explain to participants that they need to look over Handout CD3M STEP 1 that they originally filled out, as well as the filled out Handout CD3M STEP 2. Say or paraphrase: *"After having participated in this session on qualitative data, as well as the benefits of using a mixed methods approach, I'd like you to think about how you can incorporate a qualitative data method or two in order to try to answer the question that you originally posed/the problem that you originally identified. I will distribute a new CD3M – STEP 2 handout that you can update based on what qualitative data that you feel you could collect."*
	
	3. [SLIDE 16]: In small groups again, ask participants to consider these guiding questions in order to begin drafting a qualitative data collection tool that they can really use in their own school setting to fill the data need in order to provide further data to the context specific problem that they already identified and modified in Step 1 and Step 2 of the CD3M cycle:
	• Form your research question: What do you need to learn from collecting and analyzing data?
	• Avoid collecting the same data in another way – revisit your inventory of data sets you already have and make sure that you really need to collect new data; confirm the "gap."
	• Consider methods: Which qualitative method will be the quickest and easiest way to get the data you need?
	• Be objective: Avoid bias in your tool.
	
	4. [SLIDE 17]: After about 25 minutes, ask small groups to report back to the large group by telling us about their tool. Guiding questions:
	• Tell us about the tool.
	• Tell us about the data collection and organization *process*:
	  o Who will you collect data from by using this tool?
	  o When will you collect it?
	  o Who will collect the data (implement the tool)?

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Participants define and provide examples of qualitative and mixed methods in the Motivation and Information 1 sections. **Learning Objective 2:** Participants explain the benefits and limitations of each method in the Information 2 section. **Learning Objective 3:** Participants explore different qualitative tools in the Practice 1 section. **Learning Objective 4:** Participants build draft qualitative tools in relation to their problem identified in Step 1 of the CD3M process cycle in the Application section.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:
Center for International Education. (2009). *A Monitoring and Evaluation Plan for Multi-Grade Education*. Amherst, MA: University of Massachusetts - Amherst

Method	Overall Purpose	Advantages	Challenges
Interviews – structured and unstructured	When want to fully understand someone's feelings, impressions or experiences, or learn more about answers from questionnaires	• Develops relationship with participant • Can be flexible with participant • Get full range and depth of information	• Can be costly • Can take much time • Can be hard to analyze and compare • Can be generalized to broad population
Documentation Review	When want impressions of how program operates, uses applications, finances, memos, minutes, reports	• Get comprehensive and historical information • Doesn't interrupt activities • Information already exists	• Info can be incomplete • Need to be clear about what is being looked for • Not a flexible means of data collection, restricted to what exists
Observation	To gather accurate information about how a program actually operates, particularly processes	• View operations of a program as they are actually occurring • Can adapt to events as they occur	• Can be difficult to interpret • Can be complex to categorize observations • Can influence behavior of participants • Takes time
Focus Groups	Explore a topic in depth with a small group, through discussion	• Quickly get common impressions • Can be efficient way to get much range and depth of information in short time • Can convey key information about programs	• Can be expensive • Can be hard to analyze responses • Need good facilitator • Difficult to schedule • Cannot be generalized to broader population
Community meetings	Explore a topic with a large group to get a general sense of an issue	• Inclusion of a large number of people • Opportunity to hear from individuals who may not have been involved otherwise • Can alert non-participants to what the project is doing	• Relatively superficial level of information • Can be dominated by one person • Participants may not be comfortable speaking in a group

Handout 2: Learning in Rural Education (LIRE) Project – Case Study

The (Learning in Rural Education) LIRE pilot project in Senegal and The Gambia attempted to strengthen educators' capacity to deliver and support quality multi-grade education in rural areas with low population densities. The LIRE project was funded by the World Bank-administered Bank-Netherlands Partnership Program (BNPP) and was implemented in partnership between the Center for International Education (CIE) at the University of Massachusetts, Amherst (the primary recipient) and the sub-contractor, the National Council for Negro Women-Senegal Office (NCNW). In its efforts to assist the Education Ministries in Senegal and The Gambia, to achieve the Education For All (EFA) and Millennium Development Goals (MDGs), the LIRE project was committed to the following objectives:

- Identify local training partners and develop demonstration classrooms;
- Develop and provide a package of training modules and teaching materials for multi-grade approaches to education for head teachers, teachers, and local training partners;
- Develop and provide training in an action research approach for head teachers and teachers;
- Provide technical support and guidance to head teachers and teachers in the demonstration classrooms; and
- Assist local partners in the development of a monitoring and evaluation (M&E) system.

One of the problems that teachers experience in multi-grade settings includes not having enough materials for the 2-3 grade levels that they teach at the same time. Therefore, one of the project outcomes was to increase the integration of community members as a resource that teachers could call up to help with classroom instruction.

The project posed the following questions in order to research if/how they were able to get more community members involved in being a part of the classroom:

- Do community members volunteer in the classrooms? How do they volunteer? Under what circumstances? What kind of support do they offer? Why do they volunteer or not?
- Do teachers encourage and engage community members to become involved in the school? If so, how? If not, why?

The LIRE project opted to use the following data collection methods to answer their questions:

- Document review
- Focus groups (divided by gender if necessary)
- Semi-structured interviews with teachers, community members, and students
- Classroom observation

Handout 3: Differences Between Qualitative and Quantitative Data

EXAMINE SIMILARITIES & DIFFERENCES BETWEEN QUALITATIVE AND QUANTITATIVE DATA

SIMILARITIES

- Raw data is ultimately **SUBJECTIVE IN QUALITTAIVE AND QUANTITATIVE DATA** → The researcher is human and always has to make a choice. The researcher is an active participant in the data collection and data analysis stage. All decisions that are made by the researcher are based on his/her impressions, perceptions, and interpretations.

  - o In qualitative data, the researcher chooses the questions to ask and how to code the themes that come from the data.

  - o In quantitative data, the researcher has to make a choice to limit the question being asked. This choice is also subjective.

DIFFERENCES

Qualitative Data	Quantitative Data
Overview: • Words, actions, observations, perceptions, images, sounds, smells • Deals with descriptions • Data can be observed but not measured • Colors, textures, smells, tastes, appearance, beauty, etc. • **Qualit**ative **Qualit**y	**Overview:** • Deals with numbers/statistics • Data which can be measured • Length, height, area, volume, weight, speed, time, temperature, humidity, sound levels, cost, members, ages, etc. • **Quantit**ative **Quantit**y
Example 1: *Oil Painting* **Qualitative data:** • blue/green color, gold frame • smells old and musty • texture shows brush strokes of oil paint • peaceful scene of the country • masterful brush strokes	**Example 1:** *Oil Painting* **Quantitative data:** • picture is 10" by 14" • with frame 14" by 18" • weighs 8.5 pounds • surface area of painting is 140 sq. in. • cost $300
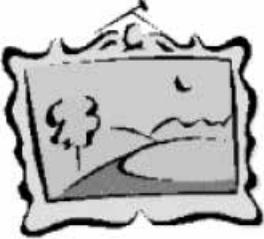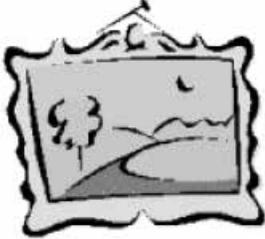
Example 2:	Example 2:
Café au lait	*Café au lait*
Qualitative data:	**Quantitative data:**
• robust aroma • frothy appearance • strong taste • burgundy cup	• 12 ounces of latte • serving temperature is 150 degrees F. • serving cup is 7 inches in height • costs $4.95
Example 3 Now you create an example to share with the group!	**Example 3** Now you create an example to share with the group!
Qualitative data:	**Quantitative data:**

Method	Benefits	Limitations
Quantitative		
Qualitative		
BOTH TOGETHER (Mixed Methods)		

Handout 5: CD3M Cycle – Step 2 – Plan of Action

CD3M – STEP 2 – What data do I have? What data do I need?
What do I know already about my problem?   Describe how the data I have proves that this is a problem:
What else do I need to know to better understand this problem?   Describe in detail here how I can go about getting that data? (Be specific, such as who, how, when, with what types of tools)

Session 7: Student Learning Assessment Tools (What's Our Plan of Action to Better Understand the Problem?)

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Adapt CD3M data collection tools to local needs and use them to conduct the CD3M process cycle

Session Rationale: Assessing student progress is a critical skill that needs to influence a teacher's instruction and curriculum planning. Student assessment does not have to be complicated or long. Using a few sample literacy tools, participants can achieve reliable results that inform their work in literacy as well as adapt tools to other content areas.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation

Version: October 2013

Contributing Posts: PC/Guatemala
PC/Philippines

Session: Student Assessment Tools (What's Our Plan of Action to Better Understand the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. This session and Powerpoint slides has been adapted from the TP_ED_Childhood Literacy Assessment Tools session of the Childhood Literacy Training Package. If the trainers are not familiar with the different components of reading, it is recommended that s/he read through the Childhood Literacy Training Package.
3. While this session introduces three tools to assess literacy skills, the important message that should run throughout the entire session is that there are simple ways that literacy skills can be assessed; these tools just happen to package them in an easy-to-use fashion, but any tool can be used or developed. The take-away is that the key is assessing the correct skills to measure student progress.
4. While this session addresses topics around literacy, these types of tools can be created for other content areas as well, such as math, science, history, geography, etc.

Materials:
- **Equipment**
     1. Computer, screen, and projector
     2. Flip chart
     3. Markers
     4. Tape
- **Handouts**
     Handout 1: The Literacy Wheel
     Handout 2: EGRA sample from Tanzania
     Handout 3: EGRA Student Booklet
     Handout 4: ASER Reading Tool
     Handout 5: Rapid Reading Assessment Tool
     Handout 6: EGMA Sample Tool from Zambia
     Handout 7: Rapid Math Assessment Tool
     Handout 8: CD3M – STEP 3 – DATA COLLECTION
- **Trainer Materials**
     Trainer Material 1:   Session 7 PowerPoint

Session Learning Objectives:
Participants will
1. State the steps needed to complete STEP 3 in the CD3M process cycle.
2. Describe the different components of literacy using the literacy wheel.
3. Indicate two purposes and benefits of assessment.
4. Explain parts of the example assessment tools and which component of literacy each other assesses.
5. Practice using the tools and identify where they can get more information to adapt to different content areas.

Phase / Time / Materials	Instructional Sequence
Motivation 10 minutes Trainer Material 1: Session 7 PowerPoint	**Activate participants' thoughts about student assessment** Participants will begin framing assessment and their understanding and feelings about it. 1. [SLIDE 2 & 3]: Refer back to the CD3M process cycle. Present STEP 3 on a PowerPoint slide/flip chart. Explain that STEP 3, the data collection process, refers to how we will collect data. This requires being more specific in the process you will use but also around the tools that you will use. We will continue to talk about different tools in order to give a plethora of resources to help create data for community driven decision making. 2. Say or paraphrase, "*Think back to a time that you were assessed on something you had recently learned. What methods were used to assess your learning? Do you think the tools or methods used to assess your learning were good ones? How do you evaluate whether they were good or not?*" 3. Depending on the size of the group, you may wish to have pairs think about the questions above or, if the group is small, the large group can respond "popcorn style" to the questions above. **Note**: This is not intended to be a long discussion, rather a quick scan of thinking around assessment. 4. Say or paraphrase, *"Today we are going to learn about some specific tools that assess the components of literacy. In that examination, we will think about and try our hand at designing similar tools for our own purposes and in other content areas as well."*

Phase / Time / Materials	Instructional Sequence

Information 1
 	
30 minutes
 	
Trainer Material 1: Session 7 PowerPoint
 	
Handout 1 : Literacy Wheel
 	
Handout 2: EGRA example from Tanzania
 	
Handout 3: EGRA student sheet from Tanzania
	What is Literacy?
	Participants indicate the different component skills of reading
	Introduction to the elements of reading and literacy
	Participants must understand the basic elements of literacy in order to support children to become fluent readers.
	
	1. [SLIDE 4]: Say, *"Reading has two elements: decoding and comprehending, otherwise known as learning to read and reading to learn. Decoding is the ability to apply your knowledge of letter-sound relationships, including knowledge of letter patterns, to correctly pronounce written words. This session covers the essential skills you must understand in order to help children acquire literacy skills and learn to read. All of these elements of literacy development are essential for children to 'crack the code' and become fluent readers who comprehend what they are reading in order to learn new information. There are nine major elements. First, I'll present the more theoretical (or academic) information on each of these elements.*
	
	2. [SLIDE 5]: Review the slide by reading and discussing the three facts about learning to read. Answer any questions.
	
	3. [SLIDE 6]: Introduce the Nine Elements of Learning to Read/ Literacy. Say, *"Let's look at the nine elements. To help us remember them, let's use a memory aid for each one."* Share the list and introduce each topic and phrase:
	   • *PAK – Print Awareness and Knowledge*
	   • *A.K. – Alphabet Knowledge*
	   • *P.P.A. – Phonological and Phonemic Awareness*
	   • *Phonics*
	   • *Fluency is Faster*
	   • *Vocabulary Matters*
	   • *Spelling Rules*
	   • *Writing Rocks*
	   • *Comprehension is pulling it all together*
	
	4. [SLIDE 7]: Distribute Handout 1. Say, *"Now, since each of these elements is crucial to achieving literacy, here is a graphic to help us think about the literacy learning process, the Literacy Wheel. Take 5 minutes to look at the wheel and to read the descriptions of the different components of reading."*

Phase / Time / Materials	Instructional Sequence

	5. Ask the group, *"Why do you think the elements of learning to read and literacy are so critical for teachers to understand?"* If participants need a hint, ask the following additional question, *"If teachers do not know or understand the process of literacy acquisition, how will this affect their teaching?"*
	
	    <u>**Note**</u>:
	    Possible answers might include:
	    • They cannot teach children to read if they do not understand the process themselves.
	    • Teachers will not be able to identify and then individualize instruction for different learners.
	
	6. Wait for a response(s). Talk through each point on this slide.
	
	Assessment in Literacy
	Participants learn about different types of assessments, as well as the Early Grade Reading Assessment (EGRA) tool
	
	7. Say or paraphrase, *"It is critical to understand how to use assessment tools to evaluate students' understanding of the components of literacy. Understanding what a learner has mastered — letter recognition, word recognition (decoding), reading fluency and comprehending — is crucial so instruction can be enhanced or altered to fit learners' needs and further help teachers understand where their students are in the learning to read and reading to learn processes. Additionally, dissecting the reasons for an assessment is also critical because depending on what the purpose or reason is, it will influence the design of the tool."*
	
	8. [SLIDE 8]: Say or paraphrase, *"Let's look at the various purposes for assessment. Keep in mind that there is a link between the kind of assessment and the purpose for that assessment."*
	
	One purpose is to identify skills that need review. Assessment provides teachers with information on what skills students have and have not mastered. It is needed to help teachers understand the skill levels of their students, since students have varying experiences and knowledge.
	
	A **second purpose** is to monitor student progress. A teacher can learn which students need review before covering additional content and which students are ready to move forward.

Phase / Time / Materials	Instructional Sequence
	A **third purpose** is to guide teacher instruction. Through consistent assessment, a teacher can make informed decisions about what instruction is appropriate for each student.
	A **fourth purpose** is to demonstrate the effectiveness of instruction. The information gained from assessment allows teachers to know if all students are mastering the content covered. It is important for teachers to use instructional time effectively, and this can be done when teachers are knowledgeable about what their students are ready to learn and what they already know. Therefore, the information gained from assessment allows a teachers to create appropriate instruction for their students.
	A **fifth purpose** of assessment is to provide teachers with information on how instruction can be improved.
	4. Ask, "*Can you think of any additional purposes for assessment?*"
	5. Focusing In: Now let's look specifically at literacy skills and reading assessments. Have the group brainstorm a list of what skills are being assessed in literacy and learning to read.
	Note: If you think the participants need to be reminded of the various literacy skills, share the Literacy Wheel introduced in the Decoding and Comprehending sessions.

	Be sure that the following are included:
	     Letter recognition
	     Word recognition
	     Reading-decoding
	     Reading fluency
	     Comprehension

	6. Say or paraphrase, "*Two tools that are currently being used internationally are the EGRA tool and the ASER tool. We will explore each one, but first we will learn about their usage.*
	Early Grade Reading Assessment (EGRA) 8. [SLIDE 9]: Say or paraphrase, "*The Early Grade Reading Assessment (EGRA) is an oral student assessment designed to measure the most basic foundational skills for literacy acquisition in*

Phase / Time / Materials	Instructional Sequence
	the early grades: recognizing letters of the alphabet, reading simple words, understanding sentences and paragraphs, and listening with comprehension. EdData II (USAID) developed the EGRA methodology and has applied it in 11 countries and 19 languages. It has been adopted and used by other implementing partners in more than 30 countries and more than 60 languages. Initially used at the country level, it is now being used in classrooms since it captures important assessment data about which concepts children are mastering and which ones they need more help with. Some PC posts have partnered with organizations using EGRA in their early grade reading programs. " 8. Pass out Handouts 1 and 2. Say or paraphrase, "*Let's take a look at this English example from Tanzania.*"
Practice 1 20 minutes (15 minutes to take turns taking and administering it and 5 minutes to debrief) Handout 2: EGRA Handout 3: Student Booklet	**Practice using EGRA** Participants practice using the two tools introduced in the session. 1. In pairs, participants will try the EGRA tool (with the exception of Section 5). Each person will take a turn administering the assessment and then taking it. <u>Note</u>: Be sure to remind them that they will use Section 3 of the Student Booklet with Section 3a Oral Passage Reading and Section 4 of Student Booklet for Section 4a. 2. Afterwards, have a short (5 minute) debrief with the group to share their experiences. Guiding questions could include: <u>Note</u>: • You can use the questions below or craft your own. • Was the tool easy or hard to use? • Are there areas of the assessment you might think your counterpart teachers will have trouble with? • How do you think the results can be used in the classroom? • Are there other uses for the results of this kind of assessment?

Phase / Time / Materials	Instructional Sequence
Information 2 5 minutes Trainer Material 1: Session 7 PowerPoint	1. Paraphrase, or say, "*Let's look at the second tool in wide use.*" 2**. ASER** [SLIDE 9]: Say or paraphrase, *"Facilitated by Pratham, ASER (meaning impact in Hindustani) is the largest household survey undertaken in India by people outside the government. It annually measures the enrollment, as well as the reading and arithmetic levels, of children in the age group of 6-14 years. Recently, the ASER tool for measuring reading has gained traction in the international development community because it is a very simple, easy to implement way to assess progress of learners in a few key literacy components: letter and word recognition, oral reading fluency, and comprehension. It's a lot like the EGRA tool, but a bit more simple and easier to replicate.*"

Practice 2
 	
30 minutes
 	
Handout 4: ASER
	Practice using the ASER tool
	Group will practice using the ASER tool.
	
	2. Afterwards, have a short (5 minute) debrief with the group to share their experiences.
	
	3. Compare and contrast the two tools:
	Note:
	You can use the questions below or craft your own.
	    • Was the tool easy or hard to use?
	    • Are there areas of the assessment you might think your counterpart teachers will have trouble with?
	    • How do you think the results can be used in the classroom?
	    • Are there other uses for the results of this kind of assessment?
	    • Pros/cons of each tool?
	    • Which tool did you prefer? Why?
	
	4. Say or paraphrase, "*Together, let's look at the various parts of each tool. Which literacy skills does each part assess? What information does it give us about instruction?*"

Phase / Time / Materials	Instructional Sequence
	Note: Answers: *EGRA:* *Section 1=Letter sound knowledge* *Section 2 =Decoding, letter sounds* *Section 3a= Decoding, fluency* *Section 3b= Comprehension* *Section 4a=Decoding, fluency* *Section4b=Comprehension* *ASER:* *Story= Decoding, reading fluency and comprehension* *Paragraph: Decoding, reading fluency, and comprehension* *Letters: Letter sound and letter knowledge* *Words: Decoding skills*
Application 45 minutes Trainer Material 1: Session 7 PowerPoint Handout 5 – Rapid Reading Assessment & Summary Handout 6 – Early Grade Math Assessment & Summary Handout 7 – Rapid Math Assessment and Summary	**Exploring Other Student Assessment Tools** Participants will look through other tools (EGRA, ASER, Rapid Assessments, Early Grade Math) and identify if there is a tool that can be used to help solve their problems/respond to the question they posed in STEP 1 of the CD3M process cycle 1. [SLIDE 10]: Review Steps 1, 2 and 3 of the CD3M cycle on PowerPoint/flip chart

Phase / Time / Materials	Instructional Sequence
	1. Invite participants to think about how any of the student assessment tools could bolster the questions that they have asked/problems they identified in STEP 1 of the CD3M cycle. Again, distribute a blank copy of CD3M STEP 3 – DATA COLLECTION. 2. [SLIDE 11]: Present a variety of other types of student assessments to participants. Indicate that these different tools can also be used. Explain the different assessments (refer to the handout pages for an explanation) • Rapid Assessment for Reading • Early Grade Math Assessment (EGMA) • Rapid Assessment for Math 3. Distribute Handouts 5, 6, 7 to all participants. Invite them to take 10 minutes to read through all of the handouts. 4. In their school groups, ask them to now complete Handout 8: CD3M STEP 3 – Data collection in order to plan how they could adapt/use one of these tools, how they would use the tool, how many students would fill out the tool, and how they would organize and manage the data. 5. (5 minutes) Wrap-up: Show participants where they can access information about EGRA and other tools (USAID-Eddata II website) on the Web. If there is an in-country contact person for these, share contact info.
Assessment	**Learning Objective 1:** Assessed during the Application section **Learning Objective 2:** Assessed during the Information 1 section and Practice 1 section **Learning Objective 3:** Assessed during the Information 1 and Information 2 sections **Learning Objective 4:** Assessed during the Application section

Phase / Time / Materials	Instructional Sequence
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

References:

Education Development Center. (2009). Rapid Reading Assessment Tool. Bamako, Mali: EDC.

International Rescue Committee. (2013). Rapid Math Assessment Tool. Kabul, Afghanistan: IRC

Peace Corps. (2012). Child Literacy. Washington, D.C.: OPATS, Peace Corps Headquarters

Peace Corps. (2012). Childhood Literacy Assessment Tools. Washington, D.C.: OPATS, Peace Corps Headquarters

USAID. (2013). Tanzania EGRA. Washington, D.C.: USAID

USAID. SSME Instruments – Zambia. Washington, D.C: USAID
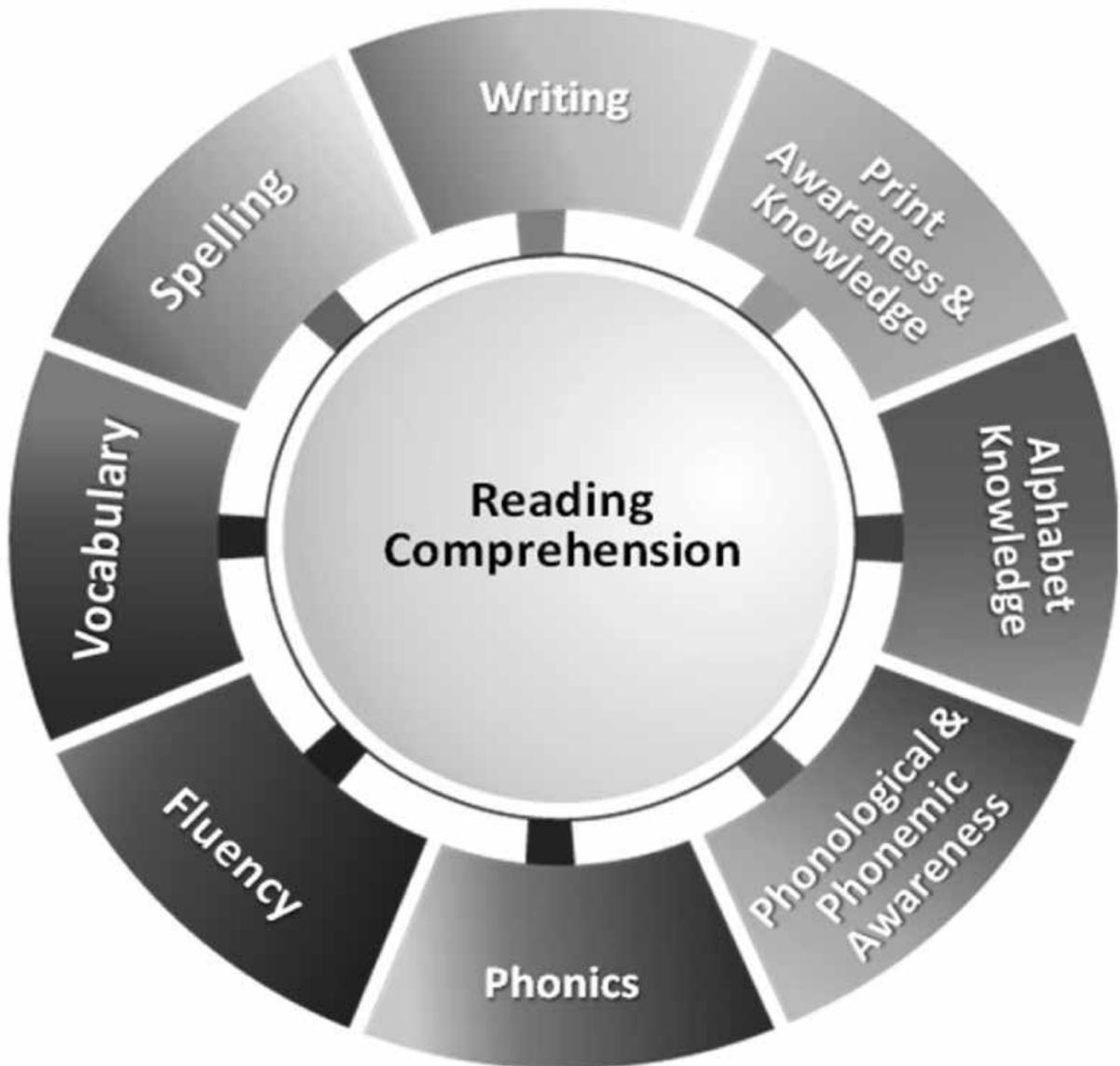
Definitions of literacy/reading concepts

- **Print Awareness & Knowledge (PAK):** Print awareness and knowledge is often a child's earliest introduction to literacy. Knowing words consist of words and letters and that there are spaces between words.

- **Alphabet Knowledge (AK):** Knowing letter names.

- **Phonological and Phonemic Awareness (PPA):** Paying attention to and understanding the sounds of letters and how they work. Phonological awareness is the umbrella concept of understanding sounds in speech relationships, while phonemic awareness is about being able to identify the smallest sounds in speech.

- **Phonics:** The understanding that there is a relationship between letters and sounds through written language. Phonics instruction includes teaching <u>letter shapes </u>and <u>names</u>, <u>phonemic awareness</u>, and all major <u>letter-sound relationships</u>.

- **Fluency:** The ability to read text with meaning and feeling, understanding when to pause and give emphasis, the accuracy in reading words and also speed of reading.

- **Vocabulary:** Refers to understanding the meaning of words needed to read text. After the early childhood years, children need to develop skills for making meaning of new vocabulary that they do not encounter in their everyday lives.

- **Spelling:** Learning to spell is built on the understanding that words are made up of separate speech sounds (phonemes) and that letters represent those sounds.

- **Writing:** The ability to recognize and produce the writing system.

- **Text comprehension:** Making meaning of what is read. This is the ultimate goal for reading.

Handout 2: EGRA Sample from Tanzanie

Tanzania Early Grade Reading Assessment: Student Response

Administrator Instructions and Protocol (Baseline)

ENGLISH

General Instructions

It is important to establish a playful and relaxed rapport with the children to be assessed, via some simple initial conversation among topics of interest to the child (see example below). The child should perceive the following assessment almost as a game to be enjoyed rather than an exam. It is important to read ONLY the sections in boxes aloud slowly and clearly.

> Good morning. My name is _____ and I live in _____. I'd like to tell you a little bit about myself. [Number and ages of children; pets; sports; etc]
>
> 1. Could you tell me a little about yourself and your family? [*Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent*].
>
> 2. What do you like to do when you are not in school?

Verbal Consent

> - Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance, like in a raffle or lottery.
> - We would like your help in this. But you do not have to take part if you do not want to.
> - We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.
> - Using this stopwatch, I will see how long it takes you to read.
> - This is NOT a test and it will not affect your grade at school.
> - I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.
> - I will NOT write down your name so no one will know these are your answers.
>
> - Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.
> - Do you have any questions? Are you ready to get started?

Check box if verbal consent is obtained: ☐ *YES*

> *(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)*

A. Date of Assessment :	Day : _____ Month:_____		I. Class:	1 = Class One 2 = Class Two 3 = Class Three 4 = Class Four
B.1. Enumerator's Name :				
B.2. Enumerator Code :				
C. School Name :			J. Stream Name:	
D. District:			K. Student Unique Code:	
E. Region:				
F. School Shift :	1 = Full day 2 = Morning only 3 = Afternoon only		L. Student's Age :	
G. Multigrade Class ?	0 = No 1 = Yes		M. Student's Gender	1 = boy 2 = girl
H. Order of Assessment	1 = First 2 = Second 3 = Third		N. Time Started: ____ : _____ AM / PM	

Section 1. Letter Sound Knowledge

Show the child the sheet of letters in the student stimuli booklet. Say:

Here is a page full of letters of the English alphabet. Please tell me the SOUNDS of as many letters as you can; not the NAMES of the letters, but the SOUNDS.

For example, the sound of this letter *[point to A]* **is "AH" as in "APPLE".**

Let's practise: Tell me the sound of this letter *[point to V]***:**

> *If the child responds correctly say:* **Good, the sound of this letter is "VVVV."**

> *If the child does not respond correctly, say:* **The sound of this letter is "VVVV."**

Now try another one: Tell me the sound of this letter *[point to L]***:**

> *If the child responds correctly say:* **Good, the sound of this letter is "LLL."**

> *If the child does not respond correctly, say:* **The sound of this letter is "LLL."**

Do you understand what you are to do?

When I say "Begin," please sound out the letters as quickly and carefully as you can. Tell me the sound of the letters, starting here and continuing this way. *[Point to the first letter on the row after the example and draw your finger across the first line].***If you come to a letter sound you do not know, I will tell it to you. If not, I will keep quiet and listen to you. Ready? Begin.**

*Start the timer when the child reads the first letter. Follow along with your pencil and **clearly** mark any incorrect letters with a slash (/). Count self-corrections as correct. If you've already marked the self-corrected letter as incorrect, circle the letter and go on. **Stay quiet,** except when providing answers as follows: if the child hesitates for 3 seconds, provide the sound of the letter, point to the next letter and say "**Please go on.**" Mark the letter you provide to the child as incorrect. If the student gives you the letter name, rather than the sound, provide the letter sound and say: ["**Please tell me the SOUND of the letter**"]. This prompt may be given only once during the exercise.*

AFTER 60 SECONDS SAY, "stop." Mark the final letter read with a bracket ( ]).

Early Stop Rule: *If you have marked as incorrect all of the answers on the first line with no self-corrections, say "**Thank you!**" discontinue this exercise, check the box at the bottom, and go on to the next exercise.*

Example :   A   v   L

1	2	3	4	5	6	7	8	9	10	
e	f	d	R	m	i	w	r	i	H	*(10)*
o	n	F	a	e	A	t	T	e	y	*(20)*
n	G	W	o	C	t	i	H	e	o	*(30)*
r	E	s	Y	n	U	S	t	s	e	*(40)*
D	t	l	o	t	p	l	i	s	g	*(50)*
L	N	I	E	l	x	k	r	z	A	*(60)*
n	w	a	O	H	e	P	d	t	s	*(70)*
s	o	E	h	e	m	a	M	b	E	*(80)*
J	r	c	s	v	h	R	u	B	a	*(90)*
u	E	Q	N	a	T	l	h	A	O	*(100)*

Time remaining on stopwatch at completion (number of SECONDS):

Check this box if the exercise was discontinued because the child had no correct answers in the first line.

Section 2. Invented Word Decoding

Show the child the sheet of invented words in the student stimuli booklet. Say,

---

Here are some made-up words. I would like you to read as many as you can. Do not spell the words, but read them. For example, this made-up word is: "ut".

Let's practise: Please read this word *[point to the next word:* **dif***].*

  [If the student says "dif", say]: **"Very good: "dif"**

  [If the student does not say "dif" correctly say]: **This made-up word is "dif."**

Now try another one: Please read this word *[point to the next word:* **mab***].*

  [If the student says "mab", say]: **"Very good: "mab"**

  [If the student does not say "mab" correctly say]: **This made-up word is "mab."**

When I say "begin," read the words as quickly and carefully as you can. Read the words across the page, starting at the first row below the line. I will keep quiet and listen to you, unless you need help. Do you understand what you are to do? Ready? Begin.

Start the timer when the child reads the first word. Follow along with your pencil and clearly mark any incorrect words with a slash (/). Count self-corrections as correct. If you've already marked the self-corrected word as incorrect, circle the word and go on. **Stay quiet,** *except when providing answers as follows: if the child hesitates for 3 seconds, provide the word, point to the next word and say "* **Please go on.** *" Mark the word you provide to the child as incorrect.*

AFTER 60 SECONDS, SAY "Stop." Mark the final word read with a bracket ( ]).

Early Stop Rule: *If you have slashed/marked as incorrect all of the answers on the first line, say "* **Thank you!** *" discontinue this exercise, check the box at the bottom, and go on to the next exercise.*

Example :   ut   dif   mab

1	2	3	4	5	
vob	tep	reb	fem	bis	*(5)*
zay	yut	gux	pef	het	*(10)*
raz	mak	mip	lep	sab	*(15)*
vap	zin	jif	pab	ruk	*(20)*
wis	zeg	mep	jol	pos	*(25)*
yot	wog	bem	kar	heg	*(30)*
jeb	pog	dix	fik	dap	*(35)*
rov	wim	kom	gat	cur	*(40)*
pim	pug	daf	lal	laj	*(45)*
noz	zil	fal	mof	lop	*(50)*

Time remaining on stopwatch at completion (number of SECONDS):

Check this box if the exercise was discontinued because the child had no correct answers in the first line.

Section 3a. Oral Passage Reading

Show the child the story in the student stimuli booklet. Say,

Here is a short story. I want you to read it aloud, quickly but carefully. When you have finished, I will ask you some questions about what you have read. Do you understand what you are to do? When I say "begin," read the story as best as you can. I will keep quiet & listen to you, unless you need help. Ready? Begin.

*Start the timer when the child reads the first word. Follow along with your pencil and clearly mark any incorrect words with a slash (/). Count self-corrections as correct. **Stay quiet,** unless the child hesitates for 3 seconds, in which case provide the word, point to the next word and say "**Please go on**." Mark the word you provide to the child as incorrect.*

At 60 seconds, say "Stop." Mark the final word read with a bracket ( ]).

Early stop rule: **If the child reads no words correctly on the first line, say "Thank you!", discontinue this exercise, check the box at the bottom of the page, and go on to the next exercise.**

Section 3b. Reading Comprehension

When 60 seconds are up or if the child finishes reading the passage in less than 60 seconds, REMOVE the passage from in front of the child, and ask the first question below.

Give the child at most 15 seconds to answer the question, mark the child's response, and move to the next question.

Read the questions for each line up to the bracket showing where the child stopped reading.

Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can.

Story 1: WHERE IS SARA's SWEATER	QUESTIONS	CORRECT RESPONSE	INCORRECT RESPONSE	NO RESPONSE
One day, Sara lost her sweater. She was worried. It was very cold. 13	**What did Sara lose?** [Sara lost her sweater.]			
She looked in her desk and on her seat. The sweater was not there. 27	**Where did Sara look for her sweater?** [in the desk, seat, classroom, under the big tree; playground]			
She ran to the playground. She looked under the big tree. It was not there. 42	**Where did Sara run?** [the playground]			
She told her teacher she had lost her sweater. The teacher pointed to Sara's neck. Sara laughed. 59	**Where was Sara's sweater?** [On/around her neck, on her body]			
	Why did Sara laugh? [Because the sweater was on her neck]			

Time remaining on stopwatch at completion (number of SECONDS):

Check this box if exercise stopped due to the child not reading any one of the words on the first line correctly.

Section 4a. Oral Passage Reading (Untimed)

Show the child the story in the student stimuli booklet. Say,

Here is a short story. I want you to read it aloud, quickly but carefully. When you have finished, I will ask you some questions about what you have read. Do you understand what you are to do? When I say "begin," read the story as best as you can. I will keep quiet & listen to you, unless you need help. Ready? Begin.

*Start the timer when the child reads the first word. Follow along with your pencil and clearly mark any incorrect words with a slash (/). Count self-corrections as correct. **Stay quiet**, unless the child hesitates for 3 seconds, in which case provide the word, point to the next word and say **"Please go on**." Mark the word you provide to the child as incorrect.*

At 180 seconds, say "Stop." Mark the final word read with a bracket ( ]).

*Early stop rule: **If the child reads no words correctly on the first line, say "**Thank you!**", discontinue this exercise, check the box at the bottom of the page, and go on to the next exercise.***

Section 4b. Reading Comprehension

When 180 seconds are up or if the child finishes reading the passage in less than 180 seconds, REMOVE the passage from in front of the child, and ask the first question below.

Give the child at most 15 seconds to answer the question, mark the child's response, and move to the next question.

Read the questions for each line up to the bracket showing where the child stopped reading.

Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can.

Story 1: SCHOOL DANCE	QUESTIONS	CORRECT RESPONSE	INCORRECT RESPONSE	NO RESPONSE
Moraa and her friends are going to dance for their school. 11	**What are the girls going to do?** (To dance at school, dance, dance for school)			
They want to be the best dancers. They practice every day. 22	**Why do they practice every day?** (they want to be the best, to improve, get better)			
When the girls dance, the whole school claps. Moraa and her friends know they shall win. 38	**What does the whole school do when Moraa and her friends dance?** (The whole school/everyone claps)			
	Why does the whole school clap? (The girls dance well; They were happy with the dancers.)			

Time remaining on stopwatch at completion (number of SECONDS):

Check this box if exercise stopped due to the child not reading any one of the words on the first line correctly.

Section 5. Student Context Interview

Ask each question verbally to the child, as in an interview. Do not read the response options aloud. Wait for the child to respond, then write the response in the space provided, or circle the code of the option that corresponds to the child's response. If there is no special instruction to the contrary, only one response is permitted.

<table>
<tr>
<td>1a</td>
<td>Do you speak the same language at home as you speak at school?

Je, nyumbani kwenu mnazungumza lugha ileile kama unayozungumza shuleni?</td>
<td colspan="4">No, Go to 1b.. 0
Yes... 1
Do not know/No response................................ 99</td>
</tr>
<tr>
<td>1b</td>
<td>[If "No" to Question 1a], What language(s) do you speak at home?

[Kama jibu ni "Hapana" Swali 1a], Je, ni lugha ipi au zipi mnazozizungumza nyumbani kwenu?

[Multiple responses are allowed]</td>
<td colspan="4">Kiswahili 1
English.. 2
Mother Tongue.. 3
 (Specify):
.
Do not know/No response................................ 99</td>
</tr>
<tr>
<td></td>
<td>At your house, do you have:

Je, nyumbani kwenu mnavyo vifuatavyo:</td>
<td>**No**</td>
<td>**Yes**</td>
<td>**No Response**</td>
<td>**Don't Know**</td>
</tr>
<tr>
<td>2</td>
<td>A radio?

Radio?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>3</td>
<td>A telephone or mobile phone?

Simu au simu ya kiganjani?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>4</td>
<td>Electricity?

Umeme?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>5</td>
<td>A television?

Runinga au TV?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>6</td>
<td>A refrigerator?

Jokofu au friji?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>7</td>
<td>A toilet inside the house?

Choo ndani ya nyumba?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>8</td>
<td>A bicycle?

Baiskeli?</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>99</td>
</tr>
</table>

9	A motorcycle? Pikipiki?	0	1	8	99
10	A car, truck, 4 by 4, tractor, or engine boat? Gari dogo la abiria, gari la mizigo, gari aina ya landrover au landcruiser (4 by 4), trekta, au injini ya boti?	0	1	8	99

11	Did you go to a nursery or pre-school before Class 1? Je, ulisoma darasa la chekechea au shule ya awali kabla ya kuandikishwa darasa la kwanza?	No.. 0 Yes .... 1 Do not know/No response... 99
12	What class were you in last year? Je, mwaka uliopita ulikuwa unasoma darasa la ngapi?	Pre-school .... 0 Class 1 .... 1 Class 2 .... 2 Class 3 .... 3 Class 4 .... 4 Not in school .... 5 Do not know/No response... 99
13	Last year, were you absent from school for more than one week? Katika mwaka uliopita, uliwahi kukosa kuhudhuria shuleni kwa zaidi ya juma moja?	No.. 0 Yes .... 1 Do not know/No response... 9
14	Do you have the English reading textbook? Je, unacho kitabu cha kusoma cha Kiingereza?	No.. 0 Yes.. 1 Do not know / No response... 99
15	Do you have the Kiswahili reading textbook? Je, unacho kitabu cha kusoma cha Kiswahili?	No.. 0 Yes.. 1 Do not know / No response... 99
16	Do you have the maths textbook? Je, una kitaba cha hisabati?	No.. 0 Yes.. 1 Do not know / No response... 99
17	Do you have books or reading materials at home? Je, una vitabu au vijarida vya kusoma nyumbani kwenu? [If No or Don't Know Skip to 19]	No.. 0 Yes.. 1 Do not know / No response... 99

18	[If yes to Question 17] What language(s) are these books or other materials in? Je, vitabu na vijarida kule nyumbani vimeandikwa kwenye lugha ipi? *[Multiple- responses are allowed]*	Kiswahili .... 1 English .... 2 Mother Tongue .... 3 (Specify): Do not know / No response 99	
19	Can your mother read and write? Je, mama yako anajua kusoma na kuandika?	No .... 0 Yes .... 1 Do not know / No response 99	
20	Can your father read and write? Je, baba yako anajua kusoma na kuandika?	No .... 0 Yes .... 1 Do not know / No response 99	

OK we are done! You have done a good job. Go back to your classroom, and please do not talk to other pupils about what we have done today until the team of visitors departs from the school.

Vizuri sana, sasa tumemaliza. Umefanya kazi nzuri. Tafadhali sasa rejea darasani kwako, na hakikisha huwaelezi wanafunzi wengine kuhusu mahojiano haya ya leo hadi timu ya wageni hawa imeondoka.

Time Ended: _____ : _____   AM / PM

USAID FROM THE AMERICAN PEOPLE

TANZANIA EARLY GRADE READING ASSESSMENT

STUDENT STIMULI BOOKLET

ENGLISH

BASELINE SURVEY, MAY 2012

SECTION 1 – *Example:*   A   v   L

e	f	d	R	m	i	w	r	i	H
o	n	F	a	e	A	t	T	e	Y
n	G	W	o	C	t	i	H	e	O
r	E	s	Y	n	U	S	t	s	e
D	t	l	o	t	p	l	i	s	g
L	N	I	E	l	x	k	r	z	A
n	w	a	O	H	e	P	d	t	s
s	o	E	h	e	m	a	M	b	E
J	r	c	s	v	h	R	u	B	a
u	E	Q	N	a	T	l	h	A	O

SECTION 2 – *Example:*   ut   dif   mab

vob	tep	reb	fem	bis
zay	yut	gux	pef	het
raz	mak	mip	lep	sab
vap	zin	jif	pab	ruk
wis	zeg	mep	jol	pos
yot	wog	bem	kar	heg
jeb	pog	dix	fik	dap
rov	wim	kom	gat	cur
pim	pug	daf	lal	laj
noz	zil	fal	mof	lop

SECTION 3

One day, Sara lost her sweater. She was worried. It was very cold. She looked in her desk and on her seat. The sweater was not there. She ran to the playground. She looked under the big tree. It was not there. She told her teacher she had lost her sweater. The teacher pointed to Sara's neck. Sara laughed.

SECTION 4

Moraa and her friends are going to dance for their school. They want to be the best dancers. They practice every day. When the girls dance, the whole school claps. Moraa and her friends know they shall win.

Story

Seema is a little girl. Her mother gave her a book. It had lots of stories and nice pictures. Seema reads it every morning on her way to school. She learned many words. Her teacher was very happy. The teacher gave Seema another book. It had more stories. She showed it to all her friends.

Para

I go to school by bus.
The bus has four wheels.
It has many windows.
It is blue in colour.

e   d   w

     s   c

g   h   z

     i   q

Ask the child to read any 5 letters. Atleast 4 must be correct.

hand   star
          bus
cat   book
day   few
     old
sing   bold

Ask the child to read any 5 words. Atleast 4 must be correct.

Handout 5: Rapid Reading Assessment Tool

SUMMARY:

The Rapid Reading Assessment Tool was created by the Education Development Center for education programs in Mali and was first introduced in 2010 to parent-teacher committees. During the introductory meeting, facilitators explained the process of conducting the assessment, giving parents the option and ability to utilize it at home. At a follow-up meeting, parents were able to share the results from the informal test and together the group discussed the outcomes and created action plans for improvement. While this was not technically a scientific process, it did create the opportunity for open dialogue between community members about their experience with the assessment and increased parental participation in their children's education.

The procedure is very simple:
- The child is given the "student worksheet" and the tester (parent, sibling, or a teacher) uses the scoring sheet.
- The tester circles any missed answers on the scoring sheet and then tallies up the number of correct responses and scores the section.
- This assessment can be used by PTAs to find the average reading scores and the sub-test scores of all the children of the village. This requires them to collect all the completed individual sheets and tally up responses/scores for all children tested.

This quick assessment can shed light on the importance of community awareness raising and the positive reactions that members of the community feel after having been a part of the whole process.

INFORMAL TEST FOR PARENT TEACHER ASSOCIATIONS

A. QUESTIONS TO ASK THE STUDENT

    a. Child's age _____ School Grade completed in June 2012 _____

    b. District_____ School _____

    c. Did the student's teacher take part in any early grade reading trainings ?
       YES ❑   NO ❑

B. ALPHABET TEST :

Instruction : How many letters can the child correctly identify ?
- If the child takes more than 3 seconds to identify a letter, ask him / her to go to the next letter
- The child reads line-by-line from left to right
- Accept the sounds or the letter name
- On the answer sheet, circle the incorrect letters
- In the answer box below, write down the correct number of letters identified

k	d	x	h	r	i	u	j	b	z	m	c	s
g	o	q	e	t	a	n	v	y	l	w	f	p

/26

C. FREQUENTLY USED WORDS. Follow the same method for the next exercise. The child needs to read the following frequently used words in English, doing so rapidly.

The	Be	To	Of	And	In	Not	from

/8

D. READING A TEXT : Underline the words that the child reads incorrectly. If the child takes more than 5 seconds to read a word, ask him / her to continue to the next word.

My small cat plays in the garden. It saw a mouse. It hid. The mouse is still there. The cat jumps and nips the mouse.

/26

STUDENT SHEET

TEST 1

k	d	x	h	r	i	u	j	b	z	m	c	s
g	o	q	e	t	a	n	v	y	l	w	f	p

TEST 2

The	Be	To	Of	And	In	Not	from

TEST 3

My small cat plays in the garden. It saw a mouse. It hid. The mouse is still there. The cat jumps and nips the mouse.

Handout 6: Early Grade Math Assessment

SUMMARY:

The Early Grade Mathematics Assessment (EGMA) is an individually administered assessment which focuses on the foundational mathematic skills that learners need to succeed in math. EGMA was piloted in early July 2009 in Malindi, Kenya. During this time, the testing demonstrated its ability to provide feedback regarding how children were doing in the classroom and at a state level.

The assessment requires 15 minutes per child and is implemented by a trained enumerator who scores responses after providing the instructions, asking questions, and showing cards and other manipulative objects to each child. Children encounter seven overall tasks, with multiple problems within each task:

- Number identification
- Quantity discrimination
- Missing number
- Words problems
- Addition/Subtraction problems
- Shape recognition
- Pattern extension

EGMA provides educators and individuals working at the administration level with a snapshot of areas of skill deficiency by focusing on tasks that require oral counting, number identification, quantity discrimination, and identification of missing numbers as some of the highlighted measures. By focusing on early foundational skills, it can be used to bring awareness to policy makers and educational authorities. International and national assessment often test these skills in the third and fourth grades (most much later, though). Waiting this long to get a baseline understanding of the strengths and gaps that exist in children's abilities makes it increasingly difficult to target the specific levels when children begin to face these challenges. It also affects educators' ability to note these gaps and provide the appropriate remedial supports that are necessary for children to understand and use foundational skills that they will continue to use throughout their education. Although it is possible to catch children up later on, it can be expensive for the system, time consuming as it interferes with prepared curriculum, and can be frustrating for the children themselves.

Zambia Mini Early Grade Math Assessment (EGMA)

May 2011

ENGLISH

Task 1:Number Identification	📖 Sheet M1	⏱ 60 seconds

▯ Here are some numbers. I want you to tell me what each number is. I am going to use this stopwatch and will tell you when to begin and when to stop. When I say begin, say the numbers as best as you can. I will keep quiet and listen to you. Start with this number and go across the page. [*sweep your hand over the first line*] - [*point to first number*] Start here. Are you ready? . . . Begin. - What number is this ?	✋ • If the time on the stopwatch runs out (60 seconds). ➲ • If a child stops on a number for 5 SECONDS.

✎   (/) Incorrect or no response

   ( ]) After the last number read

					Tot. Cum.
12	2	17	7	77	(5)
9	18	32	53	11	(10)
62	93	34	5	83	(15)
10	19	25	39	20	(20)
74	4	60	1	46	(25)
48	13	15	97	8	(30)

✋

If you have marked as incorrect all of the answers on the first line with no self-corrections, discontinue this exercise, check the box at the bottom, and go on to the next exercise.

✎   Time left (seconds):

✎   Check this box if the exercise was discontinued because the child had no correct answers in the first line.

Task 2: Quantity Discrimination - Example	📖 **Sheet** M2-A	🕐 ✖

P1:

☐   Look at these numbers. Which one is bigger? Point to the number and tell me the number.

<div align="center">10   4</div>

✓☐ That's correct, 10 is bigger. Let's do another one.

✖☐ The bigger number is 10. *[Point to 10]* This is 10. *[Point to 4]* This is 4. 10 is bigger than 4. Let's do another one.

P2:

☐   Look at these numbers. Tell me which number is bigger.

<div align="center">20   12</div>

✓☐ That's right, 20 is bigger. Let's continue.

✖☐ The bigger number is 20. *[Point to 12]* This number is 12. *[Point to 20]* This is 20. 20 is bigger than 12. Let's continue.

Task 2: Quantity Discrimination - Exercise	📖 **Sheet** M2-B	🕐 60 seconds

☐   Now, I want you to go as quickly as you can, and do the best that you can. I am going to use this stopwatch and will tell you when to begin and when to stop. When I say begin, look at these numbers and tell me which one is bigger. Point to the number and tell me the number.

- Ready? Begin.

✎   **(/) Incorrect or no response**
      ( ]) After the last ítem attempted.

5	6	**_6_**		8	7	**_8_**	
15	20	**_20_**		14	17	**_17_**	
19	18	**_19_**		96	40	**_96_**	
50	57	**_57_**		42	21	**_42_**	
79	70	**_79_**		32	36	**_36_**	
4	9	**_9_**		7	5	**_7_**	
19	2	**_19_**		13	20	**_20_**	
11	10	**_11_**		22	25	**_25_**	
45	64	**_64_**		84	97	**_97_**	
51	35	**_51_**		29	25	**_29_**	

🖐

• If the time on the stopwatch runs out (60 seconds).

↻

• If a child stops on a number for <u>5 SECONDS.</u>

🖐

If you have marked as incorrect all of the answers on the first line with no self-corrections, discontinue this exercise, check the box at the bottom, and go on to the next exercise.

✎   Time left (seconds):

✎   Check this box if the exercise was discontinued because the child had no correct answers in the first vertical line.

Task 3: Missing Number - Example	📖 **Sheet** M3-A	🕐 ✘

P1:

🗆   Here are some numbers. 1, 2, 3, what number goes here?

       1, 2, 3, _____

✓🗆 That's correct, 4.

✘🗆 The number four goes here. Say the numbers with me. *[Point to each number]* . . . 1, 2, 3, 4. 4 goes here. Let's do another one.

P2:

🗆 Here are some more numbers. 17, *[point to dash]*, 19, 20 what number goes here? *[point to dash again]*

       17, _____, 19, 20

✓🗆 That's right, 18.

✘🗆 The number 18 goes here. Say the numbers with me. *[Point to each number]* . . . 17, 18, 19, 20. *[Point to dash]* 18 goes here. Let's do another one.

P3:

🗆 Here are some more numbers. *[point to dash]*, 25, 30, 35 what number goes here? *[point to dash again]*

       _____, 25, 30, 35

✓🗆 That's right, 20.

✘🗆 The number 20 goes here. Say the numbers with me. *[Point to each number]* . . . 20, 25, 30, 35. *[Point to dash]* 20 goes here. Let's do some more.

Task 3: Missing Number - Exercise	📖 **Sheet** M3-B	🕐 60 Seconds

🗆   Now we're going to do some more. Here are some more numbers. For each group of numbers I want you to tell me what number is missing. Now, I want you to go as fast as you can, and do the best that you can. I am going to use this stopwatch and will tell you when to begin and when to stop. When I say begin, look at these numbers and tell me the missing number.

\- Ready? Begin

🖎   **(/) Incorrect or no response**
    ( ]) After the last ítem attempted

🖐

• If the time on the stopwatch runs out (60 seconds).

🔁

• If a child stops on a number for 5 SECONDS.

🖐

If you have marked as incorrect all of the answers on the first line with no self-corrections, discontinue this exercise, check the box at the bottom, and go on to the next exercise.

18	19	20	21		**5**	10	15	20
86	87	**88**	89		122	123	**124**	125
20	30	40	**50**		2	**4**	6	8
1	2	3	4		56	57	58	**59**
98	99	100	101		**100**	200	300	400
347	348	349	**350**		**5**	6	7	8
6	7	**8**	9		18	**19**	20	21
299	**300**	301	302		40	45	**50**	55
10	**20**	30	40		68	69	70	**71**
10	11	12	**13**		7	8	9	**10**

🖎 Time left (seconds):	
🖎 Check this box if the exercise was discontinued because the child had no correct answers in the first vertical line.	

Task 4: Addition - Example	📖 **Sheet** M4-A	🕐 ✖

P1:
☐   Here is an addition problem. Three plus two. How much is two plus three?

2 + 3 =

✓☐ That's right, two plus three is five. Let's try another.

✖☐ The answer is five. Two plus three is five. Let's try another.

P2:
☐   Here is another addition problem. Twelve plus four. How much is twelve plus four?

12 + 4 =

✓☐ That's right, twelve plus four is sixteen.

✖☐ The answer is sixteen. Twelve plus four is sixteen.   Let's do some more.

Task 4: Addition - Exercise	📖 Sheet M4-B – M4-C	🕐 60 seconds

☐   Here are more addition problems. For each problem you will tell me the answer. Ok?   I will use this stopwatch. I want you to tell me the first answer that seems right to you. Go as fast as you can, but try to give the right answer.   We will start here [*point to the first problem*] and go across [*point along the first row*]. When we finish this row, we will go to the next row and start here [*point to the beginning of the second row*].

- Ready? Begin

✎   **(/) Incorrecto r no response**

( ]) After last ítem attempted.

4 + 2= **(6)**	8 + 2= **(10)**	8+6= **(14)**	16 + 4 =**(20)**	7 + 1 = **(8)**	(5)
5 + 4 = **(9)**	10 + 3 = **(13)**	10+10= **(20)**	2 + 2 = **(4)**	5 + 7 = **(12)**	(10)
6+6 = **(12)**	3 + 4= **(7)**	6 + 2 = **(8)**	5 +6= **(11)**	15+ 5= **(20)**	(15)
4 + 5 = **(9)**	7 + 2 = **(9)**	3 + 9 = **(12)**	13+ 3 = **(16)**	1 + 5 = **(6)**	(20)
5 + 5 = **(10)**	2 + 11= **(13)**	3 + 2 = **(5)**	6 + 4 = **(10)**	6 +10 = **(16)**	(25)
10 + 5 = **(15)**	5 + 3 = **(8)**	7+3 = **(10)**	4 + 7 = **(11)**	11 + 9 = **(20)**	(30)

✎   Time left (seconds):

✎   Check this box if the exercise was discontinued because the child had no correct answers in the first vertical line.

Right column notes:

🖐 ✖

🖐
• If the time on the stopwatch runs out (60 seconds).

➲
• If a child stops on a number for 5 SECONDS.

🖐
If you have marked as incorrect all of the answers on the first line with no self-corrections, discontinue this exercise, check the box at the bottom, and go on to the next exercise.

Task 5:Subtraction - Example	📖 **Sheet** M5-A	🕐 ✖

P1:

▯ Here is a subtraction problem. Seven minus two. How much is seven minus two?

$$7 - 2 =$$

✓▯ That's right, Seven minus two is five. Let's try another.

✖▯ The answer is five. Seven minus two is five. Let's try another.

P2:

▯ Here is another subtraction problem. Seventeen minus three. How much is seventeen minus three?

$$17 - 3 =$$

✓▯ That's right, seventeen minus three is fourteen.

✖▯ The answer is fourteen. Seventeen minus three is fourteen. Let's do some more.

Task 5: Subtraction - Exercise	📖 **Sheet** M5-B – M5-C	🕐 60 seconds

▯ Here are more subtraction problems. For each problem you will tell me the answer. Ok? I will use this stopwatch. I want you to tell me the first answer that seems right to you. Go as fast as you can, but try to give the right answer. We will start here [*point to the first problem*] and go across [*point along the first row*]. When we finish this row, we will go to the next row and start here [*point to the beginning of the second row*].

- Ready? Begin

✎ (/) **Incorrect or no response**

  ( ]) **After last item attempted**

6 - 2 = **(4)**	10 - 2 = **(8)**	14 - 6 = **(8)**	20 - 4 = **(16)**	8 - 1 = **(7)**	(5)
9 - 4 = **(5)**	13 - 3 = **(10)**	20 - 10 = **(10)**	4 - 2 = **(2)**	12 - 7 = **(5)**	(10)
12 - 6 = **(6)**	7 - 4 = **(3)**	8 - 2 = **(6)**	11 - 6 = **(5)**	20 - 5 = **(15)**	(15)
9 - 5 = **(4)**	9 - 2 = **(7)**	12 - 9 = **(3)**	16- 3 = **(13)**	6 - 5 = **(1)**	(20)
10 - 5 = **(5)**	13 - 11 = **(2)**	5 - 2 = **(3)**	10 - 4 = **(6)**	16 - 10 = **(6)**	(25)
15 - 5 = **(10)**	8 - 3 = **(5)**	10 - 3 = **(7)**	11 - 7 = **(4)**	20 - 9 = **(11)**	(30)

✎ Time left (seconds):

✎ Check this box if the exercise was discontinued because the child had no correct answers in the first vertical line.

Side notes (right column):

🖐 ✖

🖐

• If the time on the stopwatch runs out (60 seconds).

↩

• If a child stops on a number for 5 SECONDS.

🖐

If you have marked as incorrect all of the answers on the first line with no self-corrections, discontinue this exercise, check the box at the bottom, and go on to the next exercise.

Handout 7: Rapid Math Assessment Tool

SUMMARY:

The Rapid Math Assessment Tool was created by the International Rescue Committee and first implemented in Afghanistan to monitor progress being made and challenges that continue to arise in their education programs. The formal assessment consists of five tasks, with multiple problems within some tasks. The assessment helps evaluate the foundational skills children need to succeed in math by asking children to perform the following tasks:

- Oral counting
- Number identification
- Quantity discrimination
- Word problems
- Addition/subtraction problems

The Rapid Math Assessment Tool is administered individually to students by educators or enumerators who: give the instructions for each task, ask the questions orally, present students with show cards and manipulatives for the child to use, monitor the student's ability throughout each task, and scores the responses. During the five tasks of the assessment, assessors must present instructions to children and follow along, listening to their responses.

The first task requires assessors to set a timer for one minute and listen as children identify and read the numbers from right to left, marking each number attempt as either correct or incorrect. After the minute has passed, circle the number that the child was attempting when you said "Stop" – fill in the total amounts of accepted and incorrect responses on the provided lines.

The second task of the assessment is not timed, it requires children to point at objects as they count them and identify the number that matches that amount – in this case the assessor makes two marks per problem; one for pointing and counting, another for correctly identifying and saying the number.

The third task consists of two timed activities – identifying and saying the smallest number in the row and then pointing to the largest number in the row and saying it aloud. Both activities are timed for one minute and the assessor marks whether the child pointed to the smallest/largest number in the row – and adding up the total amount of incorrect responses once the activity has been completed.
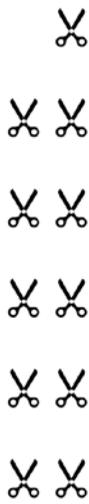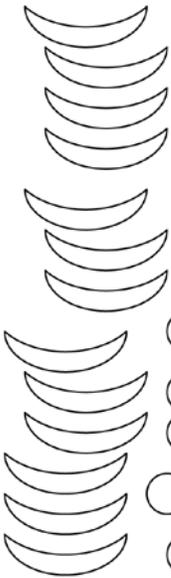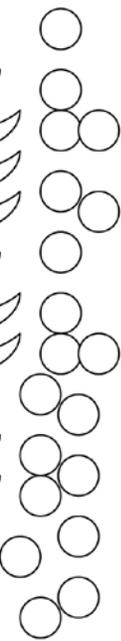
The fourth task requires children to solve mental arithmetic problems using fingers or stones/beans to aid them – assessors mark whether the child correctly or incorrectly answers the problem, presents the next problem if the child spends more than 30 seconds on each problem, and then adds up the total correct answers provided and total errors.

The Rapid Math Assessment Tool can be used to notice skill patterns in individual students, as a classroom, and as a school. By reading over assessments and highlighting incorrect answers – educators can use this information as one sample; depicting the need for support and more experience of specific foundational skills.

GRADE 1 & 2

Student number (   )   Date (   )

Show the student the following numbers. Say **'Here are some numbers and I would like you to read as many numbers as you can. I'd like you to start here** (point to the right most number on the top row) **and go across** (point from right to left). **When I say 'begin" read as many numbers as you can. Point to each number as you read it. If you don't know the number, I'll tell it to you. Put your finger on the first number. Ready? Begin.**"

Tester 1 starts the timer for one minute when you say 'begin". It is important to circle each number that is attempted as either correct or incorrect. After one minute say "**stop**." Circle the final number attempted when you said "**stop**."

Write the total number attempted and the total incorrect at the bottom of the page.

6	2	9	8	9	0	2	3	7	1
17	20	10	0	1	3	5	1	4	2
73	65	45	16	39	75	18	22	32	25
730	140	500	100	66	17	11	86	29	96
1 250	1 000	943	312	408	690	379	580	130	113

TOTAL attempted _____

TOTAL incorrect _____

Point to the first set of pictures. Say '**You will count aloud how many birds there are in this picture. After you have finished counting, point to one of the numbers that shows that amount** (point to the set of numbers) **We will do the same for all of the pictures and numbers. When I say 'begin' you can start counting aloud. Put your finger on the picture. Ready. Begin''** Tester 1 times this test for one minute. You should make 2 marks for each problem: one for pointing / counting correctly and the other for pointing and saying the correct number.

Mark ☑ if counted correctly or ☒ if not.

Mark ☑ if counted correctly or ☒ if not.

Picture	Count		Numbers		
birds	1	5	(7)	3	0
bicycles	1	2	6	(3)	9
locks/hearts	0	(5)	7	4	2
locks	6	(9)	3	1	2
scissors	26	9	13	(11)	20
bananas	9	11	(13)	6	20
circles	9	21	15	6	(19)

TOTAL incorrect _____

TOTAL incorrect _____

N 1.1

1 5 7 3 0

1 2 6 3 9

0 5 7 4 2
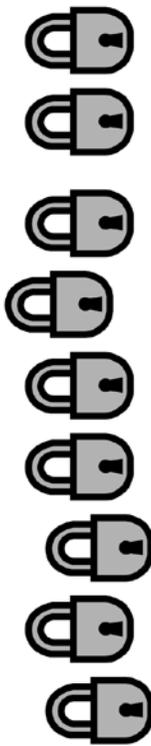
6 9 3 1 2
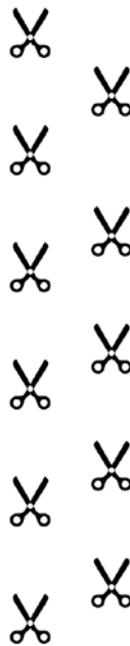
26 9 13 11 20

9 11 13 6 20

9 21 15 6 19

Grade 1 & 2

3	5	0	4	1
4	6	8	2	3
5	4	1	7	6
8	6	7	9	5
9	19	7	14	13
23	32	18	44	8
67	12	80	14	79
67	45	73	98	32
50	39	72	27	61
798	345	234	346	178

Student number (＿＿＿＿＿)　　　　　　　　　　　　　　　Date (＿＿＿＿＿)

2. Mark if pointed to the largest number in the row						1.Mark if pointed to smallest number in the row
5	3	5	0	4	1	0
8	4	6	8	2	3	2
7	5	4	1	7	6	1
9	8	6	7	9	5	5
19	9	19	7	14	13	7
44	23	32	18	44	8	8
80	67	12	80	14	79	12
98	67	45	73	98	32	32
72	50	39	72	27	61	27
798	798	345	234	346	178	178

The student will use this chart twice. The first time is to point to the smallest number in the row and say it aloud. The second time is to point to the largest number in the row and say it aloud. Say "**Here are some rows of numbers.** (point to the numbers on the first row) **I want you to look at the numbers one row at a time. Decide which number is the smallest on that row, say the number and point to it for me. You should start when I say 'begin'. Are you ready? Begin."** Tester 1 times this test for one minute. Say "**stop"** after one minute. Write the total incorrect answers at the bottom of the page.

Repeat the same instructions – but this time the child points to the **largest numbers** in the row.

TOTAL incorrect: ＿＿＿＿＿　　　　　　　　　　　　　　　　TOTAL incorrect: ＿＿＿＿＿

GRADE 1

Student number (   )   Date (   )

Ask the student these questions orally. Do not show the numbers but just verbally ask the questions. You can repeat the question if the student needs to hear it again. Say **"I am going to ask you some math problems now. Think about the question first and then give me the answer."** If the student gets stuck (more than 30 seconds on one problem), present the next problem. Encourage the student to use fingers or stones / beans to calculate the problems.

Mental arithmetic problem	Answer	Mark ☑ or ☒
2 + 1 =	3	
4 + 1 =	5	
3 + 4 =	7	
6 + 2 =	8	
Waheeda had two apples to eat. Her brother gave her another three apples. How many apples does Waheeda have to eat?	2 + 3 = 5	
8 – 2 =	6	
9 – 4 =	5	
5 – 3 =	2	
7 – 2 =	5	
Waheeda had five apples. She was very hungry and so she ate four apples. How many apples does Waheeda have now?	5 – 4 = 1	
TOTAL CORRECT:		
TOTAL ERRORS:		

CD3M – STEP 3 – **How will I gather my data? With what tools will I gather my data?**
What specific tools will I use to gather my data? Who will use the tools? How many times will each tool be used? When will it be used? Who is the tool audience?
What will I do with the data when it is collected? How will I start to compile the data?

Session 8: Teaching Assessment Tools (What' Tools Can We Use to Better Understand the Problem?)

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Adapt CD3M data collection tools to local needs and use them to conduct the CD3M process cycle

Session Rationale: Assessing teachers' instruction is critical. Teachers have a direct impact on student learning. Teacher assessments do not have to be complicated or long. Using a few sample tools, participants can better understand the quality of instruction that is found in their schools.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation

Version: October 2013

Contributing Posts: PC/Guatemala
PC/Philippines

Session: Teaching Assessment Tools (What Tools Can We Use to Better Understand the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning student-centered teaching and student well-being.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, and projector
    2. Flip chart
    3. Markers
    4. Tape
- **Handouts**
    Handout 1: Introduction to Student-Centered Teaching
    Handout 2: Nicaragua TEFL Observation Guide
    Handout 3: Teacher Observation Tool – IRC Healing Classrooms
    Handout 4: Classroom Observation – Early Grade Math – Zambia
    Handout 5: CD3M – STEP 3 – DATA COLLECTION
- **Trainer Materials**
    Trainer Material 1: Session 8 PowerPoint

Session Learning Objectives:
Participants will
1. Indicate teaching practices that promote student learning.
2. Explain how the different teacher observation tools capture realities around the use of these effective teaching practices.
3. Design at least one teacher assessment tool.

Phase / Time / Materials	Instructional Sequence
Motivation 10 minutes Flip chart Markers Tape	**The Connection Between Teaching and Learning** Participants consider how teaching and learning are related. 1. Ask participants to think back to when they were students. Ask them to think about the following question: *"What did your teachers do that helped you learn the best?"* 2. Invite participants to give their answers and record them on a t-chart flip chart: <table><tr><td>Teaching strategies that promoted my learning</td><td>Teaching strategies that hindered my learning</td></tr><tr><td></td><td></td></tr></table> 3. Ask the next question: *"What did your teachers do that hindered or made it difficult for you to learn?"* 4. Invite participants to give their answer and record them on the t-chart flip chart 5. Say or paraphrase the following: "*Teaching is a profession that requires skill and techniques that involve students in the learning process. In many contexts in which we work, teachers use a chalk-and-talk method. This means the teacher does most of the talking and students are expected to memorize and take notes and there are little opportunities for learning activities to take place. We will briefly explore the strategies that teachers can use to promote student learning so students participate, also taking into account the promotion of their well-being.*

Phase / Time / Materials	Instructional Sequence
Information 1 20 minutes Trainer Material 1: Session 8 PowerPoint Flip chart Markers Tape Handout 1: Introduction to Student-Centered Teaching	**Effective Teaching to Promote Student Learning** Participants will briefly explore different teaching strategies that are student-centered and promote active learning techniques, as well as explore a teacher observation assessment tool. 1. Say or paraphrase: "*In this section, we will be discovering basic principles in effective teaching. This is meant as an overview. Many innovative projects and education reforms center around these different approaches and include robust in-service and pre-service modules for teachers to master the art of making lessons more active, interactive, and engaging for students.*" 2. [SLIDE 2]: On the PowerPoint slide/flip chart, ask participants to examine the two terms "student-centered instruction" and "teacher-centered instruction." Ask the question: "*What do you think are the characteristics of these two different concepts?*" 3. Invite participants to share their thoughts. Write them down on the t-chart on flip chart paper. 4. [SLIDE 3]: Say or paraphrase: "*Teacher-centered instruction is the traditional form of teaching. It refers to teachers always standing in the front of the classroom, talking a lot, and students listening and being expected to digest and memorize what the teacher says or writes on the blackboard. Research demonstrates this to be the most ineffective way for students to learn. Student-centered instruction is an approach where students are engaged in the learning process. They ALL participate in many different types of activities.*" 5. Distribute Handout 1 – Introduction to Student Centered Teaching. Ask one-half of the participants to read the first page of this sheet and the remaining participants to read the second page of this sheet. Explain that when they are done, they will get together with a participant who read the opposite page. They have to then "teach" each other concerning the content of each page. 6. Participants read the handout. 7. Participants work in pairs to inform each other on the content of "student-centered instruction" and "student well-being" 8. Ask participants to highlight the most important features of each concept (student-centered instruction and student well-being)

Phase / Time / Materials	Instructional Sequence
	9. Say or paraphrase: *"These two approaches are things that teachers should be doing in their classrooms. They help set the guidelines that we can use when observing teachers and providing them with data about their instruction. Remember the concepts in these handouts when we are presented with different tools to observe and provide helpful feedback to teachers."*

Practice 1
 	
25 minutes
 	
Trainer Material 1: Session 8 PowerPoint
 	
Handout 2: Nicaragua TEFL Observation Guide
 	
Handout 3: Teacher Observation Tool – IRC Healing Classrooms
	Teacher Instruction Observation Tools
	Participants will practice using the TEFL Teacher Observation Tool from PC/Nicaragua and the International Rescue Committee's (IRC) Healing-Classroom Teacher Observation Tool.
	
	1. Explain that you are going to distribute two different types of teacher observation assessment tools. Say or paraphrase: *"The first tool is currently used by PCVs in education projects in TEFL programs in Nicaragua. Many of the elements of this tool examine different student-centered approaches that teachers should use. The second tool is used by the International Rescue Committee in its education projects throughout the world. The version of this tool originates from Palestine, where the IRC implements an education project that focuses more directly on student well-being.*
	
	2. [SLIDE 4]: Invite participants to divide into small groups (school groups). Distribute one example of an assessment tool to each group. Ask them to look over the tool and discuss as a small group:
	    • What method?
	    • What are some strengths of this tool? Some weaknesses?
	    • How would you adapt this tool to your own school setting (if at all)?
	
	3. Once all groups are done discussing, pass out the second tool to each group. Ask them to repeat the same steps above.
	
	4. Ask each group to report out by focusing on the last guiding question – could they adapt a sample tool they looked at to a data need in their own school setting? Why or why not?

Phase / Time / Materials	Instructional Sequence
Information 2 10 minutes Trainer Material 1: Session 8 PowerPoint Flip charts Markers Tape	**Math Instruction** Participants will state different competencies to look for teaching math lessons 1. Say or paraphrase: *"Teacher observation tools can also focus more specifically on content and on types of instructional skills. This type of tool can be useful to better understand teachers' teaching skills AND their content knowledge in a subject. For example, if teachers are not comfortable with teaching the most advanced types of division, they may not focus their instructional time on this skill set. As a result, students won't learn the skill. It's important to note these difficulties so teachers can get the support and help they need to get up to speed in their content-knowledge areas."* 2. Ask participants to think of different types of content areas that teachers must master to teach, such as math. Invite participants to share their answers. Write them down on a flip chart. • [SLIDE 5]: If participants don't indicate anything, say or paraphrase the following math content areas: *"Number identification, counting, comparing, addition, subtraction, multiplication, division, fractions, decimals, percentages, money, time, space, shapes, measurements, algebra, word problems."*
Practice 2 25 minutes Trainer Material 1: Session 8 PowerPoint Trainer Material 1: Session 8 PowerPoint Handout 4: Classroom Observation – Early Grade Math – Zambia	**Math Teacher Observation Tool** Participants will practice using RTI's Zambia program Math Teacher Observation Tool 1. Explain that you are going to distribute an example of a teacher observation math assessment tool. Say or paraphrase, *"The tool was used in a large education project implemented by RTI International in Zambia. The tool was part of a larger assessment that attempted to map the realities of a whole school (reading instruction, math instruction, community participation in school, student well-being indicators for each school, etc.). For the sake of this session, it is interesting for us to see how this teacher observation assessment tool combines different elements of student-centered teaching, as well as math content. This observation tool is very systematic. Every three minutes the*

Phase / Time / Materials	Instructional Sequence
	observer conducts a classroom scan to answer each item in the assessment tool. At the end of the observation, the assessor adds up the different categories. This can be used to highlight what the teacher needs to focus on more, as well as what s/he is doing well."
	2. Invite participants to divide into small groups (school groups). Pass out one example of the math assessment tool to each group. Ask them to look over the tool and discuss as a small group:
	• What method?
	• What are some strengths of this tool? Some weaknesses?
	• How would you adapt this tool to your own school setting (if at all)?
	3. Ask each group to report out by focusing on the last guiding question – could they adapt a sample tool they looked at to a data need in their own school setting? Why or why not?
Application 30 minutes Trainer Material 1: Session 8 PowerPoint Handout 5: CD3M – STEP 3 – DATA COLLECTION	**Teacher Observation Tool Application** Participants consider if the teacher observation tools could be adapted to help answer questions posed in the CD3M STEP 1 – Problem stage of the CD3M process cycle. They will also explore how these tools could be used for future CD3M problems and questions 1. [SLIDE 6]: Review STEPS 1, 2, and 3 of the CD3M cycle on PowerPoint/Flip chart

Phase / Time / Materials	Instructional Sequence

	2. Invite participants to think about how any of the teacher assessment tools could bolster the questions that they have asked/problems that they identified in STEP 1 of the CD3M cycle. Distribute, again, a blank copy of CD3M STEP 3 – DATA COLLECTION.
	
	3. In small groups again (per school), ask participants to consider these guiding questions/steps in order to revise their CD3M STEP 3 – DATA COLLECTION handout. They should also begin drafting a data collection tool they can use in their own school setting to solve a problem by collecting data:
	
	• <u>PROBLEM:</u>
	-Form your research question: What do you need to learn about from collecting and analyzing data?
	
	• <u>PLAN OF ACTION:</u>
	- Collect any existing data you have about your question
	-Avoid collecting the same kind of data in another way – revisit your inventory of the data sets you already have and make sure that you really need to collect new data
	-Confirm the "gap" in the data
	
	• <u>DATA COLLECTION:</u>
	-Consider methods: Which method will be the quickest and easiest way to get the data you need and help you answer your research question?
	-What questions or items will you use to collect data?
	-What scale will you use to examine each item?
	-What tool already exists that you can adapt?
	-Be objective: Avoid bias in your tool
	
	4. After about 25 minutes, ask small groups to report back to the large group by telling us about the tool they developed. Guiding questions:
	• Tell us about the tool you developed: What information will it collect?
	• Tell us about the data collection and organization *process*
	     From **whom** will you collect data using this tool?
	     When will you collect it?

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Achieved in the Information 1 and Practice 1 sections. **Learning Objective 2:** Achieved in the Practice 1, Practice 2 and Application sections. **Learning Objective 3:** Achieved in the Application section.
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

References

International Rescue Committee. (2012). Teacher Observation Tool. New York, NY: IRC

USAID. (2013). SSME Math Teacher Observation Tool – Zambia. Washington, D.C.: USAID

Weimer, M. (2002). *Learner-Centered Teaching*. San Francisco, CA: Jossey-Bass.

Handout 1: Introduction to Student-Centered Teaching

Student-Centered Teaching[1]
A shift is happening in education: From the teacher being the "center of the classroom" to a primary focus on whether or not the student is learning. This paradigm shift will require change for both the students (who are used to being told everything) and the teachers (who are used to telling students what they need to know).

In student-centered teaching, the responsibilities of both the teacher and the student change, with the ultimate goal of the student becoming a "lifelong learner."

When teaching is student-centered, the action focuses on what the students (not the teachers) are doing:
- When teaching is student-centered, content is used, not covered.
- Course content/curriculum is not the end; it is the means to the end.
- Don't assume that because teachers have taught, that students have learned.
- This is not only about how teachers need to become student-centered teachers, but also about teaching the students to become student-centered learners.

The seven principles can be followed to create a student-centered classroom: (Weimer, 2002)

1) Teachers Do Learning Tasks Less; Learners do more of organizing content, generating the examples, asking the questions, answering the questions, summarizing the discussion, solving problems, constructing diagrams.

2) Teachers Do Less Telling; Students Do More Discovering. This is "messier," in that classrooms may be "louder," it may take longer for students to "get" concepts, and the teacher learns new teaching methods. Students progressively take more responsibility for their learning through discovering and "uncovering" what they need to know.

3) Teachers Do More Design Work (of activities and learning experiences). Effective assignments and activities, which are designed to help students: Increase learning skills (learning "how to" learn); Motivate student involvement and participation; Discover work that is related to the discipline/real world; Develop content knowledge, learning skills, and awareness

4) Teachers do More Modeling: Demonstrate for students how an expert approaches a learning task, and how you problem solve.

5) Teachers do More to Get Students Learning From and With Each Other: Use collaborative activities and cooperative groups for learning (think-pair-share, group work, etc.)

6) Teachers Provide More Feedback: Feedback is not just about grades, but also informal and helps students learn from mistakes.

7) Teachers Create a Positive Learning Climate.

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1   Adapted from Weimer, M. (2002). *Learner-Centered Teaching*. San Francisco, CA: Jossey-Bass.

Creating a Positive Learning Climate – International Rescue Committee's (IRC) Healing Classrooms[1]

If students' social, emotional, and psychological needs are not met, then their ability to learn is not maximized. Teachers also should infuse instructional practices to promote students' well-being. The IRC has created an approach to help teachers create a "Healing Classroom," which focuses on favoring student's well-being. These elements are:

1) Creating a sense of safety
- Teachers use techniques so students feel safe in their learning environment. They are protected from all forms of abuse, manipulation, and sexual exploitation.

2) Creating a sense of control
- Teachers use techniques so students feel able and empowered. They know that learning spaces must be safe and secure where they are protected, learn new and useful skills, become empowered, and learn how to protect and have control over themselves.

3) Creating a sense of belonging
- Teachers use techniques so students feel accepted and at ease. They identify themselves as students and as important members of the school community. Their school community participation is appreciated and recognized.

4) Creating positive social relationships
- Teachers use techniques so students create important relationships with their classroom peers. When students have positive peer and teacher relationships at school, they feel valued, listened to, cared for, loved, appreciated, and emotionally supported. They have feelings of trust and self-esteem, and positive social and communication skills. Having supportive relationships with peers and teachers may be particularly important for helping crisis-affected children cope and bounce back after exposure to trauma. Students must work together, collaborate, and help one another. Therefore, classroom peers and teachers play an important role in comforting and supporting one another to rebuild relationships built on trust.

5) Creating feelings of self-confidence
- Teachers use techniques so students feel good about learning and about the future. They need to be confident and take pride in themselves (such as by wearing or carrying symbols of schooling). In school they need to develop necessary life skills that empower them to express themselves and ask questions. They must feel competent, able, and confident. In terms of their reading abilities, they must be encouraged from the beginning and recognized for their achievements, no matter how small.

6) Creating personnel attachments
- Teachers use techniques so students create positive links to their teachers. They learn better when the teaching methods and subjects are directly related to their lives.

7) Creating intellectually stimulating activities
- Students learn best when teachers use a variety of different teaching methods. Students must do activities where they are motivated, engaged, and asked to pose questions, as well as resolve real-life situations.

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1   Adapted from IRC (2011). *Learning to Read in a Healing Classroom – Teacher's Guide.* New York, NY: IRC

Handout 2: Nicaragua TEFL Observation Guide

TEFL Classroom Observation Guide

PCV:_____ **Counterpart:** _____

School: _____ **Site:** _____

Observer: _____ **Date:** _____

Lesson Topic:

Category	Performance Standard	E	G	NSW	Comments/ Observations
Team Teaching	Co-teachers are comfortable working together, efforts/roles are coordinated throughout class				Model used:
	Students look to both teachers for answers/clarification				
Flow and Content of Lesson	Lesson plan includes learning objectives, activities, assessment strategies				
	Builds on students' prior knowledge				
	Relevant to students' interests/lives				
	Accommodates various learning styles				
	Sufficient time allocated to each activity and overall topic				
	Learner-centered activities – students are actively participating in at least half of the class				
	Activities stimulate critical thinking				
Materials	Developed using local, cost-effective resources; reusable				
Use of English in Classroom	Lesson is conducted in English, Spanish is used sparingly for clarifications				
Classroom Management	Students demonstrate understanding of rules, both teachers support each other in enforcing rules				
Assessment	Both teachers continuously assess student understanding and adjust lesson accordingly				

General Comments/Observations:

E = Excellent; G = Good; NSW = Needs Some Work

Handout 3: Teacher Observation Tool – IRC Healing Classrooms

HEALING CLASSROOM TEACHER OBSERVATION TOOL

The goal of this form is to facilitate the observation of teaching techniques used by teachers. Complete this table based only on your observations in this class. Do not allow your other knowledge or past observations affect this observation.

Name of observer :		Date:	
School :	Grade Level :	Start time :	End time :
Teacher name :		Subject:	
Lesson title :		Total present # Boys : # Girls : Total :	

Organization of the classroom	Yes	No	Comments
The date, lesson plan for the day, and daily schedule are clearly displayed. Please list the missing elements.			
The teacher has class rules and consequences clearly displayed in the classroom.			
The classroom is decorated by drawings, pictures, work, and other materials made by the students.			
There is didactic material displayed in the classroom (for example, Arabic and English materials) *Please list the missing elements.*			
TOTAL:			

I. Lesson planning and organization *Tip: Always/Often behavior is acceptable ; Sometimes/Never = needs improvement*	Always	Often	Sometimes	Never	Comments
1. The teacher establishes a coherent routine between the start and end of activities					
2. The teacher uses the students' names to greet them before and after class and to address them during class					
3. The teacher treats each student equally during the class (front/back, strong/weak, old/young, lefties/righties, girls/boys)					
4. *The teacher starts and ends on time*	☐ Yes		☐ No		
5. The teacher uses a lesson plan to guide the lesson.	☐ Yes		☐ No		
6. The lesson has a structured sequence (an introduction, middle and an end)	☐ Yes		☐ No		
7. The teacher communicates the lesson objectives clearly	☐ Yes		☐ No		
TOTAL:					

II. Student participation and classroom management	Always	Often	Someti mes	Never	Comments
8. The teacher uses different techniques for asking questions (i.e. asking the whole class, calling on individual students by name, asking the questions in group work). *Please list the different methods used.*					
9. The teacher gives all students the opportunity to participate in learning (all the students can speak, ask questions, and get involved in the classroom activities of their choice)					
10. The teacher uses different groups for activities : the whole class, subgroups, pairs, and individuals (at least 2 per lesson). *Please list the groupings observed.*					
11. The teacher encourages the students to respect their peers, teachers, and the community, and s/he models this behavior					
12. The teacher uses positive words and praises students' good behavior, their work, and their improvements.					
13. The teacher positively and patiently corrects students' negative behavior. (Please identify the students' behavior and teacher's response in the comments section. Leave it blank if there is no bad behavior)					
14. The teacher moves around the room to guide and check on the students' individual progress and interactions with each other.					
TOTAL:					

III. Learning and Teaching	Always	Often	Someti mes	Never	Comments
15. The teacher uses didactic materials during the lesson (if yes, *please list the materials and how they were used*)					
16. The teacher presented to students activities or situations that require them to reflect, discover a rule or principle, or solve a problem (if yes *please list the activities*)					
17. The teacher uses more than one teaching technique to transmit knowledge to students (like reading out loud, chants, visual aids, writing exercises, role play, etc.) *please list these techniques in the comments section*					
18. The teacher uses examples and concepts based on the local context and everyday experience of students (*please list these examples or make suggestions*)					
19. The teacher asks questions about students' lives, their opinions, and their experiences					
20. The teacher asks questions to provoke discussion and/or critical thinking (not only to verify comprehension)					
21. The teacher demonstrates strong knowledge of the material s/he is teaching					
TOTAL:					

Specific Suggestions: What the teacher can improve upon?

Total
Always/Often:

Sometimes / Never:

% Always/Often:
(75% = objective)

Specific Observations: What the teacher did well?

Handout 4: Classroom Observation – Early Grad Math – Zambia

SSME Classroom Observation – Early Grade Mathematics

COM1 School Name:

COM2 School EMIS Number:

COM3 Teacher Number:

COM4 Assessor Name:

COM5 Assessor Code:

COM6 Supervisor Name:

COM7 Supervisor Code:

COM8 Supervisor Signature:

The observation form should be completed in class during a mathematics lesson. If the teacher indicates that there is not a separate mathematics lesson, ask to observe a lesson that focuses on mathematics.

When arriving to class, find a seat at the back of the class. Try not to interrupt or disturb the class.

Complete the observation table. Every three minutes, indicate the teacher focus, teacher content, student and teacher action, and teaching material used at the moment of observation. In sections A and B indicate the teacher focus and teacher content by placing an "X" by the observed item. In sections C and D, indicate the teacher and student action and the language being used by placing the appropriate language code by the observed action. In section E, indicate the material and the langauge being used by placing the appropriate language code by the material used at the moment of observation. Every section (A, B, C, D, and E) must have at least one mark for each "Snapshot". Don't forget to write in the start and end time for the observation.

Handout 5: CD3M Cycle – Step 3 – Data Collection

CD3M – STEP 3 – How and with what will I gather my data?
What specific tools will I use to gather my data? Who will use the tools? How many times will each tool be used? When will it be used? Who is the audience for the tool?
What will I do with the data when it is collected? How will I start to compile the data?

Session 9: Education Environment Assessment Tools (What Tools Can We Use to Better Understand the Problem?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: Assessing the school climate is also important. Different school
                                   conditions and factors can have a direct impact on teaching and
                                   learning. School environment assessments can be helpful to holistically
                                   understand what is going on at the school. Using different types
                                   of tools that take inventories of the school, participants can better
                                   understand how to maintain or change the quality of instruction and
                                   learning in their schools.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                   monitoring and evaluation and an understanding of the sector that is
                                   being featured in the workshop. Workshop materials are designed for
                                   the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation

Version: October 2013

Contributing Posts: PC/Guatemala
                                   PC/Philippines

Session: Education Environment Assessment Tools (What Tools Can We Use to Better Understand the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning school learning environment and tools.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
• **Equipment**
    1. Computer, screen, projector, electricity
    2. Flip chart
    3. Markers
    4. Tape
• **Handouts**
    Handout 1: SSME Frequently Asked Questions (FAQs)
    Handout 2: SSME Zambia Case Study
    Handout 3: SSME Zambia Package – Tools (see section using Handout 3 for links)
    Handout 4: CERCA Case Study
    Handout 5: School Equity Profile
    Handout 6: Sex Disaggregated Data
    Handout 7: CD3M Cycle – Step 3 – Data Collection

• **Trainer Materials**
    Trainer Material 1: Session 9 PowerPoint

Session Learning Objectives:
Participants will
1. Describe the purpose, goals, and process used in Snapshot of School Management Effectiveness (SSME) and School Report Cards (SRC).
2. Describe at least one SSME tool and explain whether or not any of the educational quality factors mentioned in the tool apply to their own school settings.
3. Describe at least one SRC tool and explain whether or not any of the education quality factors mentioned in the tool apply to their own school settings.
4. Explain what gender disaggregated data is and why it is important to collect it.
5. Identify how they can adapt and where they can get more information about SSME and SRC.

Phase / Time / Materials	Instructional Sequence

Motivation
 	
5 minutes
 	
Trainer Material 1: Session 9 PowerPoint
 	
Flip chart
 	
Markers
 	
Tape
	Introduction to Education Environment Assessment Tools
	Participants consider how the education environment can impact the quality of teaching and learning at their school.
	
	1. Ask participants to think about their schools and to consider different school condition factors that promote and prevent quality teaching and learning.
	
	2. Invite participants to give their answers and record them on a t-chart:
	
	<table><tr><td>School conditions that promote quality teaching and learning</td><td>School conditions that prevent quality teaching and learning</td></tr><tr><td></td><td></td></tr></table>
	
	Say or paraphrase the following: "*Quality teaching and learning are directly impacted by a variety of different school conditions. This could be a result of the following* (show on PowerPoint slides/flip chart)*:*
	  • *School infrastructure realities*
	  • *Enrollment, class size, class composition*
	  • *Pupil characteristics*
	  • *Parental and community support*
	  • *Availability and use of pedagogic materials*
	  • *Reading/math materials available*
	  • *Lesson content*
	  • *Teachers' interactions with pupils*
	  • *Learning environment*
	  • *Time on tasks (length of school year, school day, teaching time, absenteeism, later arrival, curriculum coverage)"*
	
	"We will briefly explore how to conduct schoolwide data collection in order to pull out data that indicate the different school environment-related factors that have positive and negative impacts on teachers and students."

Phase / Time / Materials	Instructional Sequence

Information 1
 	
15 minutes
 	
Trainer Material 1: Session 9 PowerPoint
 	
Handout 1: Snapshot of School Management Effectiveness Frequently Asked Questions (FAQs)
 	
Flip chart
 	
Markers
 	
Tape
	Snapshot of School Management Effectiveness (SSME)
	Participants are introduced to the goal, objectives, and uses of SSME
	
	1. [SLIDE 3]: Give a brief overview of SSME and post on PowerPoint slides/flip chart. Say or paraphrase the following:
	  • *"The Snapshot of School Management Effectiveness (SSME) paints a multifaceted picture of the education environment at a school. Data collected by the SSME include pedagogical approach; time on task; interactions among students, teachers, administrators, district officials, and parents; record keeping; discipline; availability and condition of school infrastructure; availability of pedagogical materials; and safety.*
	  • *"Data are collected via direct classroom and school observation; student assessment; and interviews with parents, teachers, principals, and parents.*
	  • *"By collecting information on just the most crucial school effectiveness factors and by applying innovative and simple data-collection methodologies, the SSM produces a rich data set at low cost.*
	  • *"One trained individual can assess a school in just one day. Although the basic SSME methodology can be applied in any school system, the SSME is designed to be adapted to reflect the issues and the structures unique to each country."*
	
	2. Distribute Handout 1: Snapshot of School Management Effectiveness (FAQs). Invite participants to read this handout.
	
	3. Present the Benefits/Limitations t-chart. Ask participants to work with a partner to identify benefits and limitations of this type of tool.

Phase / Time / Materials	Instructional Sequence
	4. Invite participants to provide their answers. • [SLIDE 4]: Ensure that the following ideas are presented and explained. <table><tr><th>Benefits</th><th>Limitations</th></tr><tr><td>Purpose: Let school, district, provincial, or national administrators or donors learn what is currently going on in their schools and classrooms and to assess how to make their schools more effective. -Uses data to understand to understand how the school environment can impact learning and teaching. - Piloting showed tool can provide statistically reliable data, successfully discriminate (with statistical precision) between effective behaviors that are already common and those that still need to be developed.</td><td>--Complex Data collection methods: • Direct classroom and school observation • Student assessments • Interviews with parents, teachers, principals, and parent -It is time intensive.</td></tr></table>
Practice 1 30 minutes Trainer Material 1: Session 9 PowerPoint Handout 2:SSME Zambia – Case Study Handout 3: SSME Zambia Package - Tools	**SSME Tool Exercise** Participants discover the SSME tools and consider how to apply them to their school. 1. Distribute Handout 2 – SSME Zambia. Explain that this handout briefly explains the type of SSME process that was used in Zambia, as well as the promising conclusions and recommendations identified as a result of this schoolwide study. 2. Participants take 5 minutes to read the case study.

Phase / Time / Materials	Instructional Sequence
	3. [SLIDE 5]: Distribute the package of SSME Zambia tools. Ask each group to focus on one example of the SSME tools. Ask them to review the tool in their small groups and use these guiding questions: • Imagine you can adapt this tool to use within your school. • What kinds of data will this tool help you measure? • How does this tool align with tools you already have? • Would the tool give you any data that you don't already have that would be useful to you? • Does this tool align with your school's improvement plan? How? 4. Ask each group to report out by first describing what their tool is/what it measures. Ask each group to share whether the tool has given them any ideas for ways to assess their own schools.

Information 2
 	
20 minutes
 	
Trainer Material 1: Session 9 PowerPoint
 	
Handout 4: CERCA Case Study
	School Report Cards
	Participants are introduced to the goal, objectives, and uses of school report cards (SRC).
	
	1. [SLIDE 6]: Say or paraphrase: "*A number of countries are experimenting with school-level information systems known as 'school report cards'(SRC) to increase accountability and transparency. These systems have different formats and purposes, ranging from strict accountability systems that measure student performance to participatory diagnostic and management tools that support school managers. The school report cards that we will sample provide data at the school level, which includes simple school profiles. Report cards have three main purposes:*
	    a) "*They provide a useful and easily understandable management tool, especially at the school level*
	    b) "*They stimulate parental involvement and citizen demand for school performance*
	    c) "*They motivate education reform at all levels—school, community, region, and nation (Winkler and Sevilla 2004)*"
	
	2. [SLIDE 7] Present an example of a SCR project: Civic Engagement for Education Reform in Central America

Phase / Time / Materials	Instructional Sequence
	(CERCA), which was implemented by the Academy for Educational Development (AED) (now known as FHI 360). Say or paraphrase: *"The CERCA project focused on assisting a small sample of schools in Guatemala, El Salvador, and Nicaragua in the development of a school report card. The process consisted of supporting schools in organizing Analysis Groups (AGs), collecting and analyzing information, and disseminating the collected information within the local school and community. The field test of the school report card (SRC) process was carried out over two months approaching the end of the 2004 school year in each country."* 3. Distribute Handout 4 – CERCA Case Study. Ask participants to read the case study. 4. Compare and contrast SSME and the SRC.
Practice 2 30 minutes Trainer Material 1: Session 9 PowerPoint Handout 5: School Equity Profile Tools Handout 6: Sex Disaggregated Data Flip chart Markers Tape	**School Equity Profile** Participants will interact with a School Equity Profile. 1. Explain to participants that a "School Equity Profile" is a type of SRC that focuses on the gender fairness of a school. 2. [SLIDE 8]: Say or paraphrase: *"The School Equity Profile (SEP) is a tool for collecting data from a school to reveal possible problems of attendance and dropout that impact girls and boys differently. It also engages the school community in analyzing school data for trends and patterns that may point to needed school change and improvements."* 3. [SLIDE 9]: Distribute Handout 6 – Sex Disaggregated Data. Ask participants to read this handout and to highlight the following: • Why is sex-disaggregated data important? 4. [SLIDE 10]: Explain the exercise: *"The SEP has three different tools that are used to verify data. In this activity, you'll work in small groups and start with one SEP tool that is on your table now. Discuss in your small group whether it would be relevant/ useful in your own community to present the type of data about*

Phase / Time / Materials	Instructional Sequence

	your school that you see in the example. How would you share this information about your own school with your community? What do you think the community response would be?
	  1) *"You will visit three stations around the room.*
	  2) *"Your group will post <u>one</u> response on the wall for each station.*
	  3) *"Your group will have <u>five minutes</u> to complete the activity per station.*
	  4) *"Your group will shift to review and discuss all three tools of the SEP."*
	
	** Handout 5: School Equity Profile Copies are posted around the room, separated by tools. Participants consider what information each section contains and their own schools.
	
	5. Wrap-up with a brief all-group discussion about whether they could do an activity like creating an SEP and presenting the report card in their own communities. Ask the following questions:
	  • *"How would you share information on the SEP with you own community?*
	  • *"How could you use technology to collect and disseminate this information?*
	  • *"What do you think the community response would be to the findings? Explain."*

Application 20 minutes Trainer Material 1: Session 9 PowerPoint Handout 7: CD3M Cycle – STEP 3 – Data Collection	**SSME and School Report Cards in Your Country** Participants consider how SSME and SRC could work in your school. 1. [SLIDE 11]: Review steps 1, 2, and 3 of the CD3M cycle on PowerPoint/flip chart 2. Invite participants to think about how any of the education environment assessment tools could bolster the questions that they have asked/problems they identified in STEP 1 of the CD3M cycle. Distribute, again, a blank copy of CD3M STEP 3 – DATA COLLECTION. 3. In small groups (per school), ask participants to consider these guiding questions in order to revise their CD3M STEP 3 – DATA

Phase / Time / Materials	Instructional Sequence
	COLLECTION handout. They should also begin drafting a data collection tool that they can really use in their own school setting to fill a data need: • Form your research question: What do you need to learn from collecting and analyzing data? • Avoid collecting the same data in another way – revisit your inventory of data sets you already have and make sure you really need to collect new data; confirm the "gap" • Consider methods: Which method will be the quickest and easiest way to get the data you need? • Be objective: Avoid bias in your tool 4. After about 10 minutes, ask small groups to report back to the large group by telling us about their tool. Guiding questions: • Tell us about the tool • Tell us about the data collection and organization *process* Who will you collect data from using this tool? 5. When will you collect it?
Assessment	**Learning Objective 1:** Achieved in Motivation and Information 1 sections **Learning Objective 2:** Achieved in Practice 1 section **Learning Objective 3:** Achieved in Practice 2 section **Learning Objective 4:** Explored in the Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

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Handout 1: Snapshot of School Management Effectiveness Frequently Asked Questions (FAQs)

What is the Snapshot of School Management Effectiveness?
❏ The Snapshot for School Management Effectiveness, or SSME, is an instrument that yields a quick but rigorous and multifaceted picture of school management practice in a country or region. The resulting data are designed to let school, district, provincial, or national administrators or donors learn what is currently going on in their schools and classrooms and to assess how to make their schools more effective.

What data does SSME collect?
❏ Management data collected by the SSME include pedagogical approaches used; time on task; interactions among students, teachers, administrators, district officials, and parents; record keeping; discipline; availability and condition of school infrastructure; availability of pedagogical materials; and safety.

❏ Additionally, the SSME includes portions of two other instruments: the Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA). These brief but thorough oral assessments are administered individually to randomly selected students, and add to the information about school management effectiveness by accurately evaluating students' knowledge of foundational reading and math skills. Thus, SSME gives a holistic snapshot of schools—from the administration and infrastructure to the teachers and students.

How is the SSME administered?
❏ Data are collected via direct classroom and school observation; student assessments; and interviews with teachers, principals, and students. By collecting information on only the most crucial school effectiveness factors and by applying innovative and simple data-collection methodologies, the SSME is able to produce a rich data set at low cost. In fact, the SSME was designed to be administered to a school in just one day using a set of trained assessors.

What are the SSME instruments?
1. Head Teacher/Principal Questionnaire – administered to the Head Teacher/Principal in each school visited;
2. Teacher Questionnaire – administered to the two teachers whose students are selected for assessment;
3. Student Questionnaire – administered to each student randomly selected for assessment;
4. Mini-EGRA and Mini-EGMA – administered to a random sampling of students in two grades;
5. School Observation – administered at each school visited;
6. Classroom Inventory – administered in each of the two sampled classes;

7. Classroom Observation (reading) – administered during the reading lesson in the lower grade classroom; and

8. Classroom Observation (mathematics) – administered during the mathematics lesson in the lower grade classroom.

In what countries has the SSME been administered?
❏ The SSME was successfully piloted in Jamaica and Peru in 2007. The pilots demonstrated that the tool can provide statistically reliable data, successfully discriminate (with statistical precision) between effective behaviors that are already common and those that still need to be developed (and detect the presence of ineffective behaviors), and distinguish between more versus less effective groups of schools. Since 2007, components of SSME have been applied in more than 10 countries throughout Africa, Latin America, Asia, and the Middle East in conjunction with Early Grade Reading Assessments (EGRA) and/or Early Grade Mathematics Assessments (EGMA). Please consult http://eddataglobal.org for the latest information about country applications.

Can the SSME results be used to compare results across languages and countries?
❏ Preparation of the SSME instrument for use in a particular country involves some adaptation, including translation into the language of instruction. A number of questions are also adapted to country-specific policies, such as inquiries about the scope of Parent Teacher Associations (PTAs). Therefore, the current use of the SSME for comparison purposes is to show discrepancies in outcomes within countries, in rural versus urban areas, for example. However, it is possible, with the simpler and more common behaviors (such as the presence of textbooks in the classroom, or richness of teacher marking) to compare across countries. We do not recommend comparing EGRA and/or EGMA findings across countries as the development of these instruments is very specific to each country's curriculum, standards, and language of instruction.

Once the SSME identifies areas for improvement, what can be done to improve learning outcomes?
❏ The main purpose of the SSME is to begin or continue policy dialogue with officials in the country where the SSME is administered. The SSME can help in two ways: First, it can show officials whether effective education policies are in place, such as whether teachers are using the textbooks assigned. Second, it can show officials whether new policies need to be implemented to make the school management more effective, such as policies to encourage principals to observe teacher lessons more frequently.

In short: SSME is a field-tested instrument that can be used to determine whether schools in a country, region, or pilot project area are following "best practice" in terms of overall management and pedagogical management, as well as governance. The data can be used to feed deliberations as to improvement strategies or can be used to track improvements due to project and policy interventions. The pilot experiences confirm that relatively small samples that are based on intense visits and gathering can yield very telling data. Visits of one day each to between 40 and 70 schools, for example, are sufficient to characterize schools with sufficient specificity as to lead to actionable knowledge. Thus, it is possible to lower the cost and time-to-completion of data-gathering processes while maintaining sufficient (and specifiable) rigor.

For more information about SSME applications, please contact the Director of the EdData Project, Amy Mulcahy-Dunn, at amulcahydunn@rti.org or (919) 541-8892.

Handout 2: SSME – Zambia Case Study

Snapshot of School Management Effectiveness (SSME) – Zambia

The pilot conducted in Zambia included eight components, in English unless otherwise noted:
– Classroom Inventory Instrument
– Classroom Observation Instrument—Early Grade Mathematics
– Classroom Observation Instrument—Early Grade Reading
– Head Teacher Instrument
– Parent Instrument (in both English and Bemba)
– School Observation Instrument
– Student Instrument (in both English and Bemba)
– Teacher Instrument

They were adapted for Zambia at a workshop in April 2011 in Lusaka that involved staff of RTI International, USAID/Zambia, the Ministry of Education, a Bemba language consultant, the Examinations Council of Zambia (ECZ), and RTI local subcontractor Family Health Trust (FHT). Training of assessors on administration of all the instruments took place in mid-June 2011 and data collection began in early July. RTI will prepare and submit a separate analysis report on the findings.

"The Snapshot of School Management Effectiveness (SSME) provides a multifaceted view of school conditions and practices that are historically linked to pupil performance. Through the SSME, we are able to answer important questions such as: Do pupils and teachers have the materials they need? Do pupils and teachers spend enough time engaged in activities that support learning? What instructional practices are teachers using?"

"To answer these questions about learning and the factors influencing it in Zambia, the Education Data for Decision Making (EdData II) project, funded by the U.S. Agency for International Development (USAID), partnered with USAID/Zambia, the Ministry of Education, and the Examinations Council of Zambia to conduct a study of learning environments. The 40 participating schools had been randomly selected from within the Bemba-speaking regions of Zambia (Central, Copperbelt, Luapula, and Northern regions). In addition to pupil assessments, researchers interviewed head teachers, teachers, pupils, and parents; conducted classroom and school inventories; and observed reading and math lessons. The fieldwork was carried out by trained data collection teams in July 2011, midway through the school year."

Findings:
"What factors could help to explain why pupils are having difficulty mastering foundational skills in reading and math? In what follows, we briefly highlight some of the more salient and actionable factors as revealed by the **Snapshot for School Management Effectiveness (SSME).**"

"Pedagogic materials are essential for both pupils and teachers to ensure that they are covering the needed curriculum content properly and efficiently. The availability of resources to Zambian teachers and pupils is low. For example, only 8 percent of schools reported receiving the appropriate number of textbooks for their pupils. We noted that on average, only 20 percent of pupils had textbooks and the distribution of these books was inequitable, with half of classrooms

having books for 10 percent or fewer of their pupils. A small fraction (less than 7 percent) of classrooms had textbooks for the majority (75–100 percent) of their pupils. Similarly, slightly more than half (56 percent) of teachers had reference guides. Non-textbook reading materials, essential for the acquisition of fluency, were rare; 63 percent of classrooms had none. Availability of reading materials at home was also low (36 percent)."

"Having time to practice nascent reading skills is a requirement for their mastery. Pupils who had access to books at home, read out loud at home, and/or had someone read to them at home all fared better on reading subtasks. Ensuring that children have access to an ample supply of appropriate reading materials and ensuring that reading time both at school and at home become engrained habits will do much to improve pupil fluency and consequently comprehension. Teacher feedback, another essential part of effective instruction and a proxy for the level of teacher engagement, was observed in most pupils' exercise books but with varying frequency. Slightly over half (52 percent) of exercise books had comments on some pages, whereas 14 percent had teacher comments on all pages and 12 percent had no comments at all. As could be expected, pupils who receive more comments tend to fare better. Encouraging all teachers to provide routine feedback to their pupils will give pupils information they need to help them succeed."

"Teaching content, another key determinant in pupil performance, was evaluated during observations of second-grade reading and mathematics lessons. Because the EGRA and EGMA results indicated that most pupils had not yet achieved automaticity in their foundational skills, teaching content should be more heavily focused on mastery of these basic skills. Although a substantial amount of time during the reading lessons was spent on foundational skills such as letters/sounds and reading single words (20.7 percent and 26.4 percent, respectively), teachers at the primary level had not received training in how to teach letter sounds or phonemics during their pre-service training. The instruction they were providing does not appear to have been effective. With mathematics lessons, the majority of time was spent on multiplication (29.5 percent), addition (21.6 percent), subtraction (21.5 percent), and division (16.3 percent). Less than 1 percent of the lesson time was spent on foundational skills, such as number identification and one digit addition. More focused time should be spent on both reading and math foundational skills. Similarly, pre-service and in-service training for primary school teachers should focus on the instruction of these skills. Quality of instruction and availability must be coupled with sufficient learning time for pupils. However, double- and triple-shift schedules necessitated by a lack of resources have reduced the average school day to four hours for pupils. This short school day is further eroded by teacher and pupil absenteeism and late arrival, as well as school breaks. The previously mentioned lack of pedagogic materials reduces the effectiveness of this teaching time. If one takes into account all the time that is lost due to factors listed above, the four-hour school day results in less than 65 hours of on task hours of reading instruction during the entire year. To achieve reading fluency, studies have shown that a minimum of 250 hours of focused reading instruction and practice time with appropriate texts is required."

"Lastly, parental engagement has been proven time and time again to have a positive impact on pupil performance. As previously mentioned, pupils who reported reading out loud at home and/or those who had someone who read to them performed better at school. Similarly, Grade 2 pupils who reported receiving help with their homework from their parents performed better than their peers who reported receiving no help with homework."

Tools: https://www.eddataglobal.org/management/index.cfm?fuseaction=pubDetail&ID=328
Report: https://www.eddataglobal.org/management/index.cfm?fuseaction=pubDetail&ID=426

SSME Teacher Instrument

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July 2011

SSME TEACHER INSTRUMENT

	Label
	T1 School Name: T2 School EMIS Number: T3 Teacher Number: T4 Assessor Name: T5 Assessor Code: T6 Supervisor Name: T7 Supervisor Code: T8 Supervisor Signature:

NOTE THAT ALL INSTRUCTIONS TO INTERVIEWER ARE IN BOLD AND CAPITAL LETTERS. UNLESS IT IS EXPLICITLY STATED, DO NOT READ OUT ANSWER OPTIONS TO THE RESPONDENT.

T9	Starting Time **[USE 24 HOUR TIME]**	:
T10	Interview Date	Date of Interview D D M M Y Y
T11	Interview Status	Refused → **END INTERVIEW** .... 1 Partially Completed .... 2 Complete 3
T12	**[IS THE TEACHER FEMALE?]**	No .... 0 Yes 1
T13	Please indicate which 2nd grade reading and math lessons you are teaching today during this shift **[PLEASE READ ALL THE OPTIONS AND CIRCLE THOSE MENTIONED BY THE RESPONDENT]**	None .... 0 2nd grade reading only .... 1 2nd grade math only .... 2 2nd grade reading and math 3
T14	Please indicate which 3rd grade reading and math lessons you are teaching today during this shift **[PLEASE READ ALL THE OPTIONS AND CIRCLE THOSE MENTIONED BY THE RESPONDENT]**	None .... 0 3rd grade reading only .... 1 3rd grade math only .... 2 3rd grade reading and math 3
T15 T15.01	What is your first language?	Chitonga .... 1 Cinyanja .... 2 English .... 3 Icibemba .... 4 Kiikaonde .... 5 Lunda .... 6 Luvale .... 7 Silozi .... 8 Other (specify): _____ 9
T16 T16.01	What is your highest level of academic education?	Primary School Certificate .... 1 Secondary School Certificate .... 2 Bachelors Degree .... 3 Masters degree .... 4 Other: (specify) _____ .... 5 Don't Know/ Refuse 888
T17	Do you have professional qualifications? (e.g. Certificate in Teaching)	No .... 0 Yes 1

Page 1 of 5

Supervisor Initials ___

T18	During your pre-service training, did you receive any specific training on how to teach reading?	No	0
		Yes	1
		Don't know/ Refuse	888
T19	Have you attended any in-service training on how to teach reading?	No	0
		→ SKIP TO T22	
		Yes	1
		Don't know/ Refuse	888
T20	Have you been able to apply what you learned in the reading training session(s)?	No	0
		Yes, Occasionally	1
		Yes, Often	2
		Yes, always	3
		Don't know/ Refuse	888
T21	If yes, please provide example of how you've been able to apply lessons learned through this training.	Did not provide example	0
		Provided example	1
		Don't know/ Refuse	888
T22	During your pre-service training, did you receive any specific training on how to teach math?	No	0
		Yes	1
		Don't know/ Refuse	888
T23	Have you attended any in-service training on how to teach math?	No	0
		→ SKIP TO T26	
		Yes	1
		Don't know/ Refuse	888
T24	Have you been able to apply what you learned in the math training session(s)?	No	0
		Yes, Occasionally	1
		Yes, Often	2
		Yes, always	3
		Don't know/ Refuse	888
T25	If yes, please provide example of how you've been able to apply lessons learned through this training.	Did not provide example	0
		Provided example	1
		Don't know/ Refuse	888
T26	What grade or grades do you teach in this classroom in this school year? [CHECK ALL THAT APPLY]		
T26.01		Grade 1	1
T26.02		Grade 2	1
T26.03		Grade 3	1
T26.04		Grade 4	1
T26.05		Grade 5	1
T26.06		Grade 6	1
T26.07		Grade 7	1
T26.08		Grade 8	1
T26.09		Grade 9	1
T27	Have you been teaching the same class since the beginning of the school year?	No	0
		Yes	1
T28	What grade or grades did you teach last school year? [CHECK ALL THAT APPLY]		
T28.01		Grade 1	1
T28.02		Grade 2	1
T28.03		Grade 3	1
T28.04		Grade 4	1
T28.05		Grade 5	1
T28.06		Grade 6	1
T28.07		Grade 7	1
T28.08		Grade 8	1
T28.09		Grade 9	1
T29	What school shift are we in today?	Morning	1
		Mid-Morning	2
		Afternoon	3

Supervisor Initials ___

T30	Do you keep a register of student attendance?		
		No → **SKIP TO T33** Yes	0 1
T31	Could I please see your student attendance register?	Register was not available to be examined. Attendance records were completed daily Attendance records were completed weekly Attendance records were completed bi-weekly Attendance records were completed monthly Other	1 2 3 4 5 6
T32	**[RECORD THE DATE OF THE MOST RECENT STUDENT ATTENDANCE RECORD]**	D D M M Y Y	
T33	In this class, how many boys are enrolled?	Don't know/ Refuse	888
T34	In this class, how many girls are enrolled?	Don't know/ Refuse	888
T35	How many boys in your class this year are repeaters?	boys Don't know/ Refuse	888
T36	How many girls in your class this year are repeaters?	girls Don't know/ Refuse	888
T37	On a typical day, how many students are absent?	Don't know/ Refuse	888
T38	On a typical day, how many students are late? **[WE DEFINE 'LATE' TO BE STUDENTS THAT ARRIVE AT LEAST 15 MINUTES AFTER THE START OF THE FIRST CLASS]**	Don't know/ Refuse	888
T39	Do you collaborate with your colleagues on lesson plans? IF YES, how often do you collaborate?	No Yes, once a week Yes, 2-4 times a week Yes, five times a week Yes, forthnighly Yes, monthly Don't know/ Refuse	0 1 2 3 4 5 888
T40	Does the head teacher, deputy head teacher or senior teacher ever check your lesson plans?	No → **SKIP TO T42** Yes Don't know/ Refuse → **SKIP TO T42**	0 1 888
T41	If **YES**, how often are lesson plans checked?	Once a year Once every 2-3 months Once every month Once every two weeks Once every week Daily Don't know/ Refuse	1 2 3 4 5 6 888

Supervisor Initials ___

T42	Do you use Ministry textbooks in your classroom lessons? If **YES**, how often?		
		No, never	0
		→ **SKIP TO T44**	
		Yes, rarely	1
		Yes, about half the time	2
		Yes, most of the time	3
		Yes, always	4
		Don't know/ Refuse	888
		→ **SKIP TO T45**	
T43	**[IF TEACHER USES MINISTRY TEXTBOOKS]**: How useful do you find them?		
		Not very useful	0
		→ **SKIP TO T43**	
		Moderately useful	1
		→ **SKIP TO T45**	
		Very Useful	2
		→ **SKIP TO T45**	
		Don't know/ Refuse	888
		→ **SKIP TO5T45**	
T44	**[IF TEACHER DOES NOT USE MINISTRY TEXTBOOKS]**: Why don't you use the official textbooks in your class?		
		Textbooks not available	1
		Not useful	2
		Not appropriate for my students	3
		Other (specify):	4
T44.01		_____	
		Don't know/ Refuse	888
T45	When you need some help with your teaching, whom do you consult?		
		Never need help	0
		No one to ask for help	1
		Organized meetings with teachers	2
		Discuss casually with teachers	3
		Head Teacher	4
		Senior Teacher	5
		Seek advice from Education Officer or subject specialist	6
T45.01		Other: (Specify)	7
		_____	
		Don't know/Refuse	888
T46	How frequently does your head teacher, deputy head teacher or senior teacher observe your teaching?		
		Never	0
		Once a year	1
		Once every 2-3 months	2
		Once every month	3
		Once every two weeks	4
		Once every week	5
		Daily	6
		Don't know/ Refuse	888
T47	Since the beginning of the school year, did an Education Officer ever visit you in school? If 'yes', how often?		
		Never	0
		→ **SKIP TO T49**	
		Once a year	1
		Once every 2-3 months	2
		Once every month	3
		Once every two weeks	4
		Once every week	5
		Daily	6
		Don't know/ Refuse	888
		→ **SKIP TO T49**	
T48	Now, I would like to ask you about what the Education Officer did during his or her visit to your school.		
T48.01	Did the Education Officer give advice on student order and discipline?		
		No	0
		Yes	1
		Don't know/ Refuse	888
T48.02	Did the Education Officer give advice on student evaluation or assessment?		
		No	0
		Yes	1
		Don't know/Refuse	888

Supervisor Initials ___

T48.03	Did the Education Officer offer advice about teaching?	No	....	0
		Yes	....	1
		Don't know/Refuse	....	888
T48.04	Did the Education Officer provide information or advice in response to a question that you asked him or her?	No	....	0
		Yes	....	1
		Don't Know/Refuse	....	888
T49	How do you measure your students' academic progress? [DO NOT READ OPTIONS. CIRCLE ALL THAT APPLY]			
T49.01		Written tests	....	1
T49.02		Oral evaluations	....	1
T49.03		Portfolios and other projects	....	1
T49.04		Homework	....	1
T49.05		End of term evaluation	....	1
T49.06		Other (Specify): _____	....	1
T50	What, if anything, limits the frequency with which you give your students written or oral evaluations?			
		_____		
		_____		
		_____		
T51	How do you use the results of students' oral and written assessments in your teaching?			
T51.01		Grade students	....	1
T51.02		Evaluate students' understanding of subject matter	....	1
T51.03		Plan teaching activities	....	1
T51.04		Adapt teaching to better suit students' needs	....	1
T51.05		Other: (Specify) _____	....	1
		Don't know/Refuse	....	888
T52	How many parents / guardians review students' homework?	None	....	0
		Some	....	1
		Most	....	2
		All	....	3
		Don't know/Refuse	....	888
T53	Are you generally satisfied with parent's involvement in their children's school work?	No	....	0
		Yes	....	1
		Don't know/Refuse	....	888
T54	Do you usually receive your salary on time?	No	....	0
		Yes	....	1
		Don't know/Refuse	....	888
Now, I am going to ask you some questions about your school facilities.				
T55	Do you feel safe at school?	No	....	0
		Yes → SKIP TO T57	....	1
		Don't know/Refuse	....	888
T56	If No, please explain.	_____		
T57	Do you feel your students are safe at school?	No	....	0
		Yes	....	1
		Don't know/Refuse	....	888
T58	Ending Time [USE 24 HOUR TIME]		_____ : _____	

THANK YOU VERY MUCH

![USAID logo - FROM THE AMERICAN PEOPLE]
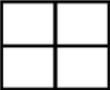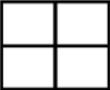
July 2011

SSME CLASSROOM INVENTORY INSTRUMENT

	Label
	CIN1 School Name: CIN2 School EMIS Number: CIN3 Teacher Number: CIN4 Assessor Name: CIN5 Assessor Code: CIN6 Supervisor Name: CIN7 Supervisor Code: CIN8 Supervisor Signature:

CIN9	Starting Time **[USE 24 HOUR]**	_____ : _____
CIN10	Interview Date	Date of Interview D D M M Y Y ☐☐☐☐☐☐
CIN11	How many boys are present in this class at the time of your observation? **[HAVE ALL THE BOYS STAND AND COUNT THEM]**	Boys ☐☐
CIN12	How many girls are present in this class at the time of your observation? **[HAVE ALL THE GIRLS STAND AND COUNT THEM]**	Girls ☐☐
CIN13	In order to determine the number of textbooks available please ask the children to hold their **BEMBA language** text book up in the air. **[IF NECESSARY, ASK THAT LANGUAGE TEXTBOOK BE REMOVED FROM CUPBOARD AND DISTRIBUTED 'AS USUAL' TO CHILDREN]** Number of children with **BEMBA Language** text book	☐☐
CIN14	Please ask the children to hold their **Maths** text book up in the air. **[IF NECESSARY, ASK THAT MATHS TEXTBOOK BE REMOVED FROM CUPBOARD AND DISTRIBUTED 'AS USUAL' TO CHILDREN]** Number of children with **Maths** textbook	☐☐
CIN15	Do children have the following materials? **[ASK CHILDREN TO RAISE EACH TYPE OF MATERIAL IN THE AIR ONE BY ONE]**	
CIN15.01	Number of children with **exercise book for language**	☐☐
CIN15.02	Number of children with **exercise book for maths**	☐☐
CIN15.03	Number of children with **pen/ pencil**	☐☐

CIN16	Does the teacher have the following materials? [CIRCLE ALL THE MATERIALS THAT THE TEACHER HAS]		
CIN16.01		Blackboard/whiteboard	1
CIN16.02		Chalk/Markers for whiteboard	1
CIN16.03		Pen/Pencil	1
CIN16.04		Notebook	1
CIN16.05		Language Reference Book	1
CIN16.06		Maths Reference Book	1
CIN17	Please ask the teacher to show you the Language Text Book (teacher's guide) he or she is using.		
CIN17.01	How many chapters are in this book?	# chapters in book	
CIN17.02	Ask the teacher, How many chapters has the class completed so far this year?	# chapters completed	
CIN18	Are there books/booklets other than textbooks available and accessible (not locked away) for children to read?	None	0
		1-4	1
		5-9	2
		10-19	3
		20-39	4
		40+	5
CIN19	Are there magazines available and accessible for children to read?	None	0
		1-4	1
		5-9	2
		10-19	3
		20-39	4
		40+	5
CIN20	Are there posters on the walls?	No	0
		Yes	1
CIN21	Is student work displayed on the walls?	No	0
		Yes	1
CIN22	Indicate what furniture is available for the students	Neither benches/chairs nor desks	0
		Benches/chairs but no desks	1
		Benches/chairs and desks	2
CIN23	Indicate what desk or bench/chair arrangement is used in this classroom	Rows	0
		small groups	1
		circle	2
CIN23.01		Other (describe):	3
CIN24	Ending Time [USE 24 HOUR TIME]	:	

SSME Classroom Observation – Early Grade Mathematics

COM1 School Name: _____

COM2 School EMIS Number: _____

COM3 Teacher Number: _____

COM4 Assessor Name: _____

COM5 Assessor Code: _____

COM6 Supervisor Name: _____

COM7 Supervisor Code: _____

COM8 Supervisor Signature: _____

The observation form should be completed in class during a mathematics lesson. If the teacher indicates that there is not a separate mathematics lesson, ask to observe a lesson that focuses on mathematics.

When arriving to class, find a seat at the back of the class. Try not to interrupt or disturb the class.

Complete the observation table. Every three minutes, indicate the teacher focus, teacher content, student and teacher action, and teaching material used at the moment of observation. In sections A and B indicate the teacher focus and teacher content by placing an "X" by the observed item. In sections C and D, indicate the teacher and student action and the language being used by placing the appropriate language code by the observed action. In section E, indicate the material and the langauge being used by placing the appropriate language code by the material used at the moment of observation. Every section (A, B, C, D, and E) must have at least one mark for each "Snapshot". Don't forget to write in the start and end time for the observation.

		Observation #:												
		1	2	3	4	5	6	7	8	9	10	11	12	13
	Observation Start time:													
	Observation End time:													
	A) Teacher focus: (only one X)													
9	Whole class													
10	Small Group													
11	One individual student													
12	Other / Not focusing on students													
13	Teacher not in the room													
	B) Instructional Content: (X)													
14	Reciting number words													
15	Number Identification													
16	Counting													
17	Comparing sets													
18	Addition - 1 digit													
19	Addition - 2 or more digits													
20	Subtraction - 1 digit													
21	Subtraction - 2 or more digits													
22	Multiplication													
23	Division													
24	Fractions													
25	Decimals & Percentages													
26	Money													
27	Time													
28	Standard Measurement Tools													
29	Working with data (graphs, etc.)													
30	Geometry (shapes, attributes)													
31	Algebra													
32	Other or don't know													
33	ABOVE DONE USING OBJECTS													
34	ABOVE DONE USING PICTURES													
	C) Teacher Action (Language)													
35	Repeating/recitation													
36	Writing problems on board													
37	Explaining													
38	Listening to student(s)													
39	Asking question(s)													
40	Monitoring students													
41	Non-instructional (Behavior mgmt, etc.)													
42	Other													
	D) Student actions (Language)													
43	Repeating/recitation													
44	Listening/watching teacher													
45	Asking question													
46	Answering question													
47	Copying from board													
48	Writing at blackboard													
49	Whole class problem solving													
50	Small group desk work													
51	Individual desk work													
52	Other (Projects, games, etc....)													
53	Off task (talking, sleeping, playing)													
	E) Materials used (Language)													
54	Blackboard													
55	Textbook													
56	Workbook/Worksheet/Copies													
57	Flashcards													
58	Posters/Wall charts													
59	Manipulatives: Counting													
60	Manipulatives: Geometry													
61	Manipulatives: Fractions													
62	Slates													
63	Student notebooks													
64	Other													

SSME Classroom Observation – Early Grade Reading

COR1 School Name:	
COR2 School EMIS Number:	
COR3 Teacher Number:	
COR4 Assessor Name:	
COR5 Assessor Code:	
COR6 Supervisor Name:	
COR7 Supervisor Code:	
COR8 Supervisor Signature:	

The observation form should be completed in class during a reading lesson. If the teacher indicates that there is not a separate reading lesson, ask to observe a lesson that focuses on reading.

When arriving to class, find a seat at the back of the class. Try not to interrupt or disturb the class.

Complete the observation table. Every three minutes, indicate the teacher focus, teacher content, student and teacher action, and teaching material used at the moment of observation. In sections A and B indicate the teacher focus and teacher content by placing an "X" by the observed item. In sections C and D, indicate the teacher and student action and the language being used by placing the appropriate language code by the observed action. In section E, indicate the material and the langauge being used by placing the appropriate language code by the material used at the moment of observation. Every section (A, B, C, D, and E) must have at least one mark for each "Snapshot". Don't forget to write in the start and end time for the observation.

		Observation #:												
		1	2	3	4	5	6	7	8	9	10	11	12	13
	Observation Start time:													
	Observation End time:													
	A) Teacher focus: (only one X)													
9	Whole class													
10	Small Group													
11	One individual student													
12	Other / Not focusing on students													
13	Teacher not in the room													
	B) Instructional Content: (X)													
14	Sounds without print													
15	Letters/sounds													
16	Reading isolated words													
17	Reading sentences													
18	Vocabulary (word meanings)													
19	Writing/dictation													
20	Reading texts													
21	Reading comprehension – text													
22	Writing – creating texts													
23	Other or don't know													
	C) Teacher Action (Language)													
24	Reading out loud													
25	Writing													
26	Explaining													
27	Speaking													
28	Listening to student(s)													
29	Monitoring students													
30	Checking student written work													
31	Other/Non-instructional behavior													
	D) Student actions (Language)													
32	Repeating/recitation													
33	Listening/watching teacher													
34	Asking question													
35	Answering question													
36	Copying from board													
37	Writing at blackboard													
38	Whole class problem solving													
39	Small group desk work													
40	Individual desk work													
41	Choral reading													
42	Individual reading out loud													
43	Silent reading													
44	Writing on paper or individual/personal slate (chalkboard)													
45	Other (Projects, games, etc....)													
46	Off task (talking, sleeping, playing)													
	E) Materials used (Language)													
47	Blackboard													
48	Textbook													
49	Other book													
50	Papers (worksheets or photocopies)													
51	Flashcards													
52	Posters/Wall charts													
53	Slates													
54	Student notebooks													
55	Other													

SSME HEAD TEACHER INSTRUMENT

		Label

HT1 School Name:
HT2 School EMIS Number:
HT3 Head Teacher Number:
HT4 Assessor Name:
HT5 Assessor Code:
HT6 Supervisor Name:
HT7 Supervisor Code:
HT8 Supervisor Signature:

HT9	Starting Time [USE 24 HOUR TIME]	_____ : _____

HT10	Interview Date	Date of Interview D D M M Y Y

HT11	Interview Status	Refused → THANK HEAD TEACHER AND END INTERVIEW .... 1 Partially Completed .... 2 Complete 3

HT12	What is your position at this school?	Head Teacher .... 1 Deputy Head Teacher 2

HT13	[IS THE HEAD TEACHER FEMALE?]	No .... 0 Yes 1

HT14	How many years have you been a head teacher?	Years

HT15 HT15.01	What is your highest level of qualification?	Diploma .... 1 Secondary school certificate .... 2 Bachelors Degree .... 3 Masters degree .... 4 Teacher's certificate .... 5 Other .... 6 Specify:_____ Don't Know/Refuse 888

HT16	Have you received special training or taken courses in school management?	No → SKIP TO HT18 .... 0 If 'yes', provide example: _____ .... 1 Don't Know/Refuse 888

HT17 HT17.01	Have you been able to use this management training?	No .... 0 Yes, Occasionally .... 1 Yes, Often .... 2 Yes, always .... 3 If 'yes', provide example of how you have used this training: _____ Don't Know/Refuse 888

HT18	In the last month, on how many days did you leave school when the school was open?	Number of Days

HT19 HT19.01 HT19.02 HT19.03 HT19.04 HT19.05 HT19.06 HT19.07 HT19.08 HT19.09 HT19.10 HT19.11	What grades are taught at this school this year? [CIRCLE ALL THAT APPLY]	Preschool .... 1 Grade 1 .... 1 Grade 2 .... 1 Grade 3 .... 1 Grade 4 .... 1 Grade 5 .... 1 Grade 6 .... 1 Grade 7 .... 1 Grade 8 .... 1 Grade 9 .... 1 Other: (specify) 1

Supervisor Initials ____

HT20	What date did classes start this school year?		
			D D M M Y Y

| HT21 | Since the start of the current school year, was this school closed or were there days when classes were not being taught during the regular school calendar (other than holidays)? | No   →   SKIP TO HT23
 Yes
 Don't Know/Refuse | 0
 1
 .... 888 |

| HT22 | IF YES, how many days was school closed or were classes not being taught ? | Number of Days
 Don't Know/Refuse | .... 888 |

| HT23 | At what time does your school day begin? [IF A SHIFT SCHOOL, RECORD START-TIME FOR CURRENT SHIFT ONLY] | Don't Know/Refuse | _____ : _____   AM/PM
 .... 888 |

| HT24 | At what time does your school day end? [IF A SHIFT SCHOOL, RECORD END-TIME FOR CURRENT SHIFT ONLY] | Don't Know/Refuse | _____ : _____   AM/PM
 .... 888 |

| HT25

 HT25.01

 HT25.02 | This means that your school day lasts 'x' hours and 'y' minutes? [CALCULATE DURATION OF SCHOOL SHIFT/DAY AND THEN VERIFY WITH HEAD TEACHER] |

 $x=$ Hours

 $y=$ Minutes
 Don't Know/Refuse | .... 888 |

| HT26

 HT26.01

 HT26.02

 HT26.03 | How much time is allotted for assemby, break, and lunch each day? | Time for assemby   Minutes

 Time for break   Minutes

 Time for lunch   Minutes
 Don't Know/Refuse | .... 888 |

| HT27
 HT27.01
 HT27.02 | How many boys are currently enrolled in this school? How many girls are currently enrolled....? | Number of Boys
 Number of Girls
 Don't Know/Refuse | .... 888 |

| HT28
 HT28.01
 HT28.02 | How many male teachers are currently employed at this school? How many female teachers....? | Number of Male Teachers
 Number of Female Teachers
 Don't Know/Refuse | .... 888 |

| HT29 | How many teachers were absent today (or on the last day school was in session)? | Number of absent teachers
 Don't Know/Refuse | .... 888 |

| HT30 | How many teachers arrived **after** the start of classes today? | Number of tardy teachers
 Don't Know/Refuse | .... 888 |

| HT31

 HT31.01 | What do you do with a class whose teacher is absent? [DO NOT READ OPTIONS, JUST MARK WHAT THE HEAD TEACHER REPLIES] | Let the class proceed without a teacher
 Allocate that class to another teacher
 Join all the students in one class
 Hire volunteer teachers
 Dismiss students for the day
 Other,
 Explain: _____ | 1
 2
 3
 4
 5
 .... 6 |

Supervisor Initials ___

	Now I have some questions about school records.		
HT32	Do you keep teacher attendance records?	No → SKIP TO HT36 Yes Don't Know/ Refuse	0 1 888
HT33 HT33.01 HT33.02 HT33.03	Who records teacher attendance information? [CIRCLE ALL THAT APPLY]	Head Teacher Deputy Head Teacher Senior Teacher Don't Know/ Refuse	1 1 1 888
HT34	Could I please see your teacher attendance records?	Records were not available to be examined. → SKIP TO HT36 Attendance records were completed daily Attendance records were completed weekly Attendance records were completed bi-weekly Attendance records were completed monthly Other	1 2 3 4 5 6
HT35	[RECORD THE DATE OF THE MOST RECENT TEACHER ATTENDANCE RECORD]	☐☐☐ day mo year	
HT36	Are students attendance records from all your classes compiled at the school level? If so, how frequently?	No, never Yes, once a year Yes, once every 2-3 months Yes, once every month Yes, once every two weeks Yes, once every week Yes, daily Don't Know/Refuse	0 1 2 3 4 5 6 888
HT37	Do you or one of your staff check teachers' lesson plans? If so, how frequently?	No/Never → SKIP TO HT40 Yes, once a year Yes, once every 2-3 months Yes, once every month Yes, once every two weeks Yes, once every week Yes, daily Don't Know/Refuse	0 1 2 3 4 5 6 888
HT38	Please explain why you check teachers' lesson plans.	_____ _____ _____ Don't Know/Refuse	 888
HT39 HT39.01	Do you check the lesson plans of some teachers more than others? If yes, please explain why.	No, I check the lesson plans of all teachers equally Yes, I check the lesson plans of some teachers more than others If yes, Explain: _____ Don't Know/Refuse	0 1 888
HT40	How often do you, the deputy head teacher, or senior teacher visit/observe classrooms?	Never Once a year Once every 2-3 months Once every month Once every two weeks Once every week Daily Don't Know/Refuse	0 1 2 3 4 5 6 888
HT41	If you are **very** dissatisfied with a teacher's performance, would it be possible to have him or her dismissed or transferred?	No → SKIP TO HT43 Yes Don't Know/ Refuse	0 1 888
HT42	How long does it take to get a teacher dismissed?	1 Year 4-5 months 2-3 months 1 month 2 weeks or less Don't Know/ Refuse	1 2 3 4 5 888

Supervisor Initials ___

HT43	How do you know whether your students are progressing academically? [DO NOT READ RESPONSES - CIRCLE ALL THAT APPLY]		
HT43.01		Classroom observation	1
HT43.02		Monitor students' results on tests given by teachers	1
HT43.03		Evaluate children orally myself	1
HT43.04		Check children's assignments or homework	1
HT43.05		Teachers provide me progress reports	1
HT43.06		End of term evaluations	1
HT43.07		Other	1
HT43.08		Specify:_____	
		Don't Know/Refuse	888
HT44	At the beginning of this school year, did your school have the appropriate number of textbooks for your students, according to current Ministry policy?	No	0
		Yes	1
		→ SKIP TO HT46	
		Don't Know/Refuse	888
HT45	If NO, how long after the beginning of the school year did you receive the missing books?	Never received them	0
		1 Year	1
		4-5 months	2
		2-3 months	3
		1 month	4
		2 weeks or less	5
		Don't Know/Refuse	888
HT46	Do you have a school library?	No	0
		→ SKIP TO HT50	
		Yes	1
		Don't Know/Refuse	888
HT47	Do children have access to books from the library?	No	0
		→ SKIP TO HT50	
		Yes	1
		Don't Know/Refuse	888
HT48	How frequently do they get books from the library?	Monthly	1
		Weekly	2
		Daily	3
		Don't Know/Refuse	888
HT49	Where can children read library books? [READ OUT OPTIONS AND CIRCLE ALL THAT APPLY]	In the school library	1
		In the classroom	1
		At home	1
		In other school locations	1
		Don't Know/Refuse	888
HT50	Is there a P.T.A. at this school?	No	0
		→ SKIP TO HT55	
		Yes	1
		Don't Know/Refuse	888
HT51	If yes, how often did the Executive P.T.A meet in this past school year?	Never	0
		Once a year	1
		Once every 2-3 months	2
		Once every month	3
		Once every week	4
		Don't Know/Refuse	888
HT52	Did you have an Annual General Meeting of your P.T.A in the past school Year?	No	0
		Yes	1
		Don't Know/ Refuse	888
HT53	For which of the following does the P.T.A have decision making authority and/or responsibility? [READ OUT OPTIONS AND CIRCLE ALL THAT APPLY]		
HT53.01		Discuss school management problems	1
HT53.02		Discuss students' problems and solutions	1
HT53.03		Review progress of school improvement efforts	1
HT53.04		Review financial situation (budgets) of the school	1
HT53.05		Approve school policy	1
HT53.06		Manage school infrastructure and equipment?	1
HT53.07		Discuss school curriculum	1
HT53.08		Raise funds	1
HT53.09		Manage procurement or distribution of textbooks	1
HT53.10		Other	1
		Don't know/Refuse	888

Supervisor Initials ___

Session 9: Education Environment Assessment Tools   **217**

HT54	Are you generally satisfied with the level of support the P.T.A provides to the school?	No .... 0 Yes .... 1 Don't know/Refuse 888
HT55	Are you generally satisfied with parents' involvement in their children's school work?	No .... 0 Yes .... 1 Don't know/Refuse 888
HT56	In the past year have you received a visit from a Ministry official in response to your request?	No .... 0 Yes .... 1 Don't know/Refuse 888
HT57	Within this past year, how many times did your school receive an inspection or support visit from a Ministry official or the Education Standards Officer?	Never .... 0 → SKIP TO HT59 Once .... 1 Once every month .... 2 Once every week .... 3 Don't Know 888
HT58 HT58.01 HT58.02 HT58.03 HT58.04 HT58.05 HT58.06 HT58.07 HT58.08 HT58.09 HT58.10 HT58.11 HT58.12 HT58.13 HT58.14 HT58.15 HT58.16	What activities does the Education Standards Officer undertake during his or her visits? [DO NOT READ RESPONSES - CIRCLE ALL THAT APPLY]	Check for the availability of school's financial records .... 1 Check student attendance register .... 1 Check teachers' lesson plans .... 1 Check for teachers' personnel files .... 1 Check on pupils' progress records .... 1 Check the availability of water supply .... 1 Check to ensure working toilets are available for girls and boys .... 1 Sit in the class and observe a class in session .... 1 Check recent student assessment tests and evaluation processes .... 1 Give advice on student order and discipline .... 1 Give advice on student evaluation or assessment .... 1 Offer management advice to school head .... 1 Offer teaching advice to teaching staff .... 1 Provide information on curriculum innovations .... 1 Provide information on professional development opportunities .... 1 Give advice on school health and sanitary practices 1
HT59	Does your school provide free meals for its students?	No .... 0 → SKIP TO HT61 Yes .... 1 Don't Know/Refuse 888
HT60	What proportion of your students receive free meals through these programs?	A few .... 1 A quarter .... 2 Half .... 3 Most .... 4 All .... 5 Don't Know/Refuse 888
	Now I would like to ask you about safety in your school.	
HT61 61.01	Is there anything in the school buildings that poses a safety problem for your students?	No .... 0 Yes .... 1 Explain:_____ Don't Know/Refuse 888
HT62	Do you feel safe in your school?	No .... 0 Yes .... 1 → SKIP TO HT64 Don't Know/Refuse 888
HT63	If No, please explain.	_____ _____
HT64	Are your students safe in school?	No .... 0 Yes .... 1 → SKIP TO HT66 Don't know/Refuse 888
HT65	If No, please explain.	_____ _____
HT66	Ending Time [USE 24 HOUR TIME]	_____ : _____
	THANK YOU VERY MUCH	

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FROM THE AMERICAN PEOPLE

July 2011

SSME PARENT INSTRUMENT

Label

P1 School Name:
P2 School EMIS Number:
P3 Parent Number (11-12):
P4 Assessor Name:
P5 Assessor Code:
P6 Supervisor Name:
P7 Supervisor Code:
P8 Supervisor Signature:

NOTE THAT ALL INSTRUCTIONS TO INTERVIEWER ARE IN BOLD AND CAPITAL LETTERS. UNLESS IT IS EXPLICITLY STATED, DO NOT READ OUT ANSWER OPTIONS TO THE RESPONDENT.

P9	Starting Time: **[USE 24 HOUR TIME]**	____ : ____
P10	Interview Date:	Date of Interview D D M M Y Y
P11	Interview Status:/	Refused .... 1 Partially Completed .... 2 Complete 3
P12	**[IS THE RESPONDENT FEMALE?]**	No .... 0 Yes 1
P13	Do you have one or more children attending (school name) _____? IF YES, I will be asking you questions about your child or children that are currently attending this school.	No → **THANK PARENT AND END INTERVIEW** .... 0 Yes 1

Now I am going to ask you questions about this child's experience at school and at home.

P14	If you were to walk to this school, how long would it take?	HOURS..... . MINUTES......
P15	How far away, in kilometers, is this school from your home? **ENTER '00' IF LESS THAN 1 KILOMETER.** **IF DON'T KNOW, PROBE:** Is it greater than 5 kilometers?	KM.. Don't Know/Refuse 888

Supervisor Initials ___

P16	Is there a P.T.A at this school?	No	....	0
		→ **SKIP TO P19**		
		Yes	....	1
		Don't Know/Refuse	....	888
		→ **SKIP TO P19**		
P17	How often does this P.T.A meet?	Once a year	....	1
		Once every 3 months	....	2
		Once every month	....	3
		Once every week	....	4
P17.01		Other (specify):	....	5
		_____		
		Don't Know/Refuse	....	888
P18	In the past year, has the P.T.A done anything to improve school attendance or improve students' learning at the school?	No	....	0
		Respondent said Yes, but did not provide example	....	1
		Respondent said Yes, and provided example	....	2
		Don't Know/Refuse	....	888
P19	Do you receive your child(ren)'s school report form?	No	....	0
		Yes	....	1
		Don't Know/Refuse	....	888
P20	Are you asked to sign your child(ren)'s report forms?	No	....	0
		Yes	....	1
		Don't Know/Refuse	....	888
P21	Do you discuss your child(ren)'s report forms with their teacher(s)?	No	....	0
		Yes	....	1
		Don't Know/Refuse	....	888
P22	Does someone in your home help your child(ren) with their homework?	No	....	0
		Yes	....	1
		Don't Know/Refuse	....	888
P23	Do you or does someone else in your home check to ensure that your child(ren) have completed their homework ?	No	....	0
		Yes	....	1
		Don't Know/Refuse	....	888
P24	How often do you have your child(ren) read out aloud to you?	Never	....	0
		Sometimes	....	1
		Once a week	....	2
		2-3 times per week	....	3
		Every day	....	4
		Don't Know/Refuse	....	888
P25	How often do you or someone in your family or community read to your child(ren)?	Never	....	0
		Sometimes	....	1
		Once a week	....	2
		2-3 times per week	....	3
		Every day	....	4
		Don't Know/Refuse	....	888

Supervisor Initials ___

P26	In the past year, have you ever met with your child(ren)'s teacher(s)? **If YES**, how often?		
		Never	0
		Yes, Once a year	1
		Yes, Once every 2-3 months	2
		Yes, Once every month	3
		Yes, Once every two weeks	4
		Yes, Once every week	5
		Other (specify):	6
		Don't Know/Refuse	888
P27	What is the top reason for school absence among your children?		
		Illness	0
		Over sleeping in the morning	1
		No food to eat	2
		Funeral	3
		Market day or market day preparation	4
		Taking care of siblings	5
		Take care of sick family member	6
		Other chores/ work to do	7
		Transport problems	8
		Weather	9
		Uniform not available	10
		Didn't want to go to school	11
P27.01		Other (specify):	12
		Don't Know/Refuse	888
P28	What do you like about your children's school? **[DO NOT READ RESPONSE OPTIONS - CIRCLE ALL THAT APPLY]**		
P28.01		The children learn a lot	1
P28.02		The teachers are good	1
P28.03		The principal is good	1
P28.04		There is good discipline/ order at the school	1
P28.05		School is in good condition	1
P28.06		Parents support the school	1
P28.07		Teaching materials are good	1
P28.08		Other (specify):	1
		Don't Know/Refuse	888
P29	What do you **NOT** like about your children's school? **[DO NOT READ RESPONSE OPTIONS - CIRCLE ALL THAT APPLY]**		
P29.01		The children are not learning	1
P29.02		The teaching quality is poor	1
P29.03		The principal is not effective	1
P29.04		Discipline at the school is not good	1
P29.05		School building is in poor shape	1
P29.06		Parents don't support the school	1
P29.07		Teaching materials are lacking	1
P29.08		Other (specify):	1
		Don't Know/Refuse *Nshishibe/ bakaana ukwasuka*	888

Supervisor Initials ___

P30	To your knowledge, does your child's teacher(s) ever use corporal punishment in the classroom?	No .... 0 Yes .... 1 Don't Know/Refuse 888
P31	In the past year, has anyone ever hurt your child(ren) physically on their way to or from school?	No .... 0 Yes .... 1 Don't Know/Refuse 888
P32	In the past year, has anyone ever hurt your child(ren) physically at school?	No .... 0 Yes .... 1 Don't Know/Refuse 888
P33	Do you feel that your children are safe in this school?	No .... 0 Yes .... 1 Don't Know/Refuse 888
P34	Do you feel that your children are safe on their way to or from school?	No .... 0 Yes .... 1 Don't Know/Refuse 888
P35 P35.01	Finally, is there anything that you can think of that would improve this school?	No .... 0 Yes .... 1 If Yes, explain: _____ Don't Know/Refuse 888
P36	Ending Time [USE 24 HOUR TIME]	_____ : _____

THANK YOU VERY MUCH

Supervisor Initials ___

USAID
FROM THE AMERICAN PEOPLE

July 2011

SSME SCHOOL OBSERVATION INSTRUMENT

Label

SOB1 School Name:
SOB2 School EMIS Number:
SOB3 Assessor Name:
SOB4 Assessor Code:
SOB5 Supervisor Name:
SOB6 Supervisor Code:
SOB7 Supervisor Signature:

SOB8	Starting Time **[USE 24 HOUR TIME]**	_____ : _____
SOB9	Interview Date	Date of Interview D D M M Y Y
SOB10	Interview Status	Refused → **END INTERVIEW** . . . . 1 Partially Completed . . . . 2 Complete 3
SOB11	How many classes are in session?	
SOB12	Ask the head teacher, how many classes are SUPPOSED to be in session?	
SOB13	Are the school buildings and surroundings clean and neat?	No . . . . 0 Yes 1
SOB14	Are any major repairs needed?	No . . . . 0 Yes 1
SOB15	Does the school have electricity? If **YES**, is it functioning today?	No . . . . 0 Yes, but not functioning today . . . . 1 Yes, and functioning today 2
SOB16	What drinking water source does the school have?	None . . . . 0 Well . . . . 1 Hand Pump . . . . 2 Tap . . . . 3 Rain barrel/ tank . . . . 4 Treadle pump . . . . 5 River 6

Page 1 of 2

Supervisor Initials ____

SOB17	Is the drinking water source working? (I.E. IS WATER AVAILABLE DURING YOUR VISIT?)	No .... 0 Yes 1
SOB18	How many functional toilets/latrines are there? **(A FUNCTIONING TOILET IS ONE THAT CAN BE USED; IF A FLUSH TOILET, THE FLUSH MECHANISM IS WORKING)**	Toilets ☐☐ **IF ZERO → SKIP TO SOB21**
SOB19	Of these functional toilets/latrines, how many are for girl students only (if any)?	Toilets ☐☐
SOB20	Are toilets/latrines clean?	Not at all .... 0 Somewhat clean .... 1 Very clean 2
SOB21	Is there a school library? **If YES**, are students using the library at the time of visit?	No, there is no library .... 0 Yes, but no students are using it .... 1 Yes, and students are using it 2
SOB22	Is there a collection of books in the classroom that the students can use/borrow?	No, there is no collection of books .... 0 Yes, but no students are using it .... 1 Yes, and students are using it 2
SOB23 23.01 23.02 23.03 23.04	Is there a functioning telephone? **[CIRCLE ALL THAT APPLY]**	None .... 1 Yes, there is a school landline .... 1 Yes, the head teacher has a cellphone .... 1 Other: (specify) _____ 1
SOB24	Is there a playground?	No .... 0 Yes 1
SOB25	Are there up-to-date notices posted around the school that communicate useful administrative and/or professional information?	No .... 0 Yes 1
SOB26	Ending Time **[USE 24 HOUR TIME]**	_____ : _____

Supervisor Initials ____

Communitry Data-Driven Decision Making in Education: A Facilitator's Manual

![USAID FROM THE AMERICAN PEOPLE]

July 2011

SSME STUDENT INSTRUMENT

Label

S1 School Name:
S2 School EMIS Number:
S3 Teacher Number:
S4 Student Number (1-10):
S5 Assessor Name:
S6 Assessor Code:
S7 Supervisor Name:
S8 Supervisor Code:
S9 Supervisor Signature:

NOTE THAT ALL INSTRUCTIONS TO INTERVIEWER ARE IN BOLD AND CAPITAL LETTERS. UNLESS IT IS EXPLICITLY STATED, DO NOT READ OUT ANSWER OPTIONS TO THE RESPONDENT.

S10	Starting Time: **[USE 24 HOUR TIME]**	_____ : _____	
S11	Interview Date	Date of Interview D D M M Y Y	
S12	Interview Status	Refused → **THANK STUDENT AND END INTERVIEW**	1
		Partially Completed	2
		Complete	3
S13	**[IS THE STUDENT A GIRL?]**	No	0
		Yes	1
S14	How old are you?		
S15	What language do you speak most often at home?		
		Chitonga	1
		Cinyanja	2
		English	3
		Icibemba	4
		Kiikaonde	5
		Lunda	6
		Luvale	7
		Silozi	8
S15.01		Other (specify): _____	9
S16	What grade are you in?	Grade 1	1
		Grade 2	2
		Grade 3	3
		Grade 4	4
S17	What grade were you in last year? **[DON'T VERIFY BY ASKING IF CHILD IS REPEATING]**	Preschool	0
		Grade 1	1
		Grade 2	2
		Grade 3	3
		Grade 4	4
		Don't Know/ Refuse	888

Supervisor Initials ___

S18	How do you normally get to school?			
		Walk alone	....	1
		Walk accompanied by sibling		
			....	2
		Walk accompanied by a schoolmate	....	3
		Walk accompanied by an adult household member	....	4
		Bicycle alone	....	5
		Bicycle accompanied by sibling		
			....	6
		Bicycle accompanied by a classmate	....	7
		Bicycle accompanied by an adult household member/		
			....	8
		Household member accompanies me in a car/truck/motorbike	....	9
		Household member accompanies me in a bus	....	10
		I take a bus alone	....	11
S18.01		Other (specify):	....	12
		Don't Know/ Refuse	....	888
S19	May I please see your Bemba language exercise book? If YES, PLEASE NOTE HOW MANY PAGES WERE USED? [MAKE SOME POSITIVE COMMENT REGARDING STUDENT'S WORK. DON'T COMMENT ON NEGATIVE GRADES OR TEACHER COMMENTS]	No exercise book available	....	0
		If NO, → SKIP to S23		
		One quarter	....	1
		Half	....	2
		Three Quarters	....	3
		All pages	....	4
		More than one language exercise book.	....	5
		If more than one language exercise book, specify number of language exercise books used		
		Don't Know/ Refuse	....	888
S20	[HOW MANY PAGES HAVE TEACHERS' MARKS/ CORRECTIONS? (DO NOT COUNT OR COMMENT)]	None	....	0
		Some (every few pages)	....	1
		Many (most pages)	....	2
		All pages	....	3
S21	[HOW MANY WRITTEN COMMENTS? (DO NOT COUNT TICKS OR MARKS)]	None	....	0
		Some (every few pages)	....	1
		Many (most pages)	....	2
		All pages yonse amapeepala	....	3
S22	Have you written any of your own stories in your exercise book? Or any writing that you did not copy from the board or a book? IF YES, can I see this?	No original work in exercise book	....	0
		Examples of original work shown	....	1
S23	What does the teacher do when you do well on a test or lesson?	Nothing	....	0
		Praises me	....	1
		Gives me a prize (sticker, pencil)	....	2
		Excuses me from a chore or homework	....	3
S23.01		Yes, Other (specify):	....	4
		Don't Know/ Refuse	....	888

Supervisor Initials ___

S24	What does the teacher normally do when you are unable to answer a question or answer a question incorrectly?	Teacher rephrases/explains the question	....	1
		Teacher encourages the student to try again	....	2
		Teacher asks another student	....	3
		Teacher asks again	....	4
		Teacher corrects the student but does not scold him/her	....	5
		Teacher scolds student	....	6
		Teacher sends student outside of classroom	....	7
		Teacher hits student	....	8
		Other (specify):	....	9
S24.01		Don't Know/ Refuse	....	888
S25	Last week, how many times did you get homework?	Never	....	0
		One time	....	1
		Two times	....	2
		Three times	....	3
		Four times	....	4
		Every day	....	5
		Don't Know/ Refuse	....	888
S26	Did your teacher check your homework last week?	No	....	0
		Yes	....	1
		Don't Know/ Refuse	....	888
	If you need help with your homework, who helps you at home? [CIRCLE ALL THAT APPLY]			
S26.01		No one	....	1
S26.02		Brother/sister	....	1
S26.03		Mother/ father	....	1
S26.04		Grandparent	....	1
S26.05		Other: (specify)	....	1
		Don't Know/ Refuse	....	888
S27	Did you have a meal before you arrived at school today?	No	....	0
		Yes	....	1
		Don't Know/ Refuse	....	888
S28	Have you or will you have a meal at school today?	No	....	0
		Yes	....	1
		Don't Know/ Refuse	....	888
S29	Were you absent last week? IF YES, why were you absent?	No, I was not absent last week	....	0
		Yes, because I was sick	....	1
		Yes, because I woke up late	....	2
		Yes, because I had no food to eat	....	3
		Yes, because I had to go to a funeral	....	4
		Yes, because of market day or market day preparation	....	5
		Yes, because I had to take care of siblings	....	6
		Yes, because I had to take care of sick family member	....	7
		Yes, because there was other work at home	....	8
		Yes, because I had no transport or my transport was late	....	9

Supervisor Initials ___

Session 9: Education Environment Assessment Tools

227

		Yes, because I didn't have a uniform to wear	10
		Yes, because I'm treated badly by students or teachers at school	11
		Yes, because school is too dangerous	12
		Yes, because school is too hard	13
		Yes, because school is not interesting	14
		Yes, because of bad weather	15
		Other: (specify)	16
S29.01			
		Don't Know/ Refuse	888
S30	Were you late any day last week? **IF YES**, why were you late?		
		No, I was not late last week	0
		Yes, because I was sick	1
		Yes, because I woke up late	2
		Yes, because I had to take care of siblings	3
		Yes, because I had to take care of sick family member	4
		Yes, because there was other work at home	5
			6
		Yes, because I had no transport or my transport was late	
		Yes, because I could find my uniform or my uniform wasn't ready on time in the morning	7
		Yes, because I'm treated badly by students or teachers at school	8
		Yes, because of bad weather	9
		Other: (specify)	10
S30.01			
		Don't Know/ Refuse	888
S31	The last time you got a good grade on a test or assignment in school, did your parent(s) or guardian know that you did well?	*No*	0
		Yes	1
S32	If yes, what did they do?		
		Learned but did nothing	2
		Congratulated or encouraged me	3
		Gave me a hug/*kiss*	4
		Gave me a treat	5
		Other: (specify)	6
S32.01			
		Don't Know/ Refuse	888
S33	Did you go to preschool or Kindergarten?		
		No	0
		Yes	1
		Don't Know/ Refuse	888
S34	Can your father read?		
		No	0
		Yes	1
		Don't Know/ Refuse	888
S35	Can your mother read?		
		No	0
		Yes	1
		Don't Know/ Refuse	888
S36	Do you have a reading time in your classroom or in your school library?		
		No	0
		Yes	1
		Don't Know/ Refuse	888

Supervisor Initials ___

S37	Do you bring home reading books from your classroom or from the school library to read at home?	No	....	0
		Yes	....	1
		Don't Know/ Refuse	....	888
S38	Apart from school books, do you have books that you can read at home?	No	....	0
		Yes	....	1
		Don't Know/ Refuse	....	888
S39	How often do you read out aloud to someone at home?	Never	....	0
		Sometimes	....	1
		Once a week	....	2
		2-3 times per week	....	3
		Every day	....	4
		Don't Know/ Refuse	....	888
S40	Does someone at home read to you? If yes, how often?	Never	....	0
		Sometimes	....	1
		Once a week	....	2
		2-3 times per week	....	3
		Every day	....	4
		Don't Know/ Refuse	....	888
S41	Does your family have a . . . ? [READ OUT THE BELOW OPTIONS]			
S41.01	Radio	No	....	0
		Yes	....	1
S41.02	Television	No	....	0
		Yes	....	1
S41.03	Bicycle	No	....	0
		Yes	....	1
S41.04	Vehicle	No	....	0
		Yes	....	1
S41.05	Pit toilet	No	....	0
		Yes	....	1
S41.06	Flush toilet outside of your home	No	....	0
		Yes	....	1
S41.07	Flush toilet inside of your home	No	....	0
		Yes	....	1
S41.08	Electricity	No	....	0
		Yes	....	1
S41.09	Computer	No	....	0
		Yes	....	1
S41.10	Kitchen inside the home	No	....	0
		Yes	....	1
S41.11	Firewood for cooking	No	....	0
		Yes	....	1
S41.12	Charcoal stove or Wood stove	No	....	0
		Yes	....	1
S41.13	Electric Stove or Gas Stove	No	....	0
		Yes	....	1
	Where do you get your drinking water at home? From a... [READ OUT THE BELOW OPTIONS]			
S41.14	River/spring water	No	....	0
		Yes	....	1
S41.15	Tank	No	....	0
		Yes	....	1
S41.16	Water tap/pipe within your home	No	....	0
		Yes	....	1
S41.17	Water truck	No	....	0
		Yes	....	1
S41.18	Borehole	No	....	0
		Yes	....	1
S41.19	Other			
S42	Ending Time: [USE 24 HOUR TIME]		_____ : _____	

THANK YOU VERY MUCH

Supervisor Initials ___

Handout 4: CERCA Case Study

Introduction:

The CERCA project focused on assisting a small sample of schools in Guatemala, El Salvador, and Nicaragua in the development of a school report card. The process consisted of supporting schools in organizing Analysis Groups (AGs), collecting and analyzing information, and disseminating the collected information within the local school and community. The field test of the school report card (SRC) process was carried out over two months approaching the end of the 2004 school year in each country.

The SRC was designed by CERCA as a methodology to provide local schools and communities with information on the condition of teaching and learning in their schools. The information gathered can be used to guide decisions about appropriate community-level actions to improve educational service delivery. The pretest coincides with and supports ongoing efforts in Central America to decentralize education and thereby give communities a greater role in determining and monitoring service delivery.

The approach contributes to CERCA's work to create conditions for parents and local communities to actively engage in education policymaking for their children, and in holding schools and policymakers accountable for education quality. The SRC pretest was done with participation and technical input from the USAID-funded EQUIP2 project.

The implementation of the SRC pretest began in June 2004 with a design workshop in Antigua, Guatemala. This workshop produced a schedule for carrying out the pretest, a set of procedures for implementing the project, and draft instruments to guide work in the schools. The three countries (Guatemala, El Salvador, and Nicaragua) agreed to participate and country facilitators were hired to support school efforts in each country. Eight schools—three in Guatemala and Nicaragua and two in El Salvador, and most education projects supported by USAID—participated. Within the limited scope of the pretest, an effort was made to examine the viability of the instruments and procedures in schools in different contexts (rural, semirural, urban, and bilingual) and with different formats of service delivery (graded and multi-grade).

Key features:
- A strong focus on local educational quality, prompted by community input.
- A democratically elected analysis group with their children. Ten to 15 community members, including the school principal, parents, teachers, and students.
- Data collection by the analysis group on the status of the school, including attendance, efficiency, and quality of teaching and learning. The group identifies school weaknesses
- A presentation of findings to the community through graphics and drama, provoking discussion and suggestions.
- A community-crafted action plan for school improvement.

- Implementation of that plan by community members and an emphasis on monitoring results.

The project assumes there is interest within the local educational community to participate in plans and take actions to improve the quality of school services. It also assumes that informed participation is an effective way to foster a culture of social advocacy and accountability to those most directly affected by school-level educational change.

FINDINGS
- The SRC process generated a great deal of interest in the local school communities. An average of 300 individuals per school—and in one case as many as 900 persons—participated in the community dialogue sessions.
- The SRC process was highly successful in empowering local community members to collect and analyze school-related data. In a relatively short time, AGs (analysis groups) were formed, data collected and analyzed, and results presented to the community.
- The SRC pretest met its goals of developing local knowledge and promoting options for local community engagement and action in education. In each community, a number of action strategies were generated.
- School directors were a key element in the success of the SRC process. The high level of participation and ownership taken by school directors and their assistance in coordinating the pretest in their schools was directly responsible for the success of the effort.
- In all schools, the importance of parent interest in student schoolwork was an issue that generated discussion and action. Dialogue among parents and teachers produced strategies by parents who had not realized that they could participate in their children's learning even if they themselves did not read or write.
- Students were represented in the AGs, but their participation in the analysis needed direction. Student participation was directed toward collection of certain types of data and developing illustrations and dramatizations for data presentation during the community dialogue activity. They played an important role as liaisons, inviting parents to the final exchange session.
- AG findings about classroom quality—based on the indicators used for the SRC—generated interest and reflection, mainly among teachers. Discussions covered personnel and pedagogical practices.
- Several areas of concern—student and teacher absenteeism and the low numbers of students completing primary school—generated action strategies by teachers and parents. These areas appear to offer potential for joint action among parents and teachers; such actions can also be easily monitored and evaluated.
- There was a high degree of local ownership in the results. This was evident in the decision made by all analysis groups to develop on their own new formats and strategies to share the results without assistance from the facilitator.
- Because of limited time, action plans that incorporated strategies and ideas into procedures that the community could monitor for change were not fully developed.

- The most useful information was presented in very simple formats, which succeeded in generating in-depth discussion. A limited number of symbols that showed clear trends had the greatest impact, whether presented in drawings, graphs, or numerical tables.

RECOMMENDATIONS
- Expand the SRC effort to a full pilot to fully test the approach in a variety of local school and administrative contexts.
- Initiate the SRC process early in the school year to permit full implementation of actions for change and provide means of determining results of such actions.
- The importance given by communities to topics such as absenteeism, dropout, and homework suggests that parents are willing to become involved in the improvement of education. The possibility of focusing on this information, considering its potential to produce actions that result in a change in quality, should be fully explored in the pilot.
- Focus on local leaders, such as school directors, to provide the local facilitation necessary to carry out the SRC process.
- Test additional strategies for the full participation of students in the SRC process.
- Assure the availability of appropriate tools for a set of different SRC implementation strategies. As the field test relied largely on the skills of experienced facilitators, additional support materials may be needed when other implementation strategies are tested.
- Work in a limited geographical area that supplies sufficient variation (e.g., school location and size, involvement in projects, cultural and linguistic differences) to fully explore the SRC approach.

http://www.eric.ed.gov/PDFS/ED520080.pdf

The School Equity Profile can be use to conduct research about the school environment, enrollment rates for boys and girls, age of students, and participation of boys and girls in school activities. It can help the school community find solutions to questions such as: How can the school achieve an increase in persistence and achievement for girls and other types of traditionally underserved students?

School Equity Profile Instrument

School Name:	Date of Interview:
Urban/Rural:	Name of Head Teacher Interviewed:

Tool 1: Matrix and Interview with Head Teacher

a) Collecting Data: Use the matrix to register the number of girls and boys, grade by grade, in order to perceive whether attendance remains the same, increases, or decreases across the grade levels. When the matriculation data is obtained, the interview can discuss with the head teacher the internal and external factors that influence possible dropout rates of girls and boys and other issues related to equity.

Grade Level	Students (number)		Teachers (number)		Age Range			
	Girls	Boys	Women	Men	Girls		Boys	
					From	To	From	To
Grade 1								
Grade 2								
Grade 3								
Grade 4								
Grade 5								
Grade 6								
Comments:								

b) Questionnaire
1) Are there any indications of school drop out? (compare with the data obtained from school records)
2) What are the main reasons why girls stop coming to school or why boys drop out?
3) Does the school have any information about school-age girls or boys that live in the catchment area for the school and are not attending school?
4) Are there students who bring younger brothers or sisters to school? Is this permitted?
5) Are there any indicators that lead you to believe that there is a correlation between the sex of a teacher and the decision on the part of parents to enroll their son or daughter? Why?
6) What type of assistance do over-age boys and girls receive in the classroom? What are some of the problems encountered in these situations?
7) What measures have been taken by the school to achieve an increase in matriculation?
8) What does the school do to increase the rate of school persistence and to achieve 100 percent graduation for all girls and boys?
9) Do girls receive any type of support for their specific needs?

Tool 2: Direct Observation of the School Environment
Conduct a tour around the school and collect information through dialogue and direct observation to answer the questions below related to quality and equity.

Climate of security in the school		

Question:
Does the construction of the school and the school grounds offer a secure environment for girls and boys?
	Secure doors/windows:
	Yes/No: _____
	
	Fencing:
	  1. Walls
	  2. Fence
	  3. Other
	  4. Nothing
		Comments:

Question: Does the school have water and sewage service? Are the bathrooms separated for the girls and boys?	Latrines/Bathrooms: Yes/No: _____ For boys For girls Water near latrines: For boys For girls Latrines have doors: For boys For girls Latrines cleaned by: Boys Girls Employee	Comments:

Question: Is there a problem of malnutrition in the school? Are there school feeding programs that donate snacks or lunch to the students?	Food:
	  1. Charge for food
	
	  2. Free
	
	  3. Not Provided
		Comments:

Detecting Equity/Inequity						
Question: In what activities do only girls participate? And in what activities do only boys participate?	Recreation area/playground: Are boys and girls separated? Yes/No: _____ Do the boys monopolize/ dominate the playground? Yes/No: _____ Agricultural gardens: Are there agricultural gardens? Yes/No: _____ Who works in them? -Boys -Girls -Both		Comments:			
Question: Do students perform chores at the school? Who does the various chores? (Indicate with an X in the boxes to the right)	List of chores	Boys	Girls	Both	Other Workers (specify who)	Comments:
	Cut grass					
	Sweep classroom					
	Sweep school					
	Bring water, wood, etc.					
	Cook					
	Take messages					
	Other: Specify					

Tool 1: Interview Guide / Questions for Teachers, Students, and Parents
The following questions can spur other questions related to the equity profile and environment of a school.

a) Interview with Teachers

    1.   Where do you believe that girls in your class will be in five years? In 10 years? Where do you believe the boys will be in five years? In 10 years?

b) Interview with Students

    1.   How would your life change if you woke up and discovered that you were of the opposite sex?

    2.   Who participates more in the classroom, boys or girls?

    3.   Who is more assertive and speaks up more, girls or boys? Why?

    4.   What do you want to do in the future? What will you have to do to achieve that?

c) Interview with Parents

    1.   How does the head teacher relate to and treat your daughter and/or son in school?

    2.   How do the teachers treat your daughter and/or son in school?

    3.   How do you wish they treated your son and/or daughter in school?

    4.   What are the problems that girls and boys face in school?

    5.   What do you want for your son and/or daughter to become in the future?

Handout 6: Sex Disaggregated Data

Sex-disaggregated data/information refers to the differentiation by sex of statistical data and other information and is sometimes called gender-disaggregated data. This means that we must count both males and females when gathering information for planning, implementing, monitoring, and evaluating development activities. Disaggregating information by sex is a basic good practice requirement for gender-sensitive programming. Without disaggregated information, it is difficult or impossible to assess the different impacts of development activities on males or females. It is important to disaggregate data not only by sex, but also by age (girls and boys, older men and women), race, ethnicity, caste, and any other socioeconomic group which may be affected positively or negatively by a development activity. There are many ways that development workers can gather sex-disaggregated information. Data collection methods and the quantity of data required will vary according to a range of factors, including the sector and type of development activity, the scale of the activity, the resources and time available for data collection during design, implementation and evaluation, and the institutional context.

While there are now many sources of quantitative data on the status of women and girls, up-to-date and relevant information specific to the location and activity can sometimes be difficult to get. Sex disaggregated qualitative information based on consultation with key stakeholders and local women's groups is also essential. Participatory methods may provide opportunities to hear from both women and men separately and for women and men to hear each other's perspectives.

**Adapted from Hunt, J, 2004, "Introduction to gender analysis concepts and steps." Development Bulletin, No. 64, pp. 100-106.

CD3M – STEP 3 – How and with what will I gather my data?
What specific tools will I use to gather my data? Who will use the tools? How many times will each tool be used? When will it be used? Who is the tool audience?
What will I do with the data when it is collected? How will I start to compile the data?

Session 10: Quantitative Data Analysis (What Does Our Data Tell Us about the Problem?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: Data analysis is a key step in evaluation, research, and decision making.
                                    Data analysis is the step by which we can tell the story of the data.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                    monitoring and evaluation and an understanding of the sector that is
                                    being featured in the workshop. Workshop materials are designed for
                                    the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation
                                    Session 5 - Quantitative Methods

Version: October 2013

Contributing Posts: PC/Guatemala
                                    PC/Philippines

Session: Quantitative Data Anaylsis (What Does Our Data Tell Us about the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Review basic statistics.
2. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
3. Review the important concepts and terms concerning quantitative data analysis.
4. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
5. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, and projector
    2. Flip chart
    3. Markers
    4. Speakers
    5. Internet – Kahn Academy Video
    6. Calculators OR cellphones with calculators
- **Handouts**
    Handout 1: Data Set of Time on Task
    Handout 2: CD3M Cycle – STEP 4 – DATA ANALYSIS
- **Trainer Materials**
    Trainer Material 1: Session 10 PowerPoint

Session Learning Objectives:
Participants will
1. Explain mean, median, N, and frequency.
2. Describe whether mean or median yields the most meaningful result when used to analyze a sample school data set.
3. Represent their findings using lines, bar graphs, and pie charts.

Phase / Time / Materials	Instructional Sequence
Motivation 5 minutes Trainer Material 1: Session 10 PowerPoint	**Data Analysis Introduction** Participants will be introduced to the basic concepts of data analysis. 1. Say or paraphrase: "*We are now going to show you ways you can make use of the quantitative data you have collected and to make sense of (analyze) what it means.*" 2. Ask participants the following question: *"Once you have collected your data, what can you do with it?"* 3. Elicit responses from participants. 4. Review the first three steps of the CD3M cycle. 5. [SLIDE 2]: Next, present the fourth step in the CD3M cycle. 6. [SLIDE 3]: Say or paraphrase: "*Once you have collected all of your data, the next step is the 'data analysis' phase.*" 7. *"Data analysis refers to the process of looking through your data, performing different calculations (in the case of quantitative data) in order to make inferences and comments about what the data says about your problem/question posed. In simpler terms, data analysis is looking at the story that your data tells you. It's about what you learn from the data that you collected."*

Phase / Time / Materials	Instructional Sequence

Information 1
 	
35 minutes
 	
Trainer Material 1: Session 10 PowerPoint
 	
Speakers
 	
Internet
	Basic Quantitative Concepts
	Participants get a basic overview of quantitative analysis.
	    <u>**Note:**</u>
	    This is a brief overview of basic quantitative concepts. The facilitator might note that this will be a review for those who have taken statistics courses/done research/analyzed data before.
	
	1. [SLIDE 4]: *"Once you collect this data, there are several steps to analyzing it. The first is cleaning the data, then descriptive statistics, then graphing the data. If you have Excel, it will do this work for you, once you organize your data. If you don't have Excel, you can do this work manually."*
	
	2. [SLIDE 5]: Cleaning data
	   • Review the slide and explain the three areas of cleaning data. Explain that data cleaning refers to the process of looking through the data to see if there are any duplicate entries, blatant data entry mistakes, or missing information.
	   • Say or paraphrase: "*There are three areas to take into consideration when cleaning data. They are duplicate entries, missing entries, and consistency. Duplicate entries ask the question 'Did you enter someone or some data twice by mistake?' Missing entries refer to questions such as 'Do you have blanks for some entries, such as the number of girls who attend school regularly?' Consistency asks the question 'Have you entered the data in the same format throughout the spreadsheet.'"*
	   • Say or paraphrase: "*Solutions for these areas are quite straightforward. If you have duplicate entries, then you must delete one of the entries. If you have missing entries, you must leave them blank and do not count them in your analysis (or you can also check your notes/records for the data and enter it, if you find the missing entry). And for consistency, you need to reformat the quantitative data to make it all the same, for example, numbers without text or text without numbers; Y for yes, N for no, etc.*
	   • *WHATEVER YOU DO, DO <u>NOT</u> MAKE UP DATA!*

Phase / Time / Materials	Instructional Sequence

	3. Remind Volunteers that poor data collection leads to poor data analysis.
	
	4. [SLIDE 6]: Descriptive Statistics: MEAN
	  • Explain: Volunteers will be required to find the mean and median, determine the N or denominator, report out frequencies, and graph their analysis.
	
	  • *"Mean, median, N, and frequencies describe or summarize the data so other people can construct a mental picture of the data and the people, events, or objects they relate to.*
	
	5. [SLIDE 7]: MEAN
	  • *"The mean is the average. While we will learn how to do this on Excel, you calculate the average by adding up all the numbers in the data set and then dividing by the amount of numbers you added up.*
	  • To compute: Sum up all the values and divide by the number of values

<table>
<tr><td>Example:</td><td>Math Test Scores</td></tr>
<tr><td>Scores out of 100:</td><td>95 73 88 96 74 67 72</td></tr>
<tr><td>Mean / Average:</td><td>(95+73+ 88+ 96+74+67+72) = 80.7 7</td></tr>
</table>

• Indicate the advantages and disadvantages of using the mean to measure central tendency. Advantages are that the mean includes every value in the data set as part of the calculation. The disadvantage is that the mean can be influenced by outliers.
• Explain that outliers are numbers in a data set that are significantly different from the other numbers. When you see these numbers they almost look like there may have been a mistake in the data collection/data entry process. Present a data set with an example of an outlier. This outlier really impacts the measure of central tendency (such as the mean). It brings the mean down drastically and not realistically telling the whole picture of the data.

Phase / Time / Materials	Instructional Sequence

Attendance out of 100 days	100; 95; 99; 80; 82; 83; 10
Outlier:	**10**

6. [SLIDE 8]: MEDIAN
   - *"The median is the middle value in a group of numbers. If you look at this data set above, the number 10 is much smaller than the other numbers. If we did the mean, this number would skew the average of this group. So we use the median instead."*
   - To compute the median when your sample has an odd number of data points, you follow the easy steps below:

Example:	Time on Task
Minutes of Instruction in a 60-minute class:	42, 15, 30, 20, 33, 45, 50
Arrange the number in ascending order	15, 20, 30, 33, 42, 45, 50
Median (middle number):	15, 20, 30, **33**, 42, 45, 50

   - To compute the median when your sample has an even number of data points, you follow the steps below:

Example:	Time on Task
Minutes of Instruction in a 60-minute claass:	42, 15, 30, 20, 33, 45, 50
Arrange the number in ascending order	15, 20, 30, 33, 42, 45, 50
Median (middle number):	15, 20, 30, 33, 42, 45
Take the average of the two middle numbers $= \frac{1}{2}(n+1)$	$\frac{(30+33)}{2} = 31.5$

Phase / Time / Materials	Instructional Sequence

	• *The median is often used to give a better picture when you have a few extreme values in your data set.*
	
	     Note: If you are having trouble with explaining the mean and media, you can click on the link below. "Kahn Academy" is a great online forum that uses video and presentations to explain the most basic and the most difficult math and statistics concepts. In the video we are about to watch, we will learn about "mean, median, mode" (10 minutes):
	
	 • Lecturette: http://www.youtube.com/watch?v=uhxtUt_-GyM
	
	 • Example: https://www.khanacademy.org/math/probability/descriptive-statistics/central_tendency/v/mean-median-and-mode
	
	 7. [SLIDE X]: N=
	
	 • *"This represents the total number of respondents or participants. By listing the N, you can make a better comparison of the percentage of respondents who said the changes were better. You need to always keep track of your N, especially when reporting out frequencies."*
	
	     Note:
	
	     All: N= is the total number of participants [say your baseline, the community]. For Volunteers, their baseline is N or the total count of people who participated.
	
	     If there is only one sample, the letter "N" is used to designate the sample size. If samples are taken from each of "a" populations, then the small letter "n" is used to designate size of the sample from each population. The total number of subjects sampled would still be indicated by N.
	
	 8. [SLIDE 10]: FREQUENCIES
	
	 • *"There are two types of frequencies:*
	      • *"uses the count or the N=*
	      • *"uses the N= to get a percentage*
	
	 • *"Use the first method when your N is less than 25. Use the percentage when your N is 25 or more.*
	
	 • *"To get the percentage: Take the number of people who responded a specific way or did a specific thing and divide that by the total number of people you surveyed or who took the training."*

Phase / Time / Materials	Instructional Sequence

Practice 1
 	
30 minutes
 	
Trainer Material 1: Session 10 PowerPoint
 	
Handout 1: Data Set of Time on Task
	Mean and Median
	Participants work with a data set to understand mean and median.
	
	1. [SLIDE 11]: Explain to participants that they will practice calculating the mean, media, and mode of a variety of a complex data set. Ask them to describe for each data set what the best measure of central tendency will be (mean or median). Explain to participants that they will need to answer the following questions:
	    • Which measure of central tendency is most appropriate for each data set? Why?
	    • What does the result tell us about the data?
	    • How would you show these scores?
	    • How would you present these scores?
	    • What should the next steps be?
	
	2. Participants work with a partner to compute and analyze the data set.
	3. Invite pairs to report back. The participants should identify the following items. Say or paraphrase:
	    • Answers: Mean: 34.4 minutes of instruction; Median: 35 minutes of instruction; Relative Frequencies: <20 minutes or less of instruction = 22 percent of classes observed; 20-40 minutes = 50 percent of classes observed; 40-60 minutes = 28 percent of classes observed.
	    • *Teacher A is the outlier. Either the parent did not calculate the minutes well or the teacher is not teaching at all. There needs to be further data collection to see if students are learning, as well as to observe Teacher A's performance.*
	    • *Because of Teacher A, it may be better to use the median as the measure of central tendency. Teacher A's time on task brings the mean down by almost 2.5 minutes.*
	    • *However, the median does highlight that only 35 out of 60 minutes are allotted to actively teaching children during the last class of the day.*
	    • *Next steps could include: Encouraging teachers to actively teach and interviewing teachers to better understand why they are losing about 25 minutes of instruction time during the last class of each day. It could also include the head*

Phase / Time / Materials	Instructional Sequence
	teacher providing teachers with in-service professional development of how to get children learning actively in pairs, as well as teachers giving written activities where they can help students while they work individually (this is also considered direct individualized instruction). • *Our data DOES NOT tell us about why Teacher A has low time on task. It also does not tell us why other teachers usually teach 35 out of the 60 required minutes per class. It does not indicate to us how teachers are using their time and what they are doing in class.* • Ask participants: "*Is there other information that the data does not tell us but that might be good to know?*" • "*Let's calculate the relative frequencies together. This gives us an idea of a range of different instruction times so we can start to talk about what needs to improve.*" 4. Ask participants: • "*Do you use mean and median in your classrooms?* • "*Do you report out on test scores, or other quantitative school data, using these analyses?* • "*Do you use technology to do this?* • "*How might you use it in the future?*"
Information 2 20 minutes Trainer Material 1: Session 10 PowerPoint	**Using Graphs** Participants learn about the formats and uses of different types of graphs. 1. [SLIDE 12]: Before you begin to produce reports, presentations, or other methods of sharing information, you need to consider who your audience is and how you can best make your data meaningful and useful to them. In education, the main stakeholders usually include local, regional, and national officials in and outside education, school personnel like teachers and principals, communities, parents, students, and NGOs. Different audiences use and understand information differently. This is why it is also good to present data in **multiple** formats: descriptive, quantitative, and graphic.

Phase / Time / Materials	Instructional Sequence
	• [SLIDE 13]: A **line graph**, at its simplest, is a type of graph or diagram that shows a line joining several points, or a line that shows the best possible relationship between the points. They are good at showing specific values of data, meaning that given one variable the other can easily be determined. They show trends in data clearly, meaning that they visibly show how one variable is affected by the other as it increases or decreases. They enable the viewer to make predictions about the results of data not yet recorded. As they show trends over time, they are very useful for monitoring reports. • Explain/Define X-Axis: The horizontal line on a graph. Usually the variables cannot be changed (i.e., Year, Language). This is also known as the "dependent variable." • Explain/Define Y-Axis: The vertical line on a graph. Usually these are the findings or variables that do change (i.e., percentages, averages, scores, etc.). This is also known as the dependent variable. • [SLIDE 14]: **A column/bar graph** illustrates numerical values with horizontal columns. They are effective for showing values that are categorized by two separate characteristics, such as year and sector. A column graph is a good method of representation if you want to illustrate a set of data that is as easy to understand and simple to read. • Ask: What are the labels for the X-axis? Y-axis? Do you think you would use a column/bar graph? • [SLIDE 15]: **A pie chart** is a circular chart that is split into segments to show percentages or the relative contributions of categories of data. A pie chart gives an immediate visual idea of the relative sizes of the shares of a whole. • Ask when you would use a pie chart.

Phase / Time / Materials	Instructional Sequence
Application & Practice 2 30 minutes Handout 3: CD3M Process Cycle – STEP 4 – DATA ANALYSIS	**Using Graphs to Represent Time-on-Task Data** Participants will use the time on task case study findings and represent them on a line graph, bar graph, or pie chart. 1. Review the time-on-task findings from the Practice 1 session. Indicate to participants that it is possible to represent the relative frequencies, for example, in different graph forms. 2. Ask participants to work in pairs where they will try to represent the relative frequencies via a line graph, a column graph, and a pie chart. 3. Participants work together to graph the findings. They should post their graphs on flip chart paper, making sure to label the horizontal and vertical axes for the line and column/bar graphs, as well as making a legend for the pie chart. 4. Come back to the large group. Ask participants to share their graphs. 5. Distribute Handout 3 – CD3M Process Cycle – STEP 4 – Data Analysis. Ask individuals to fill out this form. 6. After 5 minutes, come back to the group and share findings.
Assessment	**Learning Objective 1:** Addressed and achieved in the Information and Practice 1 sections **Learning Objective 2:** Practiced in the Practice 1 and Application sections **Learning Objective 3:** Practiced in the Information 2 and Practice 2/Application sections
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Handout 1: Mean, Median, Mode – Time on Task Data Set

With the following data sets:
- Calculate the mean, median, mode
- Indicate the results that best measure the central tendency
- STEP 4 CD3M: What do the results tell us?
- STEP 5 CD3M: What should the next steps be?

Parents in a community were worried that their children were not learning. They noticed that their children were frequently coming home early from school. They wondered if this was because their children were misbehaving or if the teachers were letting them go early. One parent approached the head teacher, asking her what to do. The head teacher suggested that a bunch of parents come to school each day and observe teachers and the amount of time that they commit to instructing their children each day. They used a simple tool to calculate the amount of time connected to instruction. They sat in on the final class of each day for one week. During the instruction, when the teacher did not do something related to instruction, they would subtract the timing from the allotted 60 minutes of instruction.

-Data Set: After observing over 18 classes, they indicated the following data points:

Teacher	Time on Task	1) Calculate the Mean	2) Identify the Median	Calculate the relative frequencies
A	5			N=_____ observations
B	15			
C	35			
D	45			% of observations that recorded <20 minutes instruction
E	35			
F	35			
A	6			
B	55			
C	55			% of observations that recorded between 20 and 40 minutes instruction
D	51			
E	35			
F	35			
A	10			
B	60			
C	35			% of observations the recorded between 40 and 60 minutes instruction
D	37			
E	35			
F	36			

-Step 4: What does the measure of central tendency tell us? What doesn't it tell us?

-Step 5: As parents, what should we do with this information?

CD3M – STEP 4 – What does my data say?
What are different ideas and concepts that arise from the data (either via running descriptive statistics, such as mean, median and relative frequencies, or from coding)
What are major themes? How are they related? What does this mean?
What did I learn? How do I know? (This is a summary of what your data is telling you)

Session 11: Qualitative and Mixed Method Analysis (What Does Our Data Tell Us about the Problem?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

*Terminal Learning
Objective:*   Adapt CD3M data collection tools to local needs and use them to
                              conduct the CD3M process cycle

Session Rationale: Qualitative data analysis requires participants to read through the
                              data that they have and find commonalities/differences (known as
                              coding) in order to explain what they mean (known as findings). It is
                              important to practice coding techniques in order to create themes and
                              make meaning from qualitative data. Qualitative analysis can support
                              quantitative analysis (known as mixed methods analysis).

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                              monitoring and evaluation and an understanding of the sector that is
                              being featured in the workshop. Workshop materials are designed for
                              the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation
                              Session 5 - Quantitative Methods
                              Session 6 - Qualitative and Mixed Methods

Version: October 2013

Contributing Posts: PC/Guatemala
                              PC/Philippines

Session: Qualitative and Mixed Methods Anaylsis (What Does Our Data Tell Us about the Problem?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning qualitative and mixed-methods analysis and tools.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
*   **Equipment**
    1. Computer, screen, projector, and electricity
    2. Sticky notes
    3. Flip chart
    4. Markers
    5. Tape
*   **Handouts**
    Handout 1: Qualitative Data Analysis Terms
    Handout 2: CD3M Cycle – STEP 4 – DATA ANALYSIS
    Handout 3: Qualitative Data Case Study Exercise
    Handout 4: Time of Task Qualitative Data Example
*   **Trainer Materials**
    Trainer Material 1:   Session 11 PowerPoint Guided Coding Case Study

Session Learning Objectives:
Participants will
1. Define basic qualitative data analysis terms (coding, theme generation, meaning making) as part of STEP 4 in the CD3M process cycle.
2. Explain and demonstrate how qualitative data are coded.
3. Articulate how mixed methods data analyses (qualitative and quantitative data analysis) complement each other in order to answer questions such as "what," "why," and "how."

Phase / Time / Materials	Instructional Sequence
Motivation 20 minutes Trainer Material 1: Session 11 PowerPoint Sticky notes Flip chart Markers Tape	**Categorizing and Sorting** Participants will partake in a practical activity to sort and match, which is a preliminary technique in qualitative data analysis coding. 1. Ask participants to think about the advantages of generating school based data (whether quantitative or qualitative). 2. Distribute a small amount of sticky notes to each participant and tell everyone to write EACH ADVANTAGE on one sticky note. 3. Ask participants to share each sticky note. 4. Place their sticky notes on a two-page flip chart. Each time a participant presents his/her sticky notes, try to match ideas and group them together in categories on the flip chart. 5. At the end of the activity, review the different categories that you have come up with. Draw a circle around each category and ask participants to come up with a label for each set of ideas. 6. Explain that this exercise of matching, sorting, and categorizing is a skill set that participants will use when they analyze qualitative data. 7. Review once again the first three steps of the CD3M cycle. 8. [SLIDE 2]: Next present the fourth step in the CD3M cycle. 9. Say or paraphrase: "*Once you have collected all of your qualitative data, the next step is the 'data analysis' phase. Qualitative data analysis refers to the process of looking thoroughly at your data.*"

Phase / Time / Materials	Instructional Sequence

Information
 	
25 minutes
 	
Trainer Material 1: Session 11 PowerPoint
 	
Handout 1: Qualitative Data Analysis Terms
	Introduction to Qualitative Analysis
	Participants learn about and apply simple qualitative analysis concepts (data coding, theme generation, meaning making)
	
	1. Review with participants what qualitative data is. Ask them to give you some examples of qualitative data that they plan to collect to respond to the problem that they identified at the beginning of the CD3M process cycle.
	    Note: Possible answers include: Narratives, interviews, stories, text documents.
	    Answers should NOT BE NUMBERS.
	
	2. [SLIDE 3]: Explain the steps to qualitative data analysis. Say or paraphrase, *"Before you starting reading and looking through your qualitative data, you need to make sure you have all the data in front of you. Make sure nothing is missing. Did you enter in all of your notes? Is there anything missing? There are three steps to coding:*
	    • *"FIRST: Coding*
	    • *"SECOND: Theme generation from those codes*
	    "THIRD: Make meaning of your codes and analyze the data.Let's look at these in detail."
	
	3. Distribute Handout 1 – Qualitative Data Analysis Terms. Ask participants to read.
	
	4. [SLIDE 4]: *"In general, a code is a word or short phrase that summarizes the statement or story in your data."*
	
	5. [SLIDE 4]: Explain coding: *"CODING refers to the process of labeling the data after reading and re-reading the data. There are two types of coding techniques: 1) Inductive coding is where you read the data, re-read, and then highlight key words and other ideas that continuously pop up. 2) Deductive coding is where the researchers use preset categories, terms, concepts, that link to research activities and outcomes, people's values, and types of changes."*
	
	6. Present Training Material 2, a very short set of qualitative analysis guided demonstration set of data points (write these out on a flip chart as you will identify the codes directly). Ask participants to think about the codes. Invite them to share their code ideas and write them down on flip chart paper.
	
	7. [SLIDE 5]: Present the codes that you have established from the three different data points. Remind participants that this is credible data because we are triangulating the data.

Phase / Time / Materials	Instructional Sequence
	8. [SLIDE 6]: "*Generating themes is the process by which you place codes into patterns. These are bigger categories or concepts; time periods; or types of outcomes, such as intended or unintended changes. Create and label each theme. Once again, a theme could be an event, an outcome, a process, an experience, a cause: it will depend on what your deductive codes say. As you group the codes, you can see patterns in the stories that lead to meanings or findings and possible future action.*"
	9. Ask participants to think back to the codes determined for the guided qualitative analysis demonstration. Ask them to think about themes that come from the codes. Invite participants to share their theme ideas and write them on flip chart paper.
	10. [SLIDE 7]: Present the themes that you have established from the three different data points. Remind participants that this is credible data because we are triangulating the data. **Note:** As a reminder, triangulation is the process of using more than two qualitative research tools in order to check and verify results.
	11. Present the CD3M – Step 4 – Data analysis handout. Indicate that the questions on this handout help us make meaning of the data. Ask participants to read over this handout.
	12. Ask participants to fill this handout out for the guided qualitative data analysis example
	13. [SLIDE 8]: Present your meaning making analysis. Say or paraphrase the following: "*Parents, teachers, and the head teacher all indicated that there is a lock of classroom management, which results in students being disinterested and behavioral problems in class. When students are engaged, they are excited to learn and the behavior issues subside, but they regularly come back to the surface again. This lack of classroom management, which is a theme that is derived from the research, seems to be directly related to teachers' lack of skills to provide better and more student-centered learning opportunities for their students. As a result, teachers get de-motivated and discouraged. The data tells us that teachers are lacking classroom management skills, which directly results in difficulties in managing their classrooms and students either being bored or acting out in class.*"

Phase / Time / Materials	Instructional Sequence

Practice
 	
30 minutes
 	
Trainer Material 1: Session 11 PowerPoint
 	
Handout 3: Qualitative Data Analysis Exercise
	Case Study – Coding, Theme Generation, & Meaning Making
	Participants practice data coding, generating themes and making meaning from the qualitative data.
	
	1. Give each participant a data set on Handout 2 with the qualitative data related to a case study on student substance abuse at school.
	2. Have them read responses to check for comprehension. Answer any questions they might have.
	3. Invite participants to work in groups of two to practice coding, theme generation, and meaning making. Participants code data, create themes, and then make meaning of the data.
	4. The groups of two pair up with another group to present their codes, themes, and data analysis.
	5. [SLIDE 9]: Present your codes, themes, and data analysis on the PowerPoint.
	    • *Codes to indicate:*
	       1) *Students showing up late*
	       2) *Students bullying other students*
	       3) *Students sexually harassing girls*
	       4) *Classroom interruptions*
	       5) *Fighting at school*
	       6) *Unsure about how to address the problem*
	    • *Themes to indicate:*
	       1) *Instruction disruptions*
	       2) *Intimidation*
	       3) *Negative school climate*
	    • *Data Analysis: The substance abuse problem among a small minority of students has negative impacts on these students, other students, and the overall learning environment. This is highlighted by other students being made fun of, girls feeling unsafe at the school and while walking home from school at the end of the day, as well as frequent fights that happen between these schools. In class, it is noted that these students interrupt instruction, make fun of others, do not turn in their work, and perform negatively in class. The school administration needs to approach these students and their parents in order to explain the issues, as well as describe how they can help rehabilitate these students.*

Phase / Time / Materials	Instructional Sequence
Information 2 10 minutes Trainer Material 1: Session 11 PowerPoint	**Introduction to Mixed-Methods Data Analysis** Participants are introduced to mixed-methods. 1. Ask the following questions and write up participants' answers on flip chart paper: • What is quantitative data? • What are some methods we can use to collect quantitative data? • What are some measures of central tendency? 2. [SLIDE 2]: Review the concept of mixed methods data collection: *Mixed methods data collections combines qualitative and quantitative data collection. Mixed methods help us understand the "what" from quantitative analysis, as well as the "how" and "why" from qualitative data. It is usually helpful to run quantitative calculations first and then code, generate themes, and make meaning of the qualitative data. The final process combines the qualitative and quantitative data to make connections to tell more of a complete picture of the research question/problem posed.*
Application 40 minutes Trainer Material 1: Session 11 PowerPoint Handout 4: Time on Task Qualitative Data Example Handout 2: CD3M Process Cycle – Step 4 – Data Analysis	**Mixed Methods Application Activity** Participants refer to quantitative and qualitative case study analyses to answer questions, such as "what," "why," and "how." 1. Remind participants that in the previous session we were able to analyze data for the time-on-task case study. We calculated the mean and median instructional time for the last period of classes for a full week. We recognized that there was one teacher who had very low time on task. We also indicated that because of this outlier, we decided that the median time on task data point would be a better measure of central tendency. 2. [SLIDE 11]: Present the mixed-methods approach to better understand the "how" and "why" of the time-on-task quantitative analysis, which was only able to answer the "what." Distribute Handout 4, which is a compilation of qualitative data that result from conducting a round of qualitative observations, as well as interviews with teachers.

Phase / Time / Materials	Instructional Sequence

	Indicate to participants that they need to code this data, generate themes, and analyze ALL the data (quantitative and qualitative) together.
	
	3. Also distribute another copy of the CD3M Step 4 – Data Analysis handout and inform groups to refer back to the same handout that they filled in during the quantitative data session. Participants work through the data.
	
	4. After collecting the data, the participants should code the responses and present their findings to the whole group.
	
	5. [SLIDE 12]: Present your codes, themes, and data analysis on the PowerPoint slides:
	   • *CODES: Lack of activities, especially assessment activities; Whole class teacher-centered teaching; Students sleeping; Angered/frustrated teachers; Not enough text books; Students don't have copybooks and pencils.*
	   • *THEMES: Lack of lesson planning; Restless students; Lack of materials.*
	   • *MEANING: The median of 35 minutes of instructional time-on-task at the school seem to be related to teachers lack of lesson planning, students being easily distracted and restless, as well as a lack of instructional and learning materials. Most teachers have a general lesson plan, but all but one had specific activities for students to practice and then assess concepts learned during the learning phase of the lesson plan. Also, in the learning phase, the instruction mostly seemed more like teacher-centered direct instruction of students. In the one outlier class, the teacher wrote on the board, spoke quickly, and then had the students copy what was on the board. This method resulted in very minimal time on task. In other classes, teachers used some student-centered techniques, but students got restless during the whole-class component of the lesson. Teachers expressed difficulties that they encounter to provide enough instruction due to the lack of materials, such as enough text books for students, as well as students not having their own copybooks or pencils. As a result, they indicated that they would let students leave early once the instructional component of the lesson was completed.*

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Achieved in the Information 1 section **Learning Objective 2:** Achieved in the Practice 1 section **Learning Objective 3:** Achieved in the Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

The Peace Corps. (2012). How We Analyze Data – MRE Global Core Session. Washington, D.C.: OPATS, Peace Corps Headquarters.

Handout 1: Qualitative Data Analysis Terms and Process

The most common qualitative data analysis terms and steps are found below:

Step 1: **CODING**	CODE: A word or short phrase that summarizes an idea, a statement, or a story in your data In general, there are two types of coding strategies: 1) Inductive Coding: A type of coding of qualitative data in which you start your analysis without any predetermined idea about which codes you will use in the process. You read, re-read, and then highlight/underline/indicate key words, key ideas, and key statements from the data. 2) Deductive Coding: A type of coding of qualitative data in which you start your analysis with codes already in mind, based on previous research, a theoretical framework, or your own experience. You create code based on preset categories, terms, and concepts that link to project activities, outcomes.
Step 2: **THEME** **GENERATION**	THEME GENERATION: Grouping the codes into patterns, broad categories, time periods, or changes Steps to theme the codes: 1) Review your codes 2) Start placing the codes in categories that explain events, decisions, processes experiences, outcomes, causes, etc. 3) Give the category a label (which is called your theme)
Step 3: **MEANING** **MAKING (DATA** **ANALYSIS)**	MEANING MAKING: Tells the story of how the codes and themes interact together, as well as answers the preliminary question posed in the first step of the research phase.

Handout 2: CD3M Cycle – Step 4 – Data Analysis

CD3M – STEP 4 – What does my data say?
What are different ideas and concepts that arise from the data (either via running descriptive statistics, such as mean, median and relative frequencies, or from coding)
What are major themes? How are they related? What does this mean?
What did I learn? How do I know? (This is a summary of what your data is telling you)

Handout 3: Qualitative Data Exercise

During a staff meeting, a PCV and her teacher-colleagues wanted to discuss the challenges to students coming to school under the influence of drugs. They talked about the challenges and struggles that this caused them in class and that it was having a negative impact on other students. Everyone decided that the PCV would conduct interviews, focus groups, and make observations.

The PCV asked simple questions to each focus group: "Can you tell us more about the substance abuse problem at the school? What are the impacts on you? What should the school do to fix this problem?" Responses from each data collection method are found below (please note that these are their responses, whether or not you agree with them):

Interviews between students and their lead teachers are becoming more frequent concerning a certain group of children who continue to threaten to hurt classmates if they "tell on" any member of their group. Children have also reported being laughed at after speaking in the classroom, making them feel uncomfortable sharing with the class and being tripped and/or seeing a peer being tripped outside of the classroom.

A focus group composed of the girls in Miss Kyle's classroom have mentioned to Miss Kyle and their parents that they don't feel safe walking home after school. A few girls have indicated that a group of boys follows close behind them, calling out their names, making suggestive gestures, and when no adult is present – attempting to touch them inappropriately.

The daily attendance documents recorded by Miss Kyle show that Davi, Lucas, Enzo, Vitor, Gariel, Raul, and Alexandre have arrived 30 minutes late to school on an average of three days per week. Miss Kyle has also observed that the students are very noisy when they arrive to class and they come as a group – however, they are not brothers.

Behavioral reports written by multiple teachers in the school continue to be submitted to the school administrators. These documented observations have included the names of 12 out of 180 children at the school; these 12 children have had an average of five behavioral reports written about their actions. The reports indicate the presence of physical force occurring at the end of the school day. These students are beginning fights among one another and with their classmates.

Miss Kyle has written at least one behavioral report for Alexandre, Raul, Luca, Enzo, and Davi per week, since the school year began. These documented observations state the student's inappropriate behavior, the situation in which it occurred, and how the behavior was reprimanded. Each report is written upon observation; the student has disrupted class instruction and has refused to "take a break" after being instructed to do so – these situations result in class instruction needing to be stopped all together.

Miss Kyle has been approached by students and parents concerning uncomfortable situations that continue to arise in and around her classroom. Teachers have noted a decrease in documented test scores and of observed class participation rates since this matter began. Other teachers in the school have observed similar situations. Teachers have talked between themselves, and held interviews with students and concerned parents about what they have noticed and what can be done to make sure that all children are safe and able to learn. However, no positive changes in behavior or affect have been noted.

1) Group the qualitative data into **codes:**

CODE	DATA

2) Group the codes into themes:

THEMES	CODES

3) What is your **Analysis**?

Handout 4: Time on Task – Qualitative Data Set

During the quantitative observations in the classroom, parents calculated the time-on-task that teachers dedicated to instruction during the final class of each school day. After compiling the quantitative data, parents and the head teachers were able to calculate the:

Mean: 34.4 minutes of instruction
Median: 35 minutes of instruction
Relative Frequencies: <20 minutes or less of instruction = 22 percent of classes observed
20-40 minutes = 50 percent of classes observed
40-60 minutes =28 percent of classes observed

Parents decided to collect qualitative data in order to better understand why and how there was such a large spread of instructional time.

Multiple observations from parents who were sitting in classrooms and watching during instructional time noted that at least one child had his head on his desk and appeared to be sleeping. Whereas one child might have been sleeping, parents reported that other children looked sleepy and were disengaged in classroom activities completely.

Parents and school administers held interviews with five teachers concerning short instructional time on task performances. Teachers stated that while they do try to make the best of this time by preparing interesting lesson plans, there are not enough textbooks in the classroom. Teachers added that while it would be appropriate for children to share a textbook between two students, currently there are only enough textbooks for groups of children to read from. Teachers associate this book to student ratio to children's disinterest in the activity as it is difficult for them to read and truly focus on the material.

In one particular observation, a parent witnessed the teacher spend the majority of the instructional time with her back to the class as she wrote information on the blackboard. She spoke very quickly to the children and had children copy the material into their copybooks. Other instructional observations showed that while it appeared that the lesson had been planned out, the teacher primarily recited information and children were rarely invited to share their thinking with classmates or come up to the board to practice new skills. In these scenarios, children seemed fidgety, playing with their clothes and gazing around the classroom.

School administrators interviewed each of the teachers in the school to gain insight about why children had been leaving school early. In each interview the teacher seemed visible angry about the matter, saying that by the end of the day the children have lost interest in lessons and that children need a break (besides lunch) from academic work during the day to give them the chance to play. Some teachers added that they allow children to leave early once they have completed a portion of the lesson, that it is a waste of time to force children to focus when they become so antsy; children can't learn in that type of situation and it causes teachers to become increasingly frustrated.

Parents who sat in the classrooms and made observations each day began noting the lack of interesting activities for children to partake in during instructional time. Parents wrote that teachers often spent this time reading stories to the children. Parents noted that teachers did not show the pictures as they read, teachers strictly read the story without stopping to make sure that children understood what was happening in the story or engaging children in any way. At the end of the tale teachers did not take the time to: review the major elements of the story with the children, ask children what they liked about the story, or provide an additional activity to engage the children and demonstrate their understanding of the material.

Interviews between fellow teachers and school administers reaffirmed the fact that there is a lack of materials in almost every classroom of the school. Teachers stated that their lessons were suffering as children do not have copybooks or pencils to use during the day. During these interviews, five teachers informed school administrators that they are trying other techniques, including the use of pebbles, sand, and other natural resources to engage children. Other teachers have brought their own material from home for instructional use, but they still cannot provide the proper amount of material that would be necessary for whole class use.

1) Group the qualitative data into **codes:**

CODE	DATA

2) Group the codes into themes:

THEMES	CODES

3) What is your **Analysis**?

Trainer Material 2: Guided Qualitative Data Analsis–Data Set

Read the following scenario to participants:

The head teacher at Kolwezi school in a small district in northern Zambia noticed that his teachers were lacking motivation. They seem to come to school disinterested and not excited to teach. Over the course of two weeks, the head teacher was able to sit in on six teachers' classes and conduct six 30-minute interviews with his staff. He also conducted a five-person focus group to talk to parents about what they have noticed about teachers. Below is a set of some of the qualitative data points.

Post the following qualitative data on a flip chart:

> Observation Data:
> -Teachers seemed frustrated when they tried to control their classrooms. The strategies that they took were effective, but eventually students would resume talking and not participate in the lesson.
> -Most teachers talked a lot to the students.
> -Most teachers' style of instruction seemed to be call and response. The teachers asked questions to the whole class. He or she would choose one student to answer the question.

> Interview Data:
> -"My class is out of control. I try hard to manage discipline, but I can't seem to get students to listen."
> -"I don't know why only some students participate in the lesson. I want all students to participate."
> -"My favorite students are those that participate a lot in class. My least favorite students are those that disrupt my class."

> Focus Group Data:
> -"My children tell me that class is boring and the teacher is too mean to them."
> -"I've seen my child very excited about school when she is encouraged to participate in class and has an assignment that she can do on her own."
> -"Last I heard from other parents that Teacher X was so unmotivated to teach that he started letting students out of class 30 minutes early. I don't blame him, though, because some of the children in his class are hard to deal with."

CODES, THEMES, MEANING:
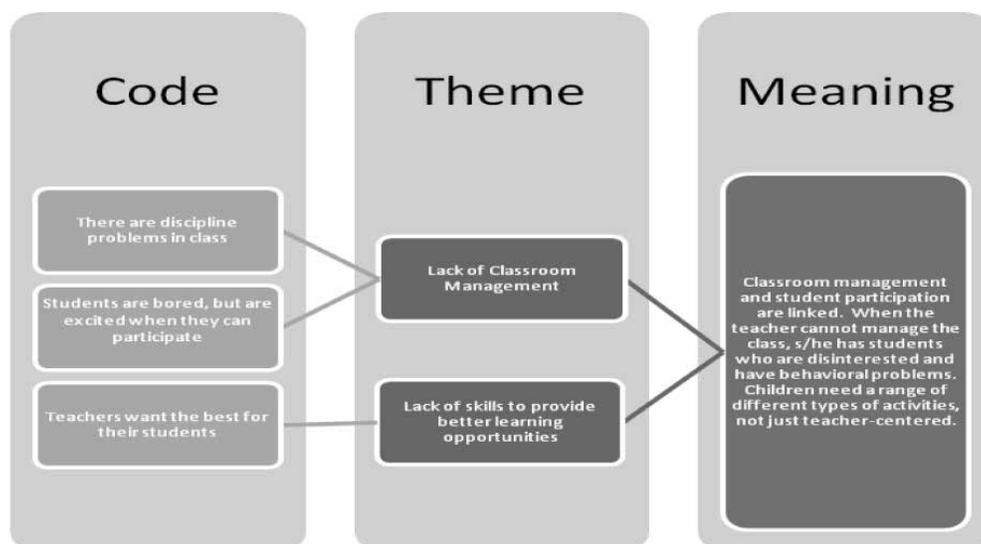
Session 12: Accessible ICT Data Collection and Analysis Tools

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: Using technology, like Excel, helps educators focus on creating graphic
                              elements to help describe data. Having a picture of the data can help
                              community members understand and remember it.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                              monitoring and evaluation and an understanding of the sector that is
                              being featured in the workshop. Workshop materials are designed for
                              the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation
                              Session 5 - Quantitative Methods
                              Session 6 - Qualitative and Mixed Methods
                              Session 10 - Quantitative Analysis
                              Session 11 - Qualitative and Mixed Methods Analysis

Version: October 2013

Contributing Posts: Guatemala
                              Philippines

Session: Accessible ICT Data Collection and Analysis Tools (Excel)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Contact participants and ask them to bring laptops, if they have one, with the program Excel.
2. If participants do not have laptops, rent or acquire enough laptops where there will be, at most, three people per laptop.
3. Review Handout1: Peace Corps Excel Manual for PCVs. Though this tool will not be used directly, it will be given to participants so they can have a resource guide to create tables and graphs using this piece of software.
4. Much of this session has been directly adapted from the following online Education Survey Course – Module 9 (created by RTI International and USAID): https://www.eddataglobal.org/courses/survey/index.cfm. Launch the flash module to update yourself on how to create line graphs, column/bar graphs, and pie charts.
5. Watch the videos and practice narrating them using the scripts presented below in the Information section.
6. Review the PowerPoint slides with any co-facilitators and discuss their respective roles in the training.
7. Review the exercises and the data set. Anticipate any questions or problems participants might have during their data analysis session and prepare for them
8. Transfer Handout 2 – Exercise to Create Line Graphs, Bar Graphs, Pie Charts to laptops
9. Transfer Trainer Materials 2 (Video – Line Graphs), 3 (Video – Column Graphs), 4(Video – Pie Chart) to laptops.
10. Create an account for E-EGRA (http://eegra.edc.org/en/login/?action=register)
11. Download E-EGRA (Excel file and sounds)
12. Upload E-EGRA Excel file and sounds to the laptops that participants will use.
13. Watch the step-by-step E-EGRA Video (http://www.youtube.com/watch?v=XWyT_76Ebh4&feature=player_embedded)
14. Create the E-EGRA student worksheets/stimuli (based on the E-EGRA sample Excel file)

Materials:
- **Equipment**
    1. Computer, projector, screen
    2. Laptops (one laptop for every two participants)
    3. Internet
    4. Speakers for sound
    5. Flip charts
    6. Markers
    7. Tape
    8. Sticky notes
- **Handouts**
  Handout 1: Peace Corps Excel Manual for PCVs
  Handout 2: Exercise to Create Line Graphs, Bar Graphs, Pie Charts
  Handout 3: Introduction to E-EGRA
  Handout 4: E-EGRA Training Sheet
  Handout 5: E-EGRA Excel Document (see separate file)
- **Trainer Materials**
  Trainer Material 1: Session 12 PowerPoint
  Trainer Material 2: Video – Line Graphs
  Trainer Material 3: Video – Colum Graphs
  Trainer Material 4: Video – Pie Chart
  Trainer Material 5: PC Excel Manual
  Trainer Material 6: E-EGRA Demonstration Video

Phase / Time / Materials	Instructional Sequence
Motivation 15 minutes Sticky notes Tape Flip chart Trainer Material 1: Session 12 PowerPoint	**Introduction to Excel** Participants indicate how comfortable they are with using Excel. 1. Explain to participants that you would first like to gauge participants' level of comfort using Excel. Pass out a sticky note to each participant. Ask them to write what they know how to do in Excel. 2. Participants give you their completed sticky notes. 3. Your read the answers in a random order and place the sticky notes into the following categories: 1) Novice; 2) Intermediate; 3) Advanced. 4. Explain that during the Excel exercises you will want participants to work in groups where there is one novice, one intermediate, and one advanced Excel user so they can help one another. 5. Introduce the objectives and topics for the Simple ICT Assessment Tools (Excel). 6. [SLIDE 2]: Say or paraphrase: "*Excel is a spreadsheet application that features tools where you can calculate and graph data sets. It can display data in the form of line graphs, column graphs, charts, and other visual representations. It's a useful tool to input, store, and manage data.*"

Phase / Time / Materials	Instructional Sequence

Information 1
 	
30 minutes
 	
Trainer Material 1: Session 12 PowerPoint
 	
Trainer Material 2: Video – Line Graphs
 	
Trainer Material 3: Video – Bar Graphs
 	
Trainer Material 4: Video – Pie Charts
	Using Excel to Represent Data Findings
	Participants will learn how represent data with line graphs, column/bar graphs, and pie charts using Excel.
	
	1. Indicate that we will review different types of graphs, but that this time we will learn how to create them in the Excel software program.
	2. Line Graphs
	   • [SLIDE 3]: *Line Graphs: What is a line graph?* (Have participants give answers and draw an example)
	   • *A line graph is a line joining several points, or a line that shows the best possible relationship between the points. Sometimes the line will go through all of the points and sometimes it will show the best possible fit. Line graphs compare two variables. Each variable is plotted along an axis. A line graph has a vertical axis and a horizontal axis. They are best to show changes in a variable over time (year, age, grade in school, etc.)*
	   • [SLIDE 4]: *On this line graph, we see the percentage of second-grade girls and boys reading at least 60 correct words per minute per year. What does this graph tell us about second-grade children's reading abilities? Answer: Boys and girls increased their reading fluency each year.*

Phase / Time / Materials	Instructional Sequence
	3. Creating a Line Graph with Excel – Play Trainer Material 2: Video – Line Graphs and during each step, narrate the text below: • *Open Workbook. There are three exercises where you have data that shows the correct words per minute that girls and boys age 5 and over can read. We will use this data to create line graphs that show the percentage of girls and boys over 5 who can read at least 60 correct words per minute. Let us look at Exercise 9.1.* • *Click on the Chart Wizard icon located above the worksheet.* • *A new Chart Wizard window opens that shows you "Step 1 of 4 - Chart Type." Here you need to select the type of chart that you will be creating. On the left of this window is a list of chart options. Select "Line" as the "chart type" option. Then click "NEXT" at the bottom of this window.* • *"Step 2 of 4 – Select source data" window opens up with two tab options – "Data range" and "Series." By default, the "Data range" tab first opens up.* • *In the middle of this window, you will see an empty row box titled "Data Range." Make sure that this box is ALWAYS empty at this step.* • *Go back to your worksheet and click on the data that you want to select. So in Exercise 1, select cells B9 through D9 down through row 14. There will be an animated moving border around the cells that you select (that is similar to when you copy cells). This selected data will now appear in the empty row box titled "Data Range" with the line graph displayed above it. You will also see the "Series in" options filled out as "Columns."* • *Click "NEXT" at the bottom of the window to go to Step 3.* • *"Step 3 of 4 – Chart Options" window opens up with six tab options, "Title," "Axes," "Gridlines," "Legend," "Data labels," and "Data table." By default, the first tab "Title" opens up. You will see three empty row boxes, one each for "Chart title," "Category (X) axis:" and "Value (Y) axis:"* • *In the "Chart title" box, type in "Percentage of second-grade girls and boys reading 60 cwpm by year."* • *In the "Category (X) axis:" box, type in "Year"* • *In the "Value (Y) axis:" box type in "Percentages"* • *Click "NEXT" at the bottom of the window to go to Step 4.*

Phase / Time / Materials	Instructional Sequence
	• *"Step 4 of 4 – Chart location" window opens up. By default, the second option, "As object in – Exercise 9.1" is automatically selected. You can select different options if you need to, but for the purposes of this exercise, you can proceed with the default option.* • *Click "FINISH" at the bottom of the window. The window closes and the created line graph appears in your worksheet. Your final graph should look like the one previously presented in this module (Page 5 of 28).* 4. Colum/Bar Graphs • [SLIDE 5]: *A Column graph is a type of presentation graphic in which numerical values are illustrated with horizontal columns. Column graphs are particularly effective for showing values that are categorized by two separate characteristics, such as year and sector. A column graph is a good method of representation if you want to illustrate a set of data in a way that is as easy to understand as it is simple to read.* • [SLIDE 6]: *You can see a column graph that shows us the average performance in reading fluency for two languages, English and Kiswahili, by school type (control and treatment).* 5. Creating a column graph with Excel, play Trainer Material 3: Video – Column Graphs and during each step narrate the text below: • *Open worksheet Column Graphs. There are three exercises where you have data that shows the fluency in Kiswahili*

Phase / Time / Materials	Instructional Sequence
	and English for control and treatment schools. Let us look at Exercise 1.
	• *Click on the Chart Wizard icon located above the worksheet.*
	• *A new Chart Wizard window opens up that shows you "Step 1 of 4 - Chart Type." Here you need to select the type of chart that you will be creating. On the left of this window is a list of chart options. Select "Column" as the "chart type" option. Then click "NEXT" at the bottom of this window.*
	• *"Step 2 of 4 – Select source data" window opens up with two tab options – "Data range" and "Series." By default, the "Data range" tab first opens up.*
	• *In the middle of this window, you will see an empty row box titled "Data Range." Make sure that this box is ALWAYS empty at this step.*
	• *Go back to your worksheet and click on the data that you want to select. So in Exercise 1, select cells B9 through D9 down through row 11. There will be an animated moving border around the cells that you select (that is similar to when you copy cells). This selected data will now appear in the empty row box titled "Data Range" with the line graph displayed above it. You will also see the "Series in" options filled out as "Rows."*
	• *Click "NEXT" at the bottom of the window to go to Step 3.*
	• *"Step 3 of 4 – Chart Options" window opens up with six tab options, "Title," "Axes," "Gridlines," "Legend," "Data labels," and "Data table." By default, the first tab "Title" opens up. You will see three empty row boxes, one each for "Chart title," "Category (X) axis:" and "Value (Y) axis:"*
	• *In the "Chart title" box, type in "Average performance in reading fluency (60 cwpm) by school type (control and treatment)."*
	• *In the "Category (X) axis:" box, type in "Language fluency."*
	• *In the "Value (Y) axis:" box type in "Averages."*
	• *Click "NEXT" at the bottom of the window to go to Step 4.*
	• *"Step 4 of 4 – Chart location" window opens up. By default, the second option, "As object in – Exercise 9.2" is automatically selected. You can select different options if you need to, but for the purposes of this exercise, you can proceed with the default option.*
	• *Click "FINISH" at the bottom of the window. The window*

Phase / Time / Materials	Instructional Sequence
	closes and the created column graph appears in your worksheet.

6. Pie Chart
   - [SLIDE 7]: *A pie chart is a circular chart (pie-shaped) that is split into segments to show percentages or the relative contributions of categories of data. A pie chart gives an immediate visual idea of the relative sizes of the shares of a whole. It is a good method of representation if you wish to compare a part of a group with the whole group.*
   - [SLIDE 8]: *In the example to the right, you can see a pie chart that shows us the percentages of languages spoken at home in Region A. Pie charts are excellent for displaying data points as a percentage of the whole. However, when several data points each amount to less than 5 percent of the pie, it becomes hard to distinguish the slices. To make smaller slices more visible in a pie chart, we can create pie of pie charts. In a Pie of Pie chart, the smaller slices get separated from the main pie chart and are displayed in an additional pie. As seen in the example on the next page, the first pie shows you percentage enrollment values for 15 Liberian counties, while the second pie shows you percentage values for those counties that had percentage values equal to or less than 2 percent.*

Percentage of Languages spoken at home in Region A

8%
16%
76%

■ English
■ Kiswahili
□ Other

7. Creating pie charts with Excel, Play Trainer Material 4: Video – Pie Charts and, during each step, narrate the text below:
   - *Open worksheet Pie Chart Exercises. There are two exercises. Exercise 1 includes data on languages spoken at home (English, Kiswahili, and other) in Regions A, B, and C; Exercise*

Phase / Time / Materials	Instructional Sequence
	2 includes data about languages spoken at home in districts Malindi and Ijara.
	• *Click on the Chart Wizard icon located above the worksheet.*
	• *A new Chart Wizard window opens up that shows you "Step 1 of 4 - Chart Type." Here you need to select the type of chart that you will be creating. On the left of this window is a list of chart options. Select "Pie" as the "chart type" option. Then click "NEXT" at the bottom of this window.*
	• *"Step 2 of 4 – Select source data" window opens up with two tab options – "Data range" and "Series." By default, the "Data range" tab opens first.*
	• *In the middle of this window, you will see an empty row box titled "Data Range." Make sure that this box is ALWAYS empty at this step.*
	• *Go back to your worksheet and click on the data that you want to select. So in Exercise 1, select cells B9 through C9, down through row 12. There will be an animated moving border around the cells that you select (that is similar to when you copy cells). This selected data will now appear in the empty row box titled "Data Range" with the line graph displayed above it. You will also see the "Series in" options filled out as "Rows."*
	• *Click "NEXT" at the bottom of the window to go to Step 3.*
	• *"Step 3 of 4 – Chart Options" window opens up with three tab options: "Titles," "Legend," and "Data labels." In the "Titles" tab, under "Chart Title" type in "Percentage of languages spoken at home in Region A." Now, go to the third tab, "Data labels." You will see a smaller box with the heading "Label contains" with four options, "Series name," ""Category name," "Value," and "Percentage."*
	• *Click the "Percentage" option for now.*
	• *Click "NEXT" at the bottom of the window to go to Step 4.*
	• *"Step 4 of 4 – Chart location" window opens up. By default, the second option, "As object in – Exercise 9.3" is automatically selected. You can select different options if you need to, but for the purposes of this exercise, you can proceed with the default option.*
	• *Click "FINISH" at the bottom of the window. The window closes and the created pie chart appears in your worksheet.*

Phase / Time / Materials	Instructional Sequence
Practice 1 20 minutes Trainer Material 1: Session 12 PowerPoint Handout 2 – Exercise to Create Line Graphs, Bar Graphs, Pie Charts Trainer Material 2: Video – Line Graphs Trainer Material 3: Video – Bar Graphs Trainer Material 4: Video – Pie Charts	**Creating Line Graphs, Bar Graphs, Pie Charts to Represent Data** Participants use a data set to create line graphs, bar/column graphs, and pie charts. 1. Indicate to participants that they will work in groups of 2-3 (one group per laptop). On the laptop, they will find the data sets in the Excel file titled "Exercises to Create Line Graphs, Bar Graphs, Pie Charts). Indicate that they will use the same steps indicated during the Information session to make these types of graphs. Inform participants that each type of exercise is found on a different worksheet. Participants will practice using Excel to create the graphs. 2. While participants are working, circulate throughout the room to help troubleshoot and guide participants. 3 [SLIDE 9]: Verify groups' Line Graph Answers while you circulate. You can even post these on the PowerPoint so participants can try to replicate them. Exercise 2 Exercise 3

Phase / Time / Materials	Instructional Sequence
	4 [SLIDE 10]: Verify groups' Column Graph Answers while you circulate. You can even post these on the PowerPoint so participants can try to replicate them. **Exercise 2** Exercise 2: Average performance in reading fluency by school type (control and treatment). **Exercise 3** Exercise 3: Average performance in reading fluency by school type (control and treatment). 5 [SLIDE 11]: Verify groups' Pie Chart Answers while you circulate. You can even post them on the PowerPoint so participants can try to replicate them. Exercise 1: Percentage of languages spoken in Region B
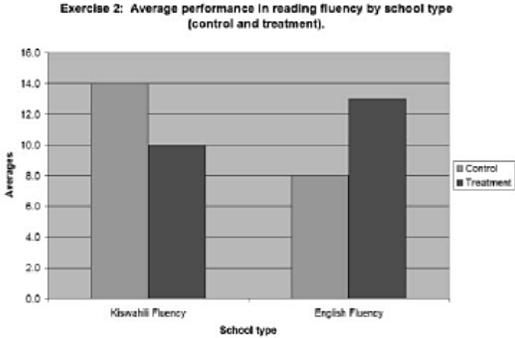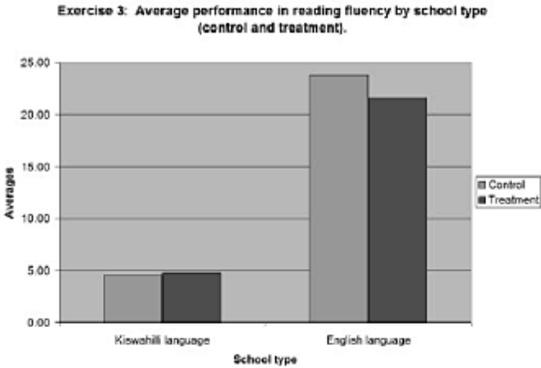
Phase / Time / Materials	Instructional Sequence

Information 2
 	
30 minutes
 	
Trainer Material 1: Session 12 PowerPoint
 	
Handout 3: Introduction to e-EGRA
 	
Training Material 6: e-EGRA Demonstration Video
 	
Handout 4: e-EGRA Training Sheet
 	
Handout 5: e-EGRA Excel Document
	E-EGRA
	Participants learn about a specific Excel-designed tool called e-EGRA, which was created to conduct an Early Grade Reading Assessment, collect data simultaneously using a computer, and then be able to create graphs and other analysis to understand students' reading levels in the classroom
	
	1. Briefly ask the following review questions:
	   • What does EGRA stand for? *Early Grade Reading Assessment*
	   • What are some of the component skills of reading that EGRA examines? *Orientation to print; letter name knowledge; letter sound knowledge; initial sound identification; familiar word reading; invented word decoding; oral reading fluency; comprehension (reading and listening)*
	
	2. [SLIDE 12]: Present eEGRA by saying or paraphrase: *"e-EGRA is a free electronic tool that is easy to use and has the ability to help teachers and administrators evaluate the literacy level of their students instantly. E-EGRA was developed by* <u>EDC</u> *as an electronic version of USAID's* <u>paper-based EGRA</u>*, which has been used worldwide in a variety of languages since 2006. This simple, easy-to-use assessment provides a detailed profile of children's reading ability and allows educators to track literacy improvement over time. But the original paper-based assessment has an essential drawback: The turnaround time between assessment and results can take up to six months, limiting its usefulness for improving instruction at the classroom level. The new and powerful eEGRA speeds the turnaround of results, empowers educators with important analytical tools, and is based on simple Microsoft Excel templates that can be installed on virtually any device."*
	
	3. [SLIDE 13]: e-EGRA is used by the proctor, not by the subject. The student still uses a stimuli sheet to complete the reading tasks. The e-EGRA screen, which displays how the test is being marked, is viewed only by the proctor.
	
	4. [SLIDE 13]: *"e-EGRA is a stand-alone computer application programmed using Microsoft Excel macros, resulting in several*

Phase / Time / Materials	Instructional Sequence
	advantages: Excel is widely available, making the test accessible to a large majority of the world's computers — including net book computers, whose low purchase price, high portability, moderate screen size, and efficient power consumption make them an excellent choice for work in classrooms in developing countries. Excel is a well-known program; casual computer users can learn the interface quickly, while advanced computer users can customize its performance. **Note:** A macro is a series of commands or functions that are stored in Excel and can be run whenever you need to perform a task. 5. Play the demonstration screen capture video for participants using Trainer Material 6: e-EGRA demonstration video 6. Distribute Handout 4 – e-EGRA Training Sheet. Ask participants to work in their groups of 2-3. They should open up their laptops and open the e-EGRA Excel file. Indicate that they should practice using the tool while referring to the sheet. 7. Ask participants the following questions: • What do you like about e-EGRA? • What do you think is difficult about e-EGRA? • How could you use this as an assessment tool in your schools? Is it feasible and possible?
Application & Practice 2 30 minutes Laptops Internet connection Handout 3: CD3M Process Cycle – STEP 4 – DATA ANALYSIS	**E-EGRA Practice** Participants practice using e-EGRA with student stimuli developed by the facilitators, as well as with the Excel sheets on their laptops. **Note:** As the facilitator, you will have to create the student stimuli for the e-EGRA based on the questions and answers found in e-EGRA. You will want to create enough stimuli for each group. 1. Ask participants to team up in groups of 4-6. Indicate to them the instructions. • Each group member will play the role of a student • One member will try out e-EGRA with the "student" • Make sure everyone gets a chance to be the student and

Phase / Time / Materials	Instructional Sequence
	to be the enumerator (the person asking the student the questions) • When you have 4-6 entries, click on the "Database" worksheet and examine the scores and the information. If any of the data seems like it was mistyped, fix it (if you are 100 percent sure) • Next, click on the "Local Results" Worksheet. Examine the results by "school" and "by gender." Make some observations about all of the data, as well as how some of the data is represented graphically. What does this data tell us about "students'" reading levels? 2. Groups practice e-EGRA. 3. Circulate throughout the room to troubleshoot and help groups.
Assessment	**Learning Objective 1:** Achieved in the Information 1 and Practice 1 sections **Learning Objective 2:** Achieved in the Information 2 and Practice 2/Application sections
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:
Education Development Center. (2013). eEGRA. Retrieved from http://eegra.edc.org/en
The Peace Corps. (2011). *Peace Corps Excel Manual*. Washington D.C.; Peace Corps Headquarters
RTI & USAID. (2004). Education Survey Course. Retrieved from
https://www.eddataglobal.org/courses/survey/index.cfm#sharing

Handout 1: Peace Corp Excel Manual

PEACE CORPS
EXCEL MANUAL
MONITORING & EVALUATION
Summer 2011

Table of Contents

Purpose of the Manual

Peace Corps Volunteers will collect and analyze data related to the indicators of their primary assignments. This manual provides Volunteers with instructions, tips, and shortcuts in Excel to assist them in organizing and analyzing the monitoring and evaluation (M&E) data they will collect as part of their service. The manual is intended for all Volunteers. As a result, the manual does not assume you have any prior knowledge of Excel or the data analysis methods you will be asked to perform. The contents are based on the experience of data analysts at headquarters and on two books: *Excel for Dummies* and *Statistical Analysis with Excel for Dummies.* The manual was reviewed and tested by RPCVs and post staff at headquarters.

The manual is not intended as a complete guide to using Excel. If you have a specific question, you can always use the HELP function in Excel. If you want a more comprehensive guide, please check the Internet or the two books used for designing this manual. These guides are clear and comprehensive and explain Excel methods and functions in understandable language.

TIP: The manual gives instructions for Excel 2007 and older versions. Make sure you know which version of Excel you are using.

A Few Terms

The following terms will help you navigate Excel and this manual.

Workbook
An Excel file. Each Excel workbook can hold several different worksheets.

Worksheet
An individual spreadsheet inside a workbook—rather like subfolders in your workbook. There may be several worksheets inside a workbook. You can name each worksheet and switch between worksheets by clicking on the tab you want.

TIP: Since one workbook can hold several worksheets of data related to the same project, you might want to think about setting up your workbooks by project. For example, your primary assignment gets one workbook and your secondary project gets a second workbook [if you want to keep track of data on those].

Worksheet tabs
When you open a workbook, on the bottom tool bar at the bottom of your screen you will find several tabs that either don't have a name [SHEET 1, SHEET, 2] or have a name [e.g., QUANT data in the training workbook].

Rows
Each Excel worksheet has numbered rows along the left-hand side of the sheet.

Columns

Each Excel worksheet has lettered columns across the top of the worksheet.

Cell

The individual boxes in each worksheet. Excel labels these by row and number, like on a map grid. So cell C6 is the cell in column C, row 6.

Menu list

When you right-click on different features in Excel, a list of options [menu] will pull down for you to make a choice.

Formula

A mathematical formula such as addition, subtraction, multiplication, or division. You can insert these formulas and let Excel do the math for you.

Function

Higher math formulas, such as mean, median, and N=, and other statistical functions.

Warning:

Excel is a dynamic spreadsheet. This means if you change the number or text in any of the cells, Excel will automatically update the calculations, totals, graphs, and tables you have created. Similarly, if you delete any cells, columns, or tables, all of that will be deleted from your graphs, calculations, and other work.

This can be very handy, but it can also increase your risk for losing your work. We recommend that you always create a separate worksheet to copy and paste any tables or data analysis that you want to keep, especially if you want to make a graph.

Start-Up: Workbooks and Worksheets

When you open a new Excel workbook, three blank worksheets automatically open. However, they are not named.

Naming a Worksheet
Both versions: Right-click a worksheet tab and select RENAME from the menu list, and then type in a short name.

Adding a New Worksheet
2007: Look at the bottom or your worksheet where the worksheet tabs are located. Left-click on the symbol of a file with a star on it. A new worksheet opens and you can name your new worksheet.

Older: Look at the bottom or your worksheet where the worksheet tabs are located. Right-click on any of the worksheet tabs, then select INSERT, then select NEW WORKSHEET. A new worksheet opens and you can name your new worksheet.

Copying a Worksheet

Both versions: Make sure you have a blank worksheet available in this workbook or another one—this is where you will paste the data.

1. Open the worksheet you want to copy.
2. In the upper left-hand corner of the worksheet just above row 1 and to the left of column A there is a blank box [2007 version has a triangle in the box]. Right-click that box to highlight the entire worksheet and open a menu list.
3. Select COPY and then go to the worksheet where you want to paste what you just copied.
4. Right-click that same blank box in the upper left-hand corner of your new worksheet to highlight the entire worksheet and open a menu list.
5. Select PASTE. Your data should appear in the new worksheet. Name the worksheet.
   a. **TIP:** If you have used formulas in your worksheet or changed the column or row widths and want to keep those features, select PASTE SPECIAL and select ALL, then click OK.

Copying Selected Cells

Both versions: Make sure you have a blank worksheet available in this workbook or another one—this is where you will paste the data.

Copying One Cell

1. Left-click on the one **cell** you want to copy.
2. Press CONTROL and the letter *C at the same time*.
3. Click on the cell where you want to paste this data and press CONTROL and the letter *V at the same time*.
   a. **TIP:** If you have used formulas in this cell or changed the column or row widths and want to keep those features, then right-click on the cell where you want to paste the data and select PASTE SPECIAL and select ALL, then click OK.

Copying Several Cells

4. To **copy several cells** that are in a row or column into a **blank** worksheet, left-click the first cell in the batch and drag your mouse over all the cells you want to copy.
5. Press CONTROL and the letter *C at the same time*.
6. Click on the cell where you want to paste the first cell of this data and press CONTROL and the letter *V at the same time*.
   a. **TIP:** If you need to **insert these cells** into a row or column that is **not blank**, then highlight the cells you want to copy, press CONTROL-*C*, right-click the cell where you want to paste the new data, and select INSERT COPIED CELLS from the menu list. Excel will ask if you want to shift the cells right or shift the cells down. If you are copying several cells from a row, select SHIFT RIGHT; if you are copying several cells in a column, select SHIFT DOWN.
   b. The same tip applies here for PASTE SPECIAL.

Sorting & Filtering Cells

Both versions allow you to filter columns to see only specific data you want to see. For example, you can look at only the female participants or only households that score 1 or above on the Hunger Index.

1. Click on the column heading you want to filter.
2. On the top tool bar, click on the SORT AND FILTER ICON [below].
3. Click on FILTER, the little funnel icon.
4. You should now see a box with a down arrow in the column heading and across all the column headings.
5. Click on the column you want to filter and select what you want to see.
6. To clear your filters, click on the SORT AND FILTER icon, then select CLEAR. Your data will be complete again.
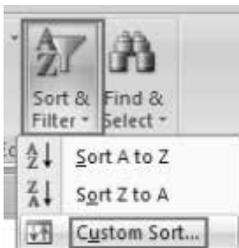
You can also sort your data alphabetically or numerically.

7. Highlight the data in the column you want to sort.
8. On the top tool bar, click on the SORT AND FILTER ICON [above].
9. Click on either SORT A TO Z or SORT Z TO A.
10. You should now see a dialogue box that says you have data next to all this stuff you want to sort. You need to keep all the data together, so select EXPAND THE SELECTION.
11. Your column should be sorted and all the data should still be together.

WARNING: If you filter your data and then try to run some formulas or functions without copying that data into a new worksheet, your analysis will be wrong. Although Excel has filtered the data for you, if you ask it to add, get the mean, or some other calculation, it will take all the data from the column. So make sure you copy the filtered data you want to analyze into your separate worksheet for doing charts, etc.

Make Work Easy: Formulas and Shortcuts

Excel allows you to insert math formulas into cells so the software will do the math for you. You can calculate entire rows, columns, or selected cells. Below is a table of calculation symbols that Excel uses for formulas.

Figure 1: Formula Symbols for Calculations

Symbol	Calculation
=	Equal to
+	Addition
-	Subtraction
/	Division
*	Multiplication
Σ	Auto sum [addition, average, count]

Formulas for Calculating Two Cells

Both: To add, subtract, divide, or multiply two cells:

1. Left-click in a blank cell and press the = key.
2. Now click on the cell that has the first figure in your equation; notice that Excel entered the location of your figure [for example C2], not the number in the cell.
3. Now enter in the math symbol you want to use [+, -, *, /]; your cell should now read =C2+ or =C2- or =C2/, etc.
4. Now click on the cell that has the second figure in your equation; your calculation cell should now read: =C2+D6, or =C2-D6, etc.
5. Now press ENTER. Excel has calculated these cells.

SHORTCUT: Let's say you need to add C and D together down several consecutive rows to make a new column of figures in your data. For example, column C is year 1 income and column D is year 2 income and you want to know what the total of C and D is for each row. Rather than repeat the steps above for 10, 20, or even 100 rows, do the following:

1. Click in the first blank cell in column E next to the first two cells you want to calculate [or the blank column following the two you want to calculate]. Follow the instructions above until you hit ENTER and get your calculation.
2. Now, click on the cell that has your total. Notice that Excel has outlined this cell, but there is a heavy dot or square in the bottom right-hand corner of the cell. Move your mouse over that heavy dot in the corner and notice that the symbol turns into a skinny + sign.
3. Click on the heavy dot while the skinny + shows and drag your mouse down the column or across the row to the last cell you want to calculate.
4. Excel has copied the formula into all the cells, but updated the formula with the correct row numbers in each row.

> **REMEMBER:** Excel is dynamic. If you change the number in any of the cells used in your formulas [C or D in our example], Excel will automatically update the calculation total.

Adding Entire Rows or Columns
Both: You can add the numbers in entire rows or columns.
1. *TO ADD*: Click on the blank cell at the end of the entire row or column you want to add.
2. Click on the Σ symbol. The word SUM appears at the same time that Excel highlights the closest row or column of numbers—Excel assumes you want to add these. Make sure these are the figures you want to add. If not, highlight the column or row you do want to add [not the column heading, though].
3. Now press ENTER.

> **SHORTCUT:** Let's say you have several columns for which you need the sum and they are all next to each other. Follow the shortcut in the section *Calculating Two Cells* for copying the formula. This shortcut works for average and count, too.

> **SHORTCUT:** The 2007 version makes this rather easy for you. Highlight the row or column of figures you want to add, average, or count. Now, look at the bottom toolbar in the right corner. You will see the average, sum, and count of the cells you highlighted. However, once you un-highlight those cells, your totals will disappear. So either write them down or do it the long way.
> Older versions of Excel show you only the sum in the bottom tool bar on the right. Sorry.

Make Work Easy: Functions
Excel will automatically calculate the mean and median, and get the count for you of a group of numbers in a row or column. Remember that Excel calls the mean the average.

2007 Finding the Mean, Median, and N=
1. To calculate the mean, median, or N= of any row or column of figures, click on the FORMULAS tab on the top tool bar.
2. Click on MORE FUNCTIONS in the function library section [it looks like two red books].
3. Click on the STATISTICAL choice in the menu list and see the larger menu list appear on the right.
4. Move your mouse over to the larger menu list and select either AVERAGE, MEDIAN, or COUNT, and click your choice.
5. A dialogue box appears. Click in the NUMBER 1 box and then highlight the row or column of numbers you want to calculate.
6. Now click OK.

Older: Excel will average, count, and find the median for you.

Calculating the Mean or Average

1. Click on the blank cell at the end of the entire row or column you want to average.
2. Click on the **fx** symbol on the top tool bar or click on the INSERT tab on the top tool bar, then click FUNCTIONS.
3. An "=" symbol appears in the cell you selected and then a dialogue box appears.
4. In the highlighted box that says "*Type a brief description of what you want to do and then click Go,*" type in AVERAGE and then click GO (Figure 2).

Figure 2: Functions Dialogue Box
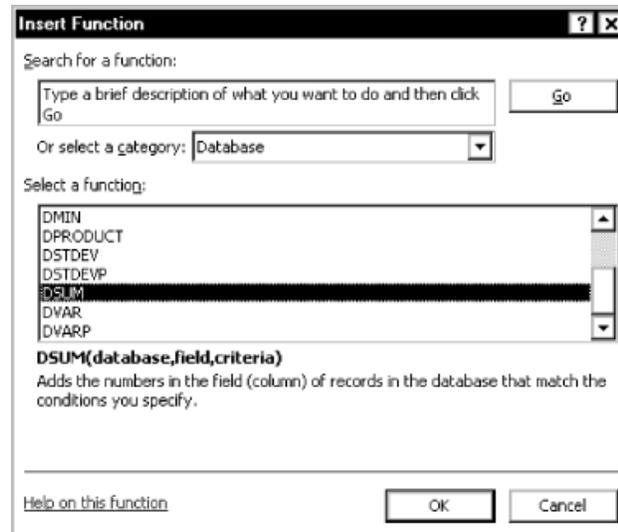
5. Another dialogue box appears. Click in the NUMBER 1 box, and then highlight the group of cells you want to average and then click OK.

Counting or N=

To count the number of entries or get the N=, follow the above instructions for AVERAGE, but in Step 6 type in COUNT and continue with the rest of the instructions.

Calculating the Median

To get the median of a column or row of entries, follow the above instructions for AVERAGE, but in Step 6 type in MEDIAN and follow the rest of the instructions.

Data Analysis Toolpak

Loading the Data Analysis Toolpak
2007:
1. Click on the Microsoft Office Button at the top left corner of your workbook [image below].
2. On the bottom of the menu list is a tool bar; click EXCEL OPTIONS.
3. Now click ADD-INS and the add-ins menu list should appear. At the bottom of this menu list, make sure EXCEL ADD-INS is selected from the menu list for the MANAGE: box. If not, select EXCEL ADD-INS and press GO.
4. From the menu, click on the DATA ANALYSIS TOOLPAK at the top, *not* on the data analysis tool pack vba.
5. Press OK and then close down your workbook. Now reopen your workbook. Click the DATA tab on the top tool bar. You should see the DATA ANALYSIS feature on the far right.

Older:
1. On the top tool bar, click the TOOLS tab. This pulls up a menu list; select ADD-INS.
2. Now select DATA ANALYSIS TOOLPAK and make sure the box is checked. Click OK.
3. Now save your Excel workbook and then close it. Now reopen your workbook [it's Microsoft, remember].
4. Check to make sure the toolpak loaded by clicking TOOLS. Is the DATA ANALYSIS feature at the bottom of the menu?

Using the Data Analysis Toolpak
2007:
1. Click on DATA and open the DATA ANALYSIS feature.
2. Select DESCRIPTIVE STATISTICS and click OK
3. In the dialogue box that opens [Figure 3], click on the INPUT RANGE box and then highlight the group of cells you want to analyze [they all need to be grouped together in a row or column; you cannot hunt and peck]—this is your input. Select COLUMNS just below the INPUT RANGE.
4. Click the circle in front of the OUTPUT RANGE and then click the blank cell in your worksheet or a new worksheet where you want Excel to insert a table with all of your mean, median, count, and other data.
    a. **TIP:** We recommend *not inserting* this into the worksheet with your actual data. Create a new worksheet called CHARTS or GRAPHS or something else to keep this analysis in.
5. Click SUMMARY STATISTICS and then click OK. You should see a table that lists the mean, median, and count of your group of data, as well as the range, the minimum and maximum number, and some advanced stats information like the standard deviation and skewness.

Figure 3: Descriptive Statistics Dialogue Box
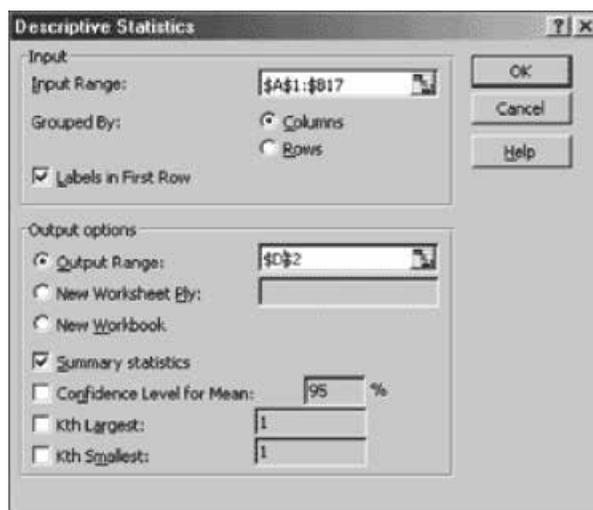
Older:

1. Click on TOOLS and open the DATA ANALYSIS feature.
2. Select DESCRIPTIVE STATISTICS and click OK
3. In the dialogue box that opens [Figure 3], click on the INPUT RANGE box and then highlight the group of cells you want to analyze [they all need to be grouped together in a row or column; you cannot hunt and peck]—this is your input. Select COLUMNS just below the INPUT RANGE.
4. Click the circle in front of the OUTPUT RANGE and then click the blank cell in your worksheet or a new worksheet where you want Excel to insert a table with all of your mean, median, count, and other data.
   a. **TIP:** We recommend *not inserting* this into the worksheet with your actual data. Create a new worksheet called CHARTS or GRAPHS or something else to keep this analysis in.
5. Click SUMMARY STATISTICS and then click OK. You should see a table that lists the mean, median, and count of your group of data, as well as the range, the minimum and maximum number, and some advanced stats information like the standard deviation and skewness.

Pivot Tables

Pivot Tables allow you to sort and analyze your data without risk of deleting or changing your data, and they let you see things that aren't really apparent just by looking at a big data set.

Inserting a Pivot Table

2007:

1. Click on INSERT on the top toolbar and select PIVOT TABLE.
2. Excel will ask you what range of data you want to use.
   a. **TIP:** It is best to capture the entire data set that you want to work with; this means

highlighting *only* the portions of the worksheet that have columns with headings. If you highlight the entire thing, Excel will tell you your data range is invalid because you have columns with no headings.

    b. Starting in cell A1, highlight all of the data set so you capture it.

    c. Select NEW WORKSHEET.

    d. Click OK.

3. Excel takes you to the new worksheet with a blank pivot table in it (Figure 4).

Figure 4: 2007 Blank Pivot Table Page
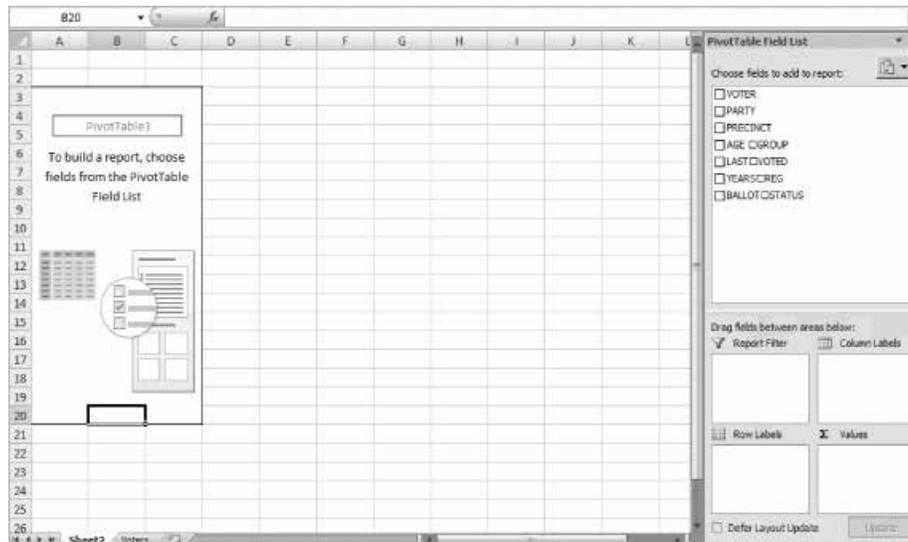
Older:

1. Click on DATA and select PIVOT TABLE. A dialogue box should open that says Step 1 of 3.

2. Select MICROSOFT OFFICE EXCEL LIST OR DATABASE then select PIVOT TABLE and press NEXT.

3. Excel will ask you to select the data you want to use.

    a. **TIP**: It is best to capture the entire data set that you want to work with; this means highlighting *only* the portions of the worksheet that have columns with headings. If you highlight the entire thing, Excel will tell you your data range is invalid because you have columns with no headings.

    b. Starting in cell A1, highlight all of the data set so you capture it.

    c. Click NEXT.

4. Select NEW WORKSHEET and click FINISH. Excel takes you to the new worksheet with a blank pivot table in it (Figure 5).

Figure 5: Older Versions of Blank Pivot Table Page
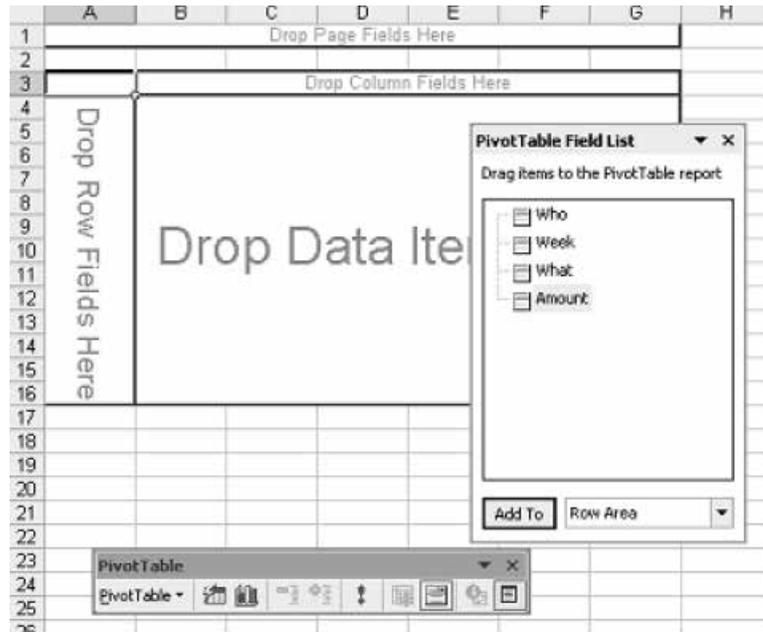
Using a Pivot Table

Whether you are working in older versions or the 2007 version of Excel, the principles of pivot tables are still the same. You will have your column headings listed on the right as the variables you can sort and analyze. They can go in either the row or column section of the pivot table. Whatever you are counting, summing, averaging, etc. goes into the middle of the table.

2007

1. From the PIVOT TABLE FIELD LIST box (the one on the right of Figure 3 with the list of your column headings), choose the one column heading [the variable] that you want to count, sum, average, etc. and drag and drop it in the ∑ VALUES box.
2. Now decide which of the variables you are going to analyze and drag and drop them into the ROW or COLUMN LABELS boxes.
3. Now decide if you are counting, summing, averaging, etc. Excel has the default set on counts or N=, which is probably what you will need most of the time.
   a. If you want to sum, then click on the down arrow in the VALUES box and select VALUE FIELD SETTINGS.
   b. Select SUM to total all of the figures.
   c. Select AVERAGE to get the mean of all the figures.

TIP: We recommend you copy and paste your pivot table analysis to a new worksheet so you save your data and can make graphs more easily with fewer headaches. Make sure you label your pivot table analysis so you remember what it is, e.g., the number of women who show a profit.

4. Once you are done with this analysis, drag and drop your variables back into the PIVOT TABLE FIELD LIST and start a new analysis.
5. If you add new data to your data set and it is not captured in the pivot table, you will need to redo your pivot table; start from INSERT PIVOT TABLE.
6. If you change data in the data set that is already captured in the pivot table, then click on the OPTIONS tab of your pivot table worksheet and select REFRESH.
7. If you want to filter data:
   a. Click on the variable [column heading] you want to filter for and drag and drop it into the REPORT FILTER box.
   b. Notice that a new heading appeared over your pivot table on the left with the name of the variable and the word ALL.
   c. Now click the down arrow near the word ALL to open all of the entries for that variable [whatever you entered in the data set for that variable will now appear]. Choose the one thing you want to look at, for example, "female."
   d. Now you will see only the data from female participants in your row and column fields in the pivot table.

Older
1. From the PIVOT TABLE FIELD LIST box (the one on the right of Figure 4), choose the one column heading [the variable] that you want to count, sum, average, etc. and drag and drop it in the big center box called DROP DATA ITEM HERE.
   a. Alternatively, you can click on that item, then at the bottom of the pivot table field box, choose from the drop down menu DATA AREA, the press ADD—but it's faster the other way.
2. Now decide which of the variables you are going to analyze and drag and drop them into the DROP ROW FIELDS HERE or DROP COLUMN FIELDS here.
3. Now decide if you are counting, summing, averaging, etc. Click on the FIELD SETTINGS BOX in the PIVOT TABLE tool bar that is floating around your screen [the field settings box is the second to last in Figure 4; it has a big I in it for information].
4. Select how you want to analyze this data: count, sum, average, etc. and click OK.

> **TIP:** We recommend you copy and paste your pivot table analysis to a new worksheet so you save your data and can make graphs more easily with fewer headaches. Make sure you label your pivot table analysis so you remember what it is, e.g., the number of women who show a profit.

1. Once you are done with this analysis, drag and drop you items back into the PIVOT TABLE FIELD LIST and start a new analysis.
2. If you add new data to your data set and it is not captured in the pivot table, you will need to redo your pivot table, SEE INSERT PIVOT TABLE.
3. If you change data in the data set that is already captured in the pivot table, then click REFRESH (!) in the PIVOT TABLE tool bar floating around your screen.

4. If you want to filter data:
    a. Click on the variable [column heading] you want to filter for and drag and drop it into the DROP PAGE FIELDS HERE area.
    b. Now click the down arrow near the word ALL to open all of the entries for that variable [whatever you entered in the data set for that variable will now appear]. Choose the one thing you want to look at, for example, "female."
    c. Now you will see only the data from female participants in your row and column fields in the pivot table.

TIP: You can find the mean, median, or N by copying your data from the pivot table worksheet to a new worksheet and then using the Functions described in this manual.

Graphing Your Data
We recommend that you copy any tables, figures, or pivot table analysis tables into a new worksheet to create graphs. If you don't, you run the risk that your data will disappear and then so will your graph. You can also use the graph again in the future if you set up a separate graphs or chart worksheet.

REMEMBER: Just because Excel will graph, it doesn't mean it's accurate or right. Pie charts should always total only 100 percent, but Excel will let you graph something that totals 150 percent, even though you can't have a pie and a half in one chart. So make sure Excel is graphing what you want.

2007
1. After you have copied your table or figures into the new worksheet, highlight the table or figures you want to graph.
2. Click the INSERT tab on the top tool bar and select the type of chart you want to use [column, line, pie, or bar].
3. Your graph should appear, but it will probably be in bare-bones form. You might need to add some data labels or axis titles, and you may want to change the color.
4. Data labels: On the top tool bar under CHART TOOLS, click LAYOUT.
    a. Now click DATA LABELS and select where you want the labels to go. **TIP:** For columns, put them at the top of the column; for bars, put them inside the bar in the middle; for pies, put them outside—it is usually easier for your audience to read.
5. Axis titles: On the top tool bar under CHART TOOLS click LAYOUT.
    a. Now click AXIS TITLES and select either HORIZONTAL or VERTICAL.
    b. Select the location you want and then name your axis in the box that appears.
    c. Do the same for the other side of your graph.
6. Faster data labels and axis titles: On the top tool bar under CHART TOOL, click DESIGN.
    a. In the CHART LAYOUTS box to the left of all the pretty colors, pick a layout design you like.
7. Colors: On the top tool bar under CHART TOOLS, click DESIGN.
    a. Select a color.

Older:

1. After you have copied your table or figures into the new worksheet, highlight the table or figures you want to graph.
2. From the top tool bar, select INSERT, then select CHART.
3. A dialogue box opens with choices of graphs and charts for you. Select the TYPE OF CHART you want [on the left] and then select the SUB-TYPE [pictures on the right].
4. Click NEXT.
5. A little picture of the graph appears, along with two tabs at the top: DATA RANGE and SERIES. Click SERIES.
   a. This area lets you name the data on the horizontal and vertical axis. Give Series 1 a name based on what it is in your data set and the same for Series 2.
   b. **TIP:** You may not need Series 2. If you don't see any bar, line, or pie piece in that color, then chances are Excel made a ghost data set for you. You can remove it.
   c. Then click NEXT.
6. Give your chart a title and label the X and Y axis [Y is vertical and X is horizontal], and click NEXT.
7. Click FINISH to save the object [your chart] as an object in the current worksheet.

TIP: Once you have created your chart, you can make changes by right-clicking in the chart and pulling up the menu list. You can change the chart type, data range, colors, etc.

TIP: If you change the data in the original table, Excel will automatically update your chart. Similarly, if you delete that original table, your chart will show nothing.

TIP: You can now copy and paste your chart into a Word document.

Handout 2: Exercise to Create Line Graphs, Bar Graphs, Pie Charts

Exercise 9.3: Pie Chart and Pie of Pie Chart

Exercise 1

Create a Pie chart to compare languages spoken at home in three regions

Exercise 2

Create a Pie chart to compare languages spoken in two districts

Region A	
English	0.08
Kiswahili	0.16
Other	0.76

District Malindi	
English	0.08
Kiswahili	0.16
Other	0.76

Region B	
English	0.05
Kiswahili	0.05
Other	0.9

District Ijara	
English	0.05
Kiswahili	0.05
Other	0.9

Region C	
English	8
Kiswahili	12
Other	82

What is e-EGRA?

- **E-EGRA** is a free electronic tool that is easy to use and has the ability to help teachers and administrators evaluate the literacy level of their students instantly.
- It is based on simple Microsoft Excel templates that can be installed on virtually any device.
- It can be downloaded for **FREE** and **re-purposed**.
- It speeds up the turnaround of results and empowers decision-makers and educators with important analytical tools.
- It has been field tested in the Philippines, Mali, Tajikistan, and Kyrgyzstan.
- Partners: Microsoft Badiliko Project, Creative Associate's Zambia Project, and JBS.

Key Features of e-EGRA

- Developed in Excel and runs on macros. Can easily be altered for another language.
- Instructions can be standardized by adding an audio file to make sure that every student gets the same instructions.

- Has a built-in timer to automatically calculate correct letters and words read. This is important because most data input mistakes are made through human errors on this calculation.

- Has a built-in database and a corresponding results page for immediate viewing of results.

Student ID	Student First Name	Last Name	Grade	Gender	Teacher First	Teacher Last	District	School	Admin First	Admin Last	Day
Exit	Export Data	Delete Record			Put an "X" in the Student ID field to mark a record for deletion (you will have to select a different cell for the delete to work)						
AAli	Aeisa	Ali	3rd	Female	Maricel	Auditor	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
AlMokaram	Al-Jamel	Mokaram	3rd	Male	Maricel	Auditor	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
MRoyod	Merhan	Royod	3rd	Male	Maricel	Auditor	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
RUuman	Rafanu	Uuman	3rd	Female	Maricel	Auditor	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
SIbrahim	Sahri	Ibrahim	3rd	Male	Maricel	Auditor	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
CConcepcion	Caye	Concepcion	3rd	Female	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
CMHoriana	Crisa Mae	Horiana	3rd	Female	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
EKFacularin	Emille Kyet	Facularin	3rd	Female	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
JCayetano	Jaspher	Cayetano	3rd	Male	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
JFirmalino	Junie	Firmalino	3rd	Male	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
JRHiraam	Jet Roger	Hiraam	3rd	Male	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
Khatislaeng	Kyla	Batislaeng	3rd	Female	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
PCamering	Princess	Camering	3rd	Female	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
RNBelleza	Ralph Nikko	Belleza	3rd	Male	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
SFirmalino	Sanny	Firmalino	3rd	Male	Mila	Corpuz	Sto Nino	Katipunan ES	Judy	Aclaracion	26th
APBadilla	Ashley Fauzia	Badilla	2nd	Female	Jane	Esmael	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
BNAnso	Bin-Nassar	Anso	2nd	Male	Jane	Esmael	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
HLumagan	Haleli	Lumagan	2nd	Male	Jane	Esmael	Sultan Kudarat 2	Simuay Junction CES	Judy	Aclaracion	10th
GSibua	Gerald	Sibua	3rd	Male	Lilybeth	Lanaria	Sto Nino	Guinsang-an ES	Judy	Aclaracion	27th
JCamacho	Jhames	Camacho	3rd	Male	Lilybeth	Lanaria	Sto Nino	Guinsang-an ES	Judy	Aclaracion	27th
LGPareja	Lovely Gill	Pareja	3rd	Female	Lilybeth	Lanaria	Sto Nino	Guinsang-an ES	Judy	Aclaracion	27th
APendotom	Alnazid	Pendotom	3rd	Male	Agnes	Lastimosa	Lutayan 2	Panagas Devera ES	Judy	Aclaracion	28th
BSulot	Bailabie	Sulot	3rd	Female	Agnes	Lastimosa	Lutayan 2	Panagas Devera ES	Judy	Aclaracion	28th
CWaguia	Camera	Waguia	3rd	Female	Agnes	Lastimosa	Lutayan 2	Panagas Devera ES	Judy	Aclaracion	28th

Where can I get e-EGRA?
http://eegra.edc.org/

Session 13: Data Sensitivities (What Do We Need to Take into Consideration to Present Our Findings?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: Before sharing findings to continue the CD3M process cycle, it is
                                  necessary to think of the different elements that communities need
                                  in order to understand the meaning behind CD3M findings (both
                                  quantitative and qualitative). It is also important to ensure that
                                  findings are sensitively presented in order to ensure that they do no
                                  harm to the variety of different education stakeholders.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                  monitoring and evaluation and an understanding of the sector that is
                                  being featured in the workshop. Workshop materials are designed for
                                  the Education sector, but can be adapted to other sectors as well.

Time: 1 hour 30 minutes

Prerequisites: Session 4 - Developmental Evaluation
                                  Session 5 - Quantitative Methods
                                  Session 6 - Qualitative and Mixed Methods
                                  Session 10 - Quantitative Analysis
                                  Session 11 - Qualitative and Mixed Methods Analysis

Version: October 2013

Contributing Posts: Guatemala
                                  Philippines

Session: Data Sensitivities (What Do We Need to Take into Consideration to Present Our Findings?)		
Date:	**Time:** 1 hour 30 minutes	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning data sensitivities to consider and prepare in order to effectively communicate and present CD3M findings.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, projector, electricity
    2. Flip chart
    3. Markers
    4. Tape
- **Handouts**
    Handout 1: Data Sensitivities In Your School
    Handout 2: Learning to Read – Learning to Play Football
    Handout 3: "Doing Harm" With Student Performance Data
    Handout 4: Orientation Outline Guide
- **Trainer Materials**
    Trainer Material 1:   Session 13 PowerPoint

Session Learning Objectives:
Participants will
1. Indicate that community members may not understand school-related content and that it is important to prepare and orient them so they have a better understanding of CD3M findings.
2. State the importance and need to present findings in a sensitive manner in order to do no harm to community members involved in the CD3M process.
3. Indicate concrete strategies they can use to prepare communities so they understand the context and background associated with understanding CD3M findings.
4. Plan sensitivity and preparatory sharing of findings sessions to conduct with their communities.

Phase / Time / Materials	Instructional Sequence
Motivation 5 minutes Trainer Material 1: Session 13 PowerPoint	**Introduction to Data Sensitivities** Participants consider how communities participate in the school, as well as their level of knowledge and understanding on curriculum and other content that is school-related. 1. Question for participants to think about during this session: Think about how you currently share data about your school with parents and community members. With a partner, answer the following questions: - What student data do you provide to parents? - What does this data mean to them? Do they understand this data? - What does this data mean to you? - Are there differences and similarities between what you understand about the data and what parents understand? Why? Why not? 2. [SLIDE 2]: Present the CD3M cycle. Indicate that we are now moving on to Step 5 of the CD3M process. 3. Say/paraphrase: "*Once we have done the data analysis, it is necessary to then share findings in order to come up with community driven ideas for future actions. However, presenting data to community members is complex. Even if you understand what the data is telling you and articulate what you learned, it can be even more challenging when trying to present these findings to community members. This session addresses what you need to do before presenting your findings in order for communities to fully understand what you are presenting and then take the next step to act. Therefore, there are three parts to Step 5 of the CD3M cycle: a) Data Sensitivities; b) Sharing your Findings; and c) Next Steps. In this session we will address the "data sensitivities" and knowledge that must be shared in order to understand findings.*

Phase / Time / Materials	Instructional Sequence

Information
 	
20 minutes
 	
Trainer Material 1: Session 13 PowerPoint
 	
Handout 1: Data Sensitivities In Your School
 	
Handout 2: Learning to Read – Learning to Play Football
	Data Sensitivities – The Language of Education and "Do No Harm"
	Participants are introduced to the need to present all CD3M findings in ways that are accessible and pertinent to community members, as well as the necessity to share findings in a way that ensures that there are no unintended negative consequences as a result of the findings being presented.
	
	1. [SLIDE 3 & 4]: Say or paraphrase the following: "*Presenting your findings to communities requires that communities have the proper knowledge and background in order for them to understand. Ultimately, the goal of presenting your findings is to be able to work with communities to take future action about the school /the school-related problem (Step 5: Future Action). We need to be sensitive to communities and make them feel welcomed and valued as important school community members. This can be done by doing the following:*
	  • *Articulating the important role that parents and other community members play in order to promote student learning and well-being;*
	  • *Using accessible language where outsiders do not feel intimidated and "unqualified" to be part of the school community;*
	  • *Orient and welcome in parents and community members multiple times during the year so they understand what students are supposed to be learning and how parents can help; and*
	  • *Make sure that any type of data that is used is done while respecting the privacy of students and family and that it is not used in a punitive manner where there are negative consequences.*"
	
	2. Ask participants to fill out Handout 1 – Data Sensitivities at Your School. Invite them to indicate the role community members play in their school or fail to play. Ask them to think of different education language that could be intimidating and challenging for community members to understand. Ask them what they do to orientate the community to how the school works and functions. Finally, invite them to think about how data has unintentionally harmed people in their school and community in the past.

Phase / Time / Materials	Instructional Sequence
	3. [SLIDE 5, 6, 7, & 8]: Once they have finished filling out the handout, ask participants to share their answers. During these answers, make sure that the following ideas come through:

Data Sensitivity Topic	Explanation
Communities' role in a child's educationa	*All school community members are dedicated to helping students do well and be well. Everyone has a role to play that is important and should be valued. Parents, teachers, and other community members need to understand that these are valuable roles. They need to understand what these roles are. Parents, for example, can help contribute to data and findings by including valuable information about children when they are in the home and in the community. Be sure to give families a voice and invite families to share their own data and observations about their children to make them active partners.*
Education Language/ Jargon	*Accompanying education is a wide range of different terms, jargon, and content that communities may not be familiar with. It is important to avoid as much education jargon as possible. People who are not directly involved in an education setting are often unfamiliar with education content and terms. Education is a science. Communities need to understand the different components in order to be able to fully understand findings that are presented to them. Parents, for example, need to understand the different skills and knowledge their child will need. Being able to understand and relate findings to a community's context is invaluable.*
Orientation	*Communities need to be oriented to data and findings. These types of orientations should cover how to access and understand the findings. This can be done by presenting data in many different ways (orally, visually, in written form) in addition to using many different techniques (metaphors, role plays, simulations). During this orientation, communities can be provided with concrete ideas to help them understand the best way to enrich children's learning.*
Do No Harm	*Make sure that findings are presented in a way to respect the privacy of students and their families. If the head teacher, for example, presents findings on daily attendance rates, s/he should make sure not to signal anyone out in front of the school. If a teacher is having a hard time with another student, the teacher should not say to other parents how bad that student is. It is necessary that we use data to help students learn and thrive. We should never use it to make students feel bad or unintentionally put students down. Data is to be used to improve and help students learn and feel better.*

Phase / Time / Materials	Instructional Sequence
	3. Being sensitive requires that school personnel present data that is context specific. Say or paraphrase: "*Data and findings can often be presented in the form of context-related metaphors or embedded within folk tales and idiomatic phrases and sayings.*" 4. Distribute the example of explaining how children should learn how to read. This is something that a teacher or head teacher could articulate to parents before presenting data on student reading abilities in a school. 5. After participants read the metaphor, ask them the following questions: • What do you think about this metaphor? • Has it helped or hindered your understanding of the necessarily skills of learning how to read? • How is it context-specific?
Practice 1 35 minutes Trainer Material 1: Session 13 PowerPoint	**Using Metaphors/Simulations/Role-Plays to Present Findings** Participants practice presenting findings in manners that are accessible to a range of community members who may not understand specific school-related content. 1. Divide participants into three groups. Indicate that each group is going to get a scenario finding that they will have to present in a sensitive and context-specific manner. 2. [SLIDE 9]: Indicate the following scenarios: • Group 1: Fluency via a Simulation – You want to talk to parents about the importance of working on activities where children practice reading on their own. Explain that this is important to improve students' fluency. Use a simulation where one student reads aloud without fluency and where one student reads aloud with fluency. Then explain the characteristics of the benefits of fluency (see the handout from Session 7 on the different components of fluency). • Group 2: Student Centered Teaching via Role-Play – You are the head teacher who has conducted a series of observations in your teachers' classrooms. You want to highlight the types of student-centered teaching

Phase / Time / Materials	Instructional Sequence
	techniques you saw, as well as techniques you saw that are more teacher centered. This can help spark a conversation with teachers on the different instructional techniques to promote (see handout from Session 8 on student-centered teaching) • Group 3: Parental Involvement in School via Metaphors – You are the teacher and you would like to host a brief orientation to help parents understand what types of reading and math content their students will be learning. You also want to explain to parents how they can help and be supportive to their children. Use the metaphor of a football team and parents and teachers working together as coaches to help children learn better. 3. Give participants time to prepare their simulation, role-play, and metaphor. 4. Invite members to present. 5. After the three presentations, lead a group discussion using the following questions as a guide about the key takeaways participants will learn from doing and watching the scenarios: • *How were specific school-related content and issues explained?* • *How did your colleagues make the information accessible to a variety of different audiences?* • *How were the scenarios linked to participants' contexts?* • *What types of challenges would you foresee for community members to grasp these concepts?* • *How would you contextualize other school-related concepts?*

Phase / Time / Materials	Instructional Sequence

Practice 2
 	
20 minutes
 	
Handout 3: Doing Harm with Student Performance Data
	Do No Harm
	Participants examine how data can "do harm" and brainstorm on how to "do no harm."
	
	1. Explain to participants the following: "*Doing No Harm is the central principle for all types of research, which includes conducting CD3M projects. If we are to engage the community in the CD3M cycle, we have to be clear that data cannot be used to hurt, harm, or remove someone from their posts. We also need to make sure that the data collection, data analysis, and sharing of findings does not hurt or have a negative impact on children. Afterall, the goal of CD3M is to conduct research in order to make improvements.*"
	
	2. Distribute Handout 3 – Doing Harm with Student Performance Data. Ask participants to take 5 minutes to read the short scenario and think of answers to the questions posed on the handout
	
	3. After 5 minutes, ask participants to turn and talk to a partner to share their answers.
	
	4. In the large group, have participants answer the questions. See answers below:
	• *Who did this data harm?*
	  Third-grade teachers whose students scored below average test scores.
	  Students – high teacher turnover rates hinder student achievement.
	• *Why was this data used to judge teacher performance?*
	  By reviewing test scores, school administers believed that the data represented a general survey of which classrooms lacked quality teachers.
	• *Was it ethical to judge third-grade teachers solely using this data?*
	  No. Using one method to make drastic changes in a school community is detrimental to everyone. If administers had continuously observed instruction in these classroom, interviewed teachers, and reviewed their lesson plans in addition to reviewing test scores, they would have had

Phase / Time / Materials	Instructional Sequence
	a more accurate sense of what was happening in these classrooms. *No. Third-grade teachers were not the only educators involved in student performance rates. Kindergarten, first-, and second-grade classroom teacher foundation math and reading skills continue to be used in third grade. By reprimanding third-grade teachers in this manner, the "problem" is never addressed.* • *How could this data collection be used to accurately assess growth?* *Teachers administered assessment tests in the middle of the school year as well as at the end. By comparing the content of these tests, the skills they require children to have and utilize and the test scores of both test per individual, school administrators would be able to monitor the growth and progress of individual students over the course of the year.* 5. Ask: *Can you think of other types of data that could be used to harm people? What would you do to prevent harm?*
Application 15 minutes Handout 4: Data Sensitivities Orientation Outline Guide	**An Orientation to Sharing Findings** Participants create a plan/outline for conducting an orientation for community members to present important concepts in order to better understand findings for their CD3M process cycle problem. 1. Ask participants to think back to their CD3M process cycle steps that they created during the different sessions. Ask them to brainstorm a list of different elements that community members need to understand in order to better understand the data and findings that they will eventually be able to present. 2. Present Handout 4 – Sensitivities Orientation Outline. Explain to participants that this tool can help them set up an orientation for any type of content-related meeting that participants can set up so community members can properly understand the findings that will be presented to them.

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Achieved in the Information section **Learning Objective 2:** Achieved in the Information section **Learning Objective 3:** Achieved in the Practice section **Learning Objective 4:** Achieved in Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

Comings, J. (2012). Evidence-Based Reading Projects. Unpublished Manuscript. Washington, D.C.: USAID

Harvard Family Research Project. (2013). Tips for Administrators, Teachers, and Families: How to Share Data Effectively. Cambridge, MA: Harvard University. Retrieved from http://www.hfrp.org/publications-resources/browse-our-publications/tips-for-administrators-teachers-and-families-how-to-share-data-effectively

Patton, C.L (2013). Making Data Meaningful. *FINE Newsletter, 5*(2). Retrieved from http://www.hfrp.org/publications-resources/browse-our-publications/making-data-meaningful

Handout 1: Data Sensitivities in Your School

Please fill out the worksheet below. Indicate with a (+) the positive elements in your school that promote data sensitivities. Indicate with a (-) the areas where you need to improve upon your data sensitivities in your school

Data Sensitivity Topic	Explanation
Communities' role in a child's education	
Education Language/ Jargon	
Orientation	
Do No Harm	

Handout 2: Learning to Read – Learning to Play Football

"Reading is a set of *component skills* that can and should be learned separately, but is also a set of *practices* that require the integration of all of those skills to perform tasks with text. Since reading takes place within the mind and is, therefore, impossible to see, an analogy is useful to understanding this definition.

"When a football (soccer in the U.S.) team is preparing for a game, they spend some time practicing individual skills, such as passing or shooting goals, and some time playing the game. The players are practicing component skills and then integrating all of those skills to play a practice match. Many amateur players learned the game without formal practice of the component skills, and a few of those players may be quite good. However, most players who learn without a focus on component skills are not accomplished players, and almost no professional player learned in that way. In fact, most good amateur players probably practiced those skills on their own or with friends when they were young. Good players do not have to think about these component skills once they are in a match because the skills have become automatic through practice. While in the game, the player is, instead, thinking about strategy, predicting where the ball might go next, and assessing the strengths and weaknesses of the other team.

"The same is true for reading. Some children learn how to read without components instruction, but most of them do not learn how to read well. Those who do learn to read well probably practiced the component skills alone or with family or friends. Children need instruction and practice in the components of reading, and then they need to use those skills to accomplish tasks with text. The tasks and the texts should be ones that challenge students to improve their reading, should too difficult for them to read successfully, and should be interesting and enjoyable for them. The component skills should be taught by starting with easy, simple skills and then slowly introducing more difficult, complex skills."

Handout 3: "Doing Harm" with Student Performance Data

Read the following scenario of where data did cause harm:

The Lombé elementary school began requiring all third-grade classrooms to administer mid-year and end-of- the-year reading and math assessment tests. After the end-of-the-year tests were given, teachers were mandated to report test scores to school administrators. Upon reviewing the test scores of all third-grade students, school administrators fired two third-grade teachers, reporting that in both cases more than 65 percent of students in those classrooms received below average test scores in both subjects. School officials later told other teachers that the test scores reflected their ability/inability to teach children and that teacher performance would continue to be judged based on this data collection.

In a group of three, try to answer the following questions:

1. Who did this data harm?

2. Why was this data used to judge teacher performance?

3. Was it ethical to judge third-grade teachers solely using this data? Explain.

4. How could this data collection be used to accurately assess growth?

5. What would you do to ensure that there were no consequences to both teachers and students?

Handout 4: Sensitivities Orientation Worksheet

The sensitivities orientation worksheet is designed so community members can easily grasp education-related context and the importance of their roles in relation to the context. It is meant to be a tool that can be used regardless of the context and types of data. It helps set the scene in order to present findings.

CD3M Topic	
Important Concepts	
Sensitivity Strategies	
Roles of Community Members	

Session 14: Sharing Findings (How Can We Present Our Findings?)

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: How research findings are presented will influence decision making
                                and community involvement/participation. This session focuses on
                                different ways and venues in which the school and teachers can
                                present CD3M findings to parents and community members. CD3M
                                requires the school and the community to know the roles they play
                                in order to work towards improving the school and promoting better
                                student learning outcomes. This session highlights the need to
                                present, re-present, and continuously talk about research findings in
                                order to take future action.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                monitoring and evaluation and an understanding of the sector that is
                                being featured in the workshop. Workshop materials are designed for
                                the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation
                                Session 5 - Quantitative Methods
                                Session 6 - Qualitative and Mixed Methods
                                Session 10 - Quantitative Analysis
                                Session 11 - Qualitative and Mixed Methods Analysis

Version: October 2013

Contributing Posts: Guatemala
                                Philippines

Session: Sharing Findings (How Can We Present Our Findings?)		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning how to share and present data findings.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Prepare all equipment, handouts, and trainer materials indicated below.

Materials:
*   **Equipment**
    1. Computer, screen, projector
    2. Flip chart
    3. Markers
    4. Tape
*   **Handouts**
    Handout 1: Data Presentation Strategies
    Handout 2: CD3M Cycle – Steps 1, 2, 3, 4
*   **Trainer Materials**
    Trainer Material 1:   Session 14 PowerPoint

Session Learning Objectives:
Participants will
1. Describe different ways to present findings.
2. Use the CD3M process cycle to conduct a mini-research project and use a specific method of sharing findings.

Phase / Time / Materials	Instructional Sequence

Motivation
 	
15 minutes
 	
Flip chart
 	
Markers
 	
Trainer Material 1: Session 14 PowerPoint
	Presenting Information and Findings
	Participants think about a time when they were presented information and findings in a way that discouraged them from wanting to make change and in a way that motivated them to be part of a new initiative
	
	1. Ask half of the participants to form an inner circle and face out toward the room. Ask the other half of participants to form an outer circle and face the colleagues who are in the inner circle. Be sure that each participant is facing another. Indicate to them that they will have 2 minutes to tell each other a quick story of a moment in their lives when they felt discouraged because someone was telling them what they were doing bad and that they needed to change. Give an example: "*Once, my head teacher told me that I was not good at being creative during my math lessons and that I needed to change. I didn't like how she told me that I was bad and then didn't provide me any direction for changing.*"
	2. Participants share their stories for 2 minutes.
	3. Invite the outer circle participants to move to the right three spaces so they are in front of another participant. Ask them to tell another story, but this time they should articulate a moment when they felt motivated to change based on someone being encouraging and supportive. For example: "*As a parent, my son's teacher invited me to school one day to talk about my son's performance in school. He wanted to know what my son was like at home and what I thought were his strengths and what I felt my son needed help with. He then presented to me the great things my son was doing in class and then followed up with areas where he needs help. Together we brainstormed on how we could both help my son. At the end of the meeting we agreed on some things we both could do to change our approaches.*"
	4. Participants share their motivational stories for 2 minutes.
	5. Ask participants to debrief using the following questions:
	   • What type of feedback do you get that makes you not want to change or be part of the change process?
	   • What type of feedback motivates you to change and be part of the change process?

Phase / Time / Materials	Instructional Sequence
	6. [SLIDE 2]: Present the CD3M cycle. Indicate that we will continue to talk about Step 5 of the CD3M process cycle and say/paraphrase: "*In our last session we talked about the need to be sensitive and to help our community members 'catch-up' so they understand the basic concepts that are associated with data findings. We indicated that we can use metaphors, simulations, and role-plays that link educational concepts to community members' contexts. The first step in taking future action is this type of orientation. In this session, we will talk about different venues and strategies that we use to present findings to community members. This research comes predominantly from the Harvard Family Research Project, which is an innovative practice-based education initiative at Harvard University in the United States that helps to bridge the research and practice gaps. In order to be able to make decisions on what to do next, community members need to continuously be part of the school and understand the findings before all stakeholders are able to work together to determine 'What do I do next?'"* FUTURE ACTION What do I do next?
Information 15 minutes Flip chart Markers Trainer Material 1: Session 14 PowerPoint	**Presenting Data in Multiple Ways** Participants are introduced to how to present data in text, visual, and audio forms, as well as different venues and strategies to present that data. 1. Ask participants the following questions: • Do you find ways to cultivate ongoing conversations with community members about the school, student performance, teachers, etc? Explain. • Do you include interpersonal and face-to-face time with community members to help contextualize data and findings? Explain. • How do parents in your schools access and learn about their school and students' performance?

Phase / Time / Materials	Instructional Sequence
	2. [SLIDE 3]: Share general tips for all types of data sharing strategies. Say or paraphrase the following: "*In all data sharing venues, there should be 1) A two-way conversation where people both talk and listen. It's a time to learn about findings, such as a child's progress in school, which includes data about things like attendance, grades, and test scores, as well as behaviors, attitudes, and observations. This is a time for community members to add to the findings by talking more about what they observe outside the school, which could include what a child's skills, interests, needs, and dreams are. 2) Data sharing should emphasize learning. Individuals presenting data should present findings in visual, audio, and written formats that are context-specific and culturally appropriate. If community members are not able to read, then data could be presented in a culturally-appropriate graphic, metaphor, role-play. Community members need to have the background knowledge (data sensitivities) discussed in the previous session. Research shows that community and family involvement is most effective when it is linked to learning. Community members should be encouraged to ask questions when findings are presented. 3) Discuss what the findings present in terms of opportunities and challenges. It should be noted what is working and what the school is doing well. The challenges also need to be presented in a neutral way so as to not blame or create unfavorable consequences for individuals. The tone focuses more on how to improve based on the challenges that are presented.*"

3. [SLIDE 4]: Present the list of different types of data sharing strategies. Indicate that many of these strategies can be used and adapted together. Quickly present a brief description of each strategy:
  • Orientation/Open Houses/Back to School Night – This is an event at the beginning of the school year where parents and community members come to learn about what goes on at the school.
  • Curricula Meetings – These are group meetings with parents of each class where the teacher presents different content and concepts that students are supposed to learn, along with learning goals for the class. For example, the teacher explains the important components of math and how parents can help their children practice. |

Phase / Time / Materials	Instructional Sequence
	• Parent-Teacher Conferences – These are individual meetings with a parent for each child where the teacher and parents speak about the strengths, progress, and needs of the specific child in order to make a joint plan to support the child. • Informal Parent-Teacher Meetings – These are informal communications where the parents and teacher build a working rapport to support the child. They can be in the form of phone calls, class visits, texts, etc. • Report Cards – Students get report cards to indicate summative assessments, as well as qualitative observation on a child's efforts, behavior, and attitudes. Parents and teachers can use this tool to create great learning goals for children. • Parent Reports – This report is similar to the student report card but highlights where the child is at in terms of other students' progress, as well as clearly setting learning benchmarks. Teachers and parents can look at this report together during parent-teacher conferences. • School Report Cards – Schoolwide report cards presented in Session 9. This refers to the progress and needs of the school. This tool is useful to present during a school open house where the community decides how to maintain the school's strengths and progress made from its weaknesses. 4. Ask participants to indicate if and how they use any of these strategies at their schools. Participants should present their examples to the large group.

Phase / Time / Materials	Instructional Sequence
Practice 20 minutes Flip chart Markers Trainer Material 1: Session 14 PowerPoint Handout 1: Data Presentation Strategies	**Data Presentation Strategies – Planning a New Strategy** Participants refer to Handout 1 – Data Presentation Strategies to plan how they will present the eventual data that they come up with in the CD3M process cycle problem. 1. [SLIDE 5]: Indicate to participants that they will work in their school groups. In the groups, they will read Handout 1 – Data Presentation Strategies, which maps out how to conduct different types of data presentation events. They will pick a group of strategies that they will use to kick off the data presentations, as well as follow-up work that they will need to conduct. In their outline, they need to include specific details that are indicated below: • Indicate the strategy that you will use for your CD3M process cycle problem? • Articulate why you will use this strategy • Who will partake? How many people? Why these people? • What will you do? What will you say? • How will you present the findings? • What will you do to ensure a two-way conversation? • What will you do to emphasize learning? • What will you do to include opportunities and challenges? • How will you follow up? 2. Groups work on their data presentation strategies for their CD3M process cycle problem. 3. Time permitting, they will then share their strategy with another group.
Application 60 minutes Trainer Material 1: Session 14 PowerPoint Handout 2: CD3M Cycle – Steps 1, 2, 3, 4	**The Entire Evaluation Cycle in Miniature** Participants act out the CD3M process of community data-driven decision making on a chosen issue (problem, plan of action, data collection, data analysis, future action). 1. [SLIDE 6]:Exercise: The Entire CD3M Cycle in Miniature Explain that this is a creative, dynamic exercise that brings together all the themes from the workshop covered for the participants thus far. The exercise forces small groups to go

Phase / Time / Materials	Instructional Sequence
	through every step in the process of data-driven decision making in the workshop space itself, with their fellow workshop participants as the "community," within one hour. Review the CD3M cycle one more time with participants (which is posted on a PowerPoint or flip chart) Lay the groundwork by pausing a bit after the previous exercise and explaining that we're now doing a very creative exercise to bring together workshop themes. Explain that this will be a competition and that each team is expected to work closely together so they can come up with a better "decision" than the other groups. Review the steps in data-driven decision making/ evaluation: - Define the question/problem – What is the problem? - Develop a plan of action – What data do I need? - Develop a SIMPLE data collection tool and collect the data. - Analyze the data – What did I learn? - Present/Utilize the findings – What data sensitivities strategy will I use? What presentation strategy will I use? What do I do next? Now explain that, since we are doing this immediately, we have to choose an issue that it is possible for us to have an immediate effect on. In other words, we will be using data to make a real

Phase / Time / Materials	Instructional Sequence
	decision here in the workshop space, so we have to choose something that we can actually *do* using our results. Reassure participants that even though the "issue" they are addressing might be silly, the purpose of the exercise is to collect high quality data using appropriate methods and to convince others that your data and your decision are the best.

Then show the participants the "issue" they are addressing and let them get to work for about 45 minutes. Here is the "issue" chosen at a previous workshop:

"We want to play the music during break that will make the most people happy."

2. Divide participants into groups of about 5-6 people. Let them work with those they haven't worked with much thus far. Give each group the CD3M handouts for Step 1, Step 2, Step 3, and Step 4. Indicate that they can use these to help guide the process.

3. The facilitator can circle to each small group in the first 5-10 minutes to make sure participants are not having trouble. Ask the group how they are going to develop a data collection tool to answer their question (in this case, something like "How will you know what type of music makes people here happy?").
   - What data exactly will the tool collect?
   - Is it unbiased?
   - How will they collect it – what methodology will they use?
   - Remind groups to *actually* collect the data.
   - Ask them how they will analyze the data.
   - When they're close to having a recommendation/decision, remind them that they must include data sensitive strategies to help community members catch up so that they can understand the findings.
   - Also try out a data presentation strategy your group presents and convince other groups that they did the best job, so they should persuasively explain why their tool is accurate, what their analysis led to, and what their decision is.

4. Have a heads-down vote to decide the winner and remember to actually follow the recommendation! |

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Achieved in the Information and Practice sections **Learning Objective 2:** Achieved in the Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Handout 1: Data Presentation Strategies

There are many different types of effective data presentation strategies. Please read the text below and think about what you currently do in your school. Also, brainstorm ideas of new strategies that you can try out.

Data Presentation Strategy	Description
Orientation/Open Houses/Back to School Night	An open house is an event held at an institution where its doors are open to the general public and to parents to allow people to have a look around in order to gain information. Schools host back-to-school nights shortly after the beginning of the year. Take advantage of this opportunity to see the world that community members' children inhabit every day and meet the people in charge. It's one of the best ways to begin to build that all-important home-school connection. During open houses, the head teacher and teachers can plan the following types of activities: **When**: Schools usually schedule the event for a weekday evening within a month of the first day of school. **Who:** Parents are able to meet their children's teachers and aides, the principal, nurse, and other staff members, and of course, fellow parents. Unless otherwise specified, this is an adults-only night. **Where:** The evening typically begins with an introduction in the auditorium or gymnasium. Then parents separate into groups and spend the evening with their children's teacher(s). **What:** The event gives community members a glimpse of their children's daily lives at school and an opportunity to learn about the curriculum. This is the moment where parents can also sign up to join the PTA or other parent group. The teacher will introduce herself and give an overview of students' daily routines, schedules, goals, and activities. She will also discuss her homework policy, discipline plan, and any other important information, such as if she maintains a classroom home page and how to contact her. The lengthiest part of the evening will be spent going over the curriculum and the methods the teacher will use to reach the year's goals. If students have several teachers for different subjects, parents may go from classroom to classroom doing this, usually in the same order their child would, so parents experience a mini-day of school. At each point, the child's teacher will likely stop and take any questions parents have about the world of the classroom. Community members will ask general questions and might ask the teacher to clarify anything they find confusing. However, this is not a time to discuss a child's individual needs or progress. Why: Research shows that parent involvement in schools helps students achieve more and schools thrive. And joining the PTA is a great way to have a voice in school issues and decisions.

Parent-Teacher Conferences	Parents are a child's first and most important teacher. The teacher and the parent both want their students to succeed. When parents and teachers talk to each other, each person can share important information about a child's abilities and needs. Parent-teacher conferences involve meetings between a teacher and a parent. They should happen at least two times per year. Here is an idea to plan, conduct, and follow up on parent-teacher conferences: **Before the parent-teacher conference:** -Teachers send out invitations to parents so they understand the date, time, and purpose of the meeting. -The teacher prepares examples of students' work, prepares student data, and comes up with a brief agenda for the meeting with each parent. This agenda should include talking about students' strengths and their needs for improvement. -The teacher sends reminders. -When parents arrive, they are welcomed in a comfortable environment. **During the parent-teacher conference:** -Together, parents and teachers discuss the progress and growth of the child. -The teacher shows the parents assignments and student work that demonstrate a child's progress. -Teachers ask questions to parents and solicit input from families about the child's strengths and needs. -Teachers share ideas for supporting learning, which include activities that parents can do with their children at home. Parents indicate what they can do at home to support their children's learning. -Together, parents and teachers seek solutions collaboratively and discuss how they can work together to support the student. -Together, they create an action plan (what you will do, for how long, and how to check on progress). -Establish lines of communication and describe how parents can communicate with the teacher. **After the conference:** -Parents talk to their children to let them who what they are doing well, as well as how they will work together with the teacher to bolster needed areas for improvement. -Teachers follow up with families. -Teachers and parents communicate regularly on the positives and other needs for improvements (via phone, text, informal meetings).
Informal Parent-Teacher Meetings	Teachers, parents, and communities can meet together informally and discuss findings that have already been presented. Informal gatherings and communications allow for the conversation around the findings to continue and serve to reinforce community members to master and better understand the findings. They also serve to strengthen the relationship between the school and the community. Examples of informal parent-teacher-community meetings could be: -Telephone calls -Texts -Discussions in the market -Impromptu school visits

Curricula Meetings	Back to School Nights and Open Houses only provide a brief introduction to parents about what types of content their children will learn. Teachers can also organize group meetings where they discuss different types of content, curricula, as well as general progress, needs for improvement, and strategies for helping all children learn at home. Curricula meetings are, in essence, a blend of "Back to School Nights/Open Houses" and "Parent-Teacher Conferences." When helping parents understand important content, teachers need to make sure to implement data sensitive approaches via metaphors, role-plays, and simulations. They also need to make sure to "do no harm," for example, not calling out the challenges of a specific child in front of other parents.
Report Cards – Student and Class	A report card communicates a student's performance academically at different intervals throughout the school year. In most cases, the student report card is issued by the school to the student and/or the student's parents 2-4 times per year. Typically, the report card is based on a grading scale and determines the quality of students' schoolwork, as well as qualitative information about their attitudes, behaviors, and other observations that the teacher has. There are numeric or letter grades associated with different disciplines, which can also include sections for individual comments about the students' work and other observations. Comments could address the following topics: 1) Start any observations on a positive note, which lets parents know how happy the teacher is to have their child in class, as well as how much the child is learning and growing. 2) Provide specific information across several areas, such as personal attributes, behaviors, work habits, social skills, etc. 3) Provide specific information across several disciplines, such as reading, writing, science, math, civic education, etc. 4) At the end of the report card, set some clear goals for the student. Reports cards are documents that can be used during parent-teacher conferences, as well as during informal meetings. A general "class report card" can also be generated and presented to parents during a curriculum meeting in order to let parents know where the class is thriving and where the class needs more support and improvement.
Parent Reports	This report is similar to the student report card but highlights where the child is at in terms of other students' progress, as well as clearly set learning benchmarks. Teachers and parents can look at this report together during parent-teacher conferences.

School Report Cards	School report cards bring together school community members in order to improve school management, student performance, teacher attendance, financial accountability, the quality of education, etc. Instead of the head teacher and teachers presenting the report card to the community (as explained in the previous examples above), the school report card is a collaborative effort between all education stakeholders.
	
	School report cards usually examine and report on 10 key areas:
	  1) School Safety and Protection
	  2) School Facilities
	  3) Access to Textbooks
	  4) Continuous Assessment
	  5) Water and Sanitation
	  6) Roles of Children at the School
	  7) The Management of Instructional Materials
	  8) Performance of the School Management Committee
	  9) Homework Assignments
	  10) Marking and Parental Responsibility
	
	This type of tool is created in order to encourage parents to take a more active role in improving the quality of education and presenting the findings to other school community members in order to take action to improve the school. Once the school report card is completed and analyzed, there is a school report card committee that arranges a meeting with members of the school community to discuss the findings. The goal of this meeting is to discuss and agree on actions to be taken by the head teacher and the Parent Teacher Association/School Management Committee to address concerns of parents listed in the school report card form. They will also organize other activities to help improve the quality of education in the school.

Handout 2: CD3M Cycle – Steps 1, 2, 3, 4

CD3M – STEP 1 – What's the Problem?
What is not working?   Describe the problem in detail here:
Given this problem, what do I want a potential outcome to be?   Describe in detail here:

CD3M – STEP 2 – What data do I have? What data do I need?
What do I know already about my problem?
Describe how the data I have proves that this is a problem:
What else do I need to know about to better understand this problem?
Describe in detail here how I can go about getting that data? (Be specific, such as who, how, when, with what types of tools)

CD3M – STEP 3 – How and with what will I gather my data?

What specific tools will I use to gather my data? Who will use the tools? How many times will each tool be used? When will it be used? Who is the tool audience?

What will I do with the data when it is collected? How will I start to compile the data?

CD3M – STEP 4 – **What does my data say?**
What are different ideas and concepts that arise from the data (either via running descriptive statistics such as mean, median, relative frequencies of from coding)
What are major themes? How are they related? What does this mean?
What did I learn? How do I know? (This is a summary of what your data is telling you)

Session 15: Future Actions (How Can We Act Upon Our Findings for Change and Decision Making?)

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Adapt CD3M data collection tools to local needs and use them to conduct the CD3M process cycle

Session Rationale: Presenting and sharing findings is an important part of the CD3M process cycle. Determining future actions to take because of the findings is an integral part of the CD3M process. Participants practice creating action plans and School Improvement Plans in order to create clear improvement objectives, articulate SMART (Specific, Measurable, Attainable, Relevant, and Time-bound) activities, and monitor the change process.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: 1 hour 15 minutes

Prerequisites: Session 4 - Developmental Evaluation
Session 5 - Quantitative Methods
Session 6 - Qualitative and Mixed Methods
Session 10 - Quantitative Analysis
Session 11 - Qualitative and Mixed Methods Analysis
Session 14 - Presenting Data

Version: October 2013

Contributing Posts: Guatemala
Philippines

Session: Future Actions (How Can We Act Upon Our Findings for Change and Decision Making?)		
Date:	**Time:** 1 hour 15 minutes	**Trainer(s):**

Trainer preparation:
1. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
2. Review the important concepts and terms concerning how to create a school improvement plan.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, and projector
    2. Flip chart
    3. Markers
    4. Tape
- **Handouts**

    Handout 1: School Improvement Plan Case Study

    Handout 2: CD3M Process Cycle – Step 5 – What do I do next? (Action Planning/School Improvement Plans)
- **Trainer Materials**

    Trainer Material 1: Session 15 PowerPoint

Session Learning Objectives:
Participants will
1. Indicate the importance of action planning and creating school improvement plans at the end of the CD3M cycle.
2. Create improvement objectives and a school improvement plan based on a case study presented to them.
3. Identify the importance and steps necessary to monitor school improvement plans.

Phase / Time / Materials	Instructional Sequence
Motivation 5 minutes Trainer Material 1: Session 15 PowerPoint	**Introduction to School Improvement Plans** Participants consider how action planning and school improvement is addressed in their schools. 1. Ask: • *"Once findings have been presented, what type of process do you think that the school community can do to address Step 5 of the CD3M process cycle – What can we do next?"* [SLIDE 2]: Re-introduce Step 5 of the CD3M process cycle. Indicate that we will continue to talk about Step 5 of the CD3M process cycle and say/paraphrase: "*In our last session we talked about ways to present and share your findings. In this session we will address how to create concrete action steps to create the change that we want to see at school. This will be done by examining school improvement plans, which are specific tools that we will use to systematically articulate what community members will agree to do, as well as how they will monitor progress and problems.*" FUTURE ACTION What do I do next?
Information 20 minutes Trainer Material 1: Session 15 PowerPoint	**Action Plans & School Improvement Plans** Participants are introduced to school improvement plans as a means to indicate goals, objectives, and timelines for accomplishing activities in the plans. They are also introduced to how to monitor a school improvement plan. **Note:** Action planning and school improvement plans are common tools used across the world to help improve the condition of a school as well as promote increased learning outcomes. If there are specific steps that schools/communities use in the country in which this training is being conducted, please highlight the steps and bring examples. This session is intended to give generic action

Phase / Time / Materials	Instructional Sequence
	planning tools that need to be formatted based on context.
	1. [SLIDE 3]: Present the concept of a school improvement plan. Say or paraphrase: *"School improvement plans (SIPs) are action plans that set out how to go about enacting change based on findings shared at the school level. SIPs have specific objectives, activities to meet those objectives, a breakdown of tasks and persons responsible, a timetable for implementation, and a monitoring framework. School improvement plans strengthen school-community partnerships so teachers and parents and students themselves become actively involved in the day-to-day running and improvements of their schools. These plans are created, followed, and monitored by the school community and not by outside interveners. Preliminary school improvement plans should start small, be concrete, and be doable without outside financial resources."*
	2. [SLIDE 4]:Present the steps for SIPs by saying or paraphrasing: *"SIPs follow a process that is complimentary to the CD3M cycle:*
	1) *"Research and data is collected and analyzed in order to express what is going well at the school and express concerns of what needs to change. This is covered in Steps 1-4 in the CD3M process cycle.*
	2) *"Mobilize community members: Explain and present the findings to a wide range of community members that will be impacted by the findings. This is a good time to talk about the School Improvement Plans and help participants to dispel fears of feeling threatened. This includes talking to parents, teachers, head teachers, and students.*
	3) *"Community members develop objectives on what needs to change according to what they have learned from the findings and during community-lead conversations. This vision can incorporate elements of school infrastructure, community-school relationships, teaching, learning materials, the well-being of children and teachers, etc. This is a part of Step 5 of the CD3M process cycle.*
	4) *"Together, the school community members create a concrete plan of action of how to attain the vision. This*

Phase / Time / Materials	Instructional Sequence
	plan must be SMART (Specific, Measurable, Attainable, Relevant, and Time-Bound). It needs to be posted at the school so everyone can see the plan. 5) *"Community members need to agree to monitor and evaluate their SIPs. This is a key step in making sure that change happens. It creates accountability from the head teachers, teachers, and community members."*
Practice 20 minutes Trainer Material 1: Session 15 PowerPoint Handout 1: Example Objectives for SIPs Handout 2: SIP Case Study Handout 3: CD3M Step 5 – What do I do next? (School Improvement Plan)	**Developing Objectives for Change** Participants set improvement objectives based on findings from a case study scenario. **Note:** This example can be contextualized to meet the realities and needs of all participants. 1. Indicate that the first step to any school improvement plan is to look at the findings and articulate objectives for improvement. 2. Present Handout 1 – Example Objectives for SIPs, a list of example objectives, and ask participants to read the objectives and think about the problem that they address (the findings that the research has showed). 3. Once participants have finished filling out Handout 1, ask them to share their responses. 4. Distribute Handout 2 – Case Study, along with Handout 3 – CD3M Step 5. Explain to participants that they will read the case study in groups of three. Then they will fill out the first page of Handout 3 (creating a concrete objective for each finding of the case study). 5. When the smaller groups have completed their work, together in the large group, participants should indicate the findings, along with objectives for improvement for each finding.

Phase / Time / Materials	Instructional Sequence
	6. [SLIDE 5]: Say or paraphrase the following objectives if they have not come directly from participants:

<table>
<tr><td>Findings</td><td>Objective</td></tr>
<tr><td>"The area where children play at school is not safe as there are metal rods poking out of the ground and broken glass in certain areas because of people smashing bottles at night."

"There is no border around the school to protect them from passing cars in the street."

"There are no games for children and no green spaces to brighten the area."</td><td>"The school has a recreational environment that includes a safe playground, outdoor games, and green areas for both boys and girls."</td></tr>
</table>

Phase / Time / Materials	Instructional Sequence
Application 25 minutes Trainer Material 1: Session 15 PowerPoint Handout 2: SIP Case Study Handout 3: CD3M Step 5 – What do I do next? (School Improvement Plan)	**Action Plan/School Improvement Plan Practice** Participants fill out a School Improvement Plan and Monitoring Meeting Schedule based on the case study addressed in the Practice section. 1. Indicate to participants that now that they have created the objectives, they can think of concrete activities, members to conduct activities, and timelines to achieve the objectives. Tell participants that they will continue to fill out the CD3M Step 5 handout, this time referring to the School Improvement Plan. 2. Groups fill out the SIP 3. Ask groups to present their SIPs. 4. [SLIDE 6]: Present your version of the SIP. Findings: *The area where children play is not safe. There is no border around the school to protect them from passing cars. There are no games for children and no green space.*

Phase / Time / Materials	Instructional Sequence

	Objective: *The school has a recreational environment that, for this theme, includes a safe playground, outdoor games, and green areas for both boys and girls.*
	
	Activities:
	   a) Hold meetings to define recreational space and design with teacher, parent, children, and adolescent participation.
	   b) Build a fence around school grounds for safe protection of children during recreational activities.
	   c) Post signs in the playground warning people not to use at night and vandalize.
	   d) Plant trees and a garden to make space appealing.
	   e) Meet with community members to request donations for games and recreational equipment.
	   f) Establish rules for the use and care of the space by adults, children, and adolescents.
	   g) Train adults in appropriate supervision of recreational space.
	
	Monitoring Plan
	   a) Meetings once a month discuss what is working and what problems are encountered
	   b) Signs up and posted
	   c) Fence built
	   d) Trees planted
	   e) Garden bed raised and plants planted
	   f) Games and recreational equipment donated
	   g) Rules posted
	   h) Adults conducting supervision strategies
	
	5. [SLIDE 7]: Project the monitoring meeting minutes template. Explain to participants that this is a tool they can use to track progress in meeting the SIP objectives.

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Achieved in the Information section **Learning Objective 2:** Achieved in the Practice and Application sections **Learning Objective 3:** Achieved in the Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

EQUIP 1. (n.d.). First Principles: Community Engagement in Education Programs. Retrieved from http://www.equip123.net/docs/E1-FP_CommEng_Comp_Web.pdf

Catholic Relief Services. (2009). School Improvement Plans How-to-Guide. CRS Ecuador. Retrieved from http://www.crsprogramquality.org/storage/pubs/education/edhowto_ecuador.pdf

Handout 1: Sample Objectives for SIPs

At the end of the school year:

- The school has safe drinking water for children and adults.
  Problem addressed:

- The school has offered tutoring and make-up work at least once a month.
  Problem addressed:

- The school and the community organize themselves to identify those children who are not attending school, and promote actions that stimulate their registration and regular attendance.
  Problem addressed:

- Teachers administer a reading comprehension and basic math test once a year, so they can make decisions to improve class work.
  Problem addressed:

- The school has adequate teaching material to facilitate children's learning.
  Problem addressed:

- The number of student absences has decreased.
  Problem addressed:

- The percentage of children passing the exit exam for primary school has increased.
  Problem addressed:

http://www.crsprogramquality.org/storage/pubs/education/edhowto_ecuador.pdf

Handout 2: SIP Case Study

A group of community members at the City Center school got together to conduct a quick assessment on the health and recreation situation of primary school students in their school. The conducted interviews with students, parents, and teachers and conducted observations to better understand the safety issues and recreation spaces for children. The major findings are listed below:

- The area where children play at school is not safe as there are metal rods poking out of the ground and broken glass in certain areas because of people smashing bottles at night.

- There is no border around the school to protect students from passing cars in the street.

- There are no games for children and no green spaces to brighten the area.

Handout 3: CD3M – Step 5 – Action Plan/School Improvement Plan Template

CD3M – STEP 5 – What do I do next?

SHARED VISION	
FINDING	OBJECTIVE
Findings:	Objective :

SCHOOL IMPROVEMENT PLAN	
Findings:	
Objective:	

Activities	Person(s) Responsible	Timeline
1.		
2.		
3.		
4.		
5.		
6.		
7		
Activities to Monitor the plan		

MONTHLY MONITORING MEETING SCHOOL IMPROVEMENT PLANS	
Date	
Meeting Members	

Objective :	
GAINS/ACCOMPLISMENTS (in reference to planned activities)	PROBLEMS (in reference to planned activities)

Session 16: Mobile Devices for Assessment 1

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: Mobile devices can be used in conjunction with computers in order to
                                 help collect, store, analyze, and present data to more people in a much
                                 faster way. Participants will explore open-source software that can be
                                 downloaded to mobile technology devices.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                 monitoring and evaluation and an understanding of the sector that is
                                 being featured in the workshop. Workshop materials are designed for
                                 the Education sector, but can be adapted to other sectors as well.

Time: 2 hours

Prerequisites: Session 4 - Developmental Evaluation

Version: October 2013

Contributing Posts: Guatemala
                                 Philippines

Session: Mobile Devices for Assessment 1		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. Before the session, record all participants' cellphone numbers in your phone. Prepare a short poll question that you can send out to participants during the Motivation section of this session. Make sure that the question can be quantifiable. This will allow you to represent the answers using a bar/column graph and a pie chart graph.
2. Prepare all training materials and handouts. The training materials are mostly videos, which participants will need to view in their groups. If there is fast Internet connectivity, participants can view these videos online. If there is no connectivity or if it is slow, then these videos should be placed on USB sticks for participants to view with their laptops. They are all downloaded and are part of the handouts and training material folder.
3. Some of the sessions require video. If possible, facilitators could contact the designers of the open-source software to see if they would be available to give a presentation via Skype or the phone instead of watching a video.
4. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
5. Review the important concepts and terms concerning mobile technologies and the different types of assessment packages to consider and prepare in order to effectively communicate and present CD3M findings.
6. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
7. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
   1. Computer, screen, and projector
   2. Excel
   3. Cellphones
   4. Flip chart
   5. Markers
   6. Tape
   7. USB sticks
   8. Laptops for groups of 2-3
   9. Internet connectivity (not necessary)

- **Handouts**
   Handout 1: Mobile Assessment Tools Worksheet
   Handout 2: Frontline SMS Introduction
   Handout 3: Ushahidi Introduction
   Handout 4: Tangerine Introduction
   Handout 5: Completed Mobile Assessment Tools Worksheet
   Handout 6: Plan Benin Blog Post

- **Trainer Materials**
   Trainer Material 1:   Session 16 PowerPoint Frontline SMS Video
   Trainer Material 2:   Ushahidi Video
   Trainer Material 3:   Tangerine Video
   Trainer Material 4:   SurveyToGo Video
   Trainer Material 5:   Plan Benin and Frontline SMS/Ushahidi

Session Learning Objectives:

Participants will

1. Indicate the importance of action planning and creating school improvement plans at the end of the CD3M cycle.
2. Create improvement objectives and a school improvement plan based on a case study presented to them.
3. Identify the importance and steps necessary to monitor school improvement plans.

Phase / Time / Materials	Instructional Sequence
Motivation 15 minutes Cellphones Laptop Projector Screen Excel Trainer Material 1: Session 16 PowerPoint	**Polling Participants Via Cellphones** Participants participate in a quick cellphone-based survey and analyze the data. 1. Ask participants to pull out their cellphones. Explain that you are going to send a SMS poll question to them. They will need to read the question and then respond back to you. 2. Send the following poll question: • How do you feel about sending a group SMS? Respond back using a number: 1) Very comfortable; 2) Comfortable; 3) Uncomfortable; 4) Very uncomfortable 3. Participants respond by sending SMS messages to your phone 4. When the messages start coming in, on an Excel spreadsheet, create the following table (making sure that the spreadsheet is projected on a screen). The number of responses for each category should be indicated in the Y column: <table><tr><td>X</td><td>Y</td></tr><tr><td>Very Comfortable</td><td></td></tr><tr><td>Comfortable</td><td></td></tr><tr><td>Uncomfortable</td><td></td></tr><tr><td>Very Uncomfortable</td><td></td></tr></table>

Phase / Time / Materials	Instructional Sequence
	5. Graph the Excel table using a bar/column graph and a pie chart. Ask participants to tell you how to do this and determine the title that is needed for each graph and the labels that are necessary for each axes • Title: Workshop Participants' Comfort Sending A Group SMS • X Label: Comfort Level • Y Label: Frequency 6. [SLIDE 2]: Say or paraphrase: *"This activity highlights to us how we can use technology to make the data collection process more streamlined, efficient, and quicker. Sending out simple surveys via SMS is but one way to get data from participants. Imagine if every day for one month you sent out an SMS to the same group of people and they had to respond to your question. This could be used as a technique to track teacher attendance, student participation in class, or poll community members about the state of their schools. The information then comes back to a central location (in this case, my cellphone) where I can record and store the data and analyze it, as we have done together using Excel. This session will expose us to different types of mobile technologies that we could use to make the CD3M process cycle a bit easier.*
Information 60 minutes Computer, projector, and screen Trainer Material 1: Session 16 PowerPoint Groups with own laptops USB sticks	**Open-Source Mobile Technology Tool for Assessment** Participants learn about Frontline SMS, Ushahidi, Tangerine/ Tangerine Class, and SurveyToGo, along with their multiple uses. 1. Ask participants: *"Have you ever used any time of technology to collect, store, analyze, and present data?"* Ask participants to explain what they used and how they used it. • Participants could refer to: *Excel (store and present data), SPSS (store and present data), Survey Monkey (collect, store, present data), audio recording(collect data), video recording (collect data).* 2. Ask participants why we would want to use mobile

Phase / Time / Materials	Instructional Sequence
Internet Connectivity Handout 1: Mobile Assessment Tools Worksheet Handout 2: Frontline SMS Introduction Handout 3: Ushahidi Introduction Handout 4: Tangerine Introduction Training Material 2: Frontline SMS Video Training Material 3: Ushahidi Video Training Material 4: SurveyToGo Video	technologies to collect, store, analyze, and present data findings? 3. [SLIDE 2]: Introduce the rationale for using mobile technologies for CD3M. Say or paraphrase the following: "*There are many different approaches to assessment with ICTs such as mobile technologies. One of these approaches is to make existing forms of assessment more reliable and efficient, as demonstrated by our Motivation section activity in which we participated. Also, technologies can enable assessments to be used as a tool to improve student learning, for example. Therefore, using mobile technologies for CD3M is useful to make the data collection, storage, analysis, and presentation processes more reliable and efficient, and can be used as tools for more formative assessments.* 4. [SLIDE 3]: Explain to participants that there are four major tools listed on this handout. Present a brief summary of each tool: • *Frontline SMS – A free open-source software package that turns a mobile phone and computer into a central hub to send SMS-based surveys and receive SMS responses.* • *Ushahidi – A free open-source software package that uses Frontline SMS, for example, to then visually present data in terms of location, frequency, and magnitude.* • *Tangerine – A free mobile assessment platform that uploads EGRA, EGMA, and other surveys to be conducted and saved on tablets.* • *SurveyToGo – An open source software package that allows for users to create customized surveys in order to download them on tablets, smartphones, and laptops.* 5. Distribute Handout 1 – Mobile Assessment Tools Worksheet. This is a blank copy. 6. Tell participants they will have to use videos and resources that you will provide, in addition to the Internet, to learn more about the four different types of mobile assessment tools. When they do, they will then fill out the different parts of the Mobile Assessment Tools Worksheet.

Phase / Time / Materials	Instructional Sequence
	7. Distribute the following materials to participants:

Medium	Material
Videos on USB key/ laptop/ Internet Paper Website locations	Training Material 2: Frontline SMS Video http://www.youtube.com/watch?v=hEK0dTWgqzQ Training Material 3: Ushahidi Video http://player.vimeo.com/video/7838030?title=0&byline=0&portrait=0 Training Material 4: Tangerine Video http://www.youtube.com/watch?v=ehmOKLltwz8&feature=player_embedded Training Material 5: SurveyToGo Video http://www.youtube.com/watch?feature=player_embedded&v=l7nlqwW3GDM Handout 2 – Frontline SMS Introduction Handout 3 – Ushahidi Introduction Handout 4 – Tangerine Introduction http://www.frontlinesms.com/ http://www.frontlinesms.com/frontlinesms-in-action/video-audio/ http://ushahidi.com/ http://www.tangerinecentral.org/ http://www.dooblo.net/stgi/surveytogo.aspx

8. Participants work in groups of 2-3 in order to learn more about the four different mobile technologies. They will fill out the worksheet as they learn. Circulate throughout the room and help guide groups and ask questions. This should take 40 minutes.

9. Distribute Handout 5 – Completed Mobile Assessment Worksheet. Invite participants to read the handout. Ask participants to pose clarifying questions and impressions about their own completed worksheets.

Phase / Time / Materials	Instructional Sequence
Application 30 minutes Computer, projector, and screen Trainer Material 1: Session 16 PowerPoint	**Frontline SMS, Ushahidi, Tangerine, SurveyToGo for Education** Participants brainstorm ways to apply Frontline SMS, Ushahidi, Tangerine, and SurveyToGo to education. 1. Divide participants into 3-4 groups. Each group will address a specific mobile technology assessment tool presented during this session. 2. [SLIDE 5]: Indicate that each group needs to: • Review the completed mobile assessment tool worksheet • Choose a few issues in education they feel the technology could address • Present some potential benefits and challenges using the materials in your country • Explain how to use the tool • Explain what types of data one would get • Explain how the data could be presented using the tool • Choose one person to represent the group on a panel made up of a representative from each group 3. Next, invite the participants to serve on a panel. Non-panelists will ask questions to the panelists in order to better understand how these tools could be used for CD3M.
A**ssessment**	**Learning Objective 1:** Achieved in the Information and Practice sections **Learning Objective 2:** Achieved in the Practice and Application sections **Learning Objective 3:** Achieved in the Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Mobile Resources:

EduTech is the World Bank Blog on ICT use in Education
http://blogs.worldbank.org/edutech/videos/mobiles-0

Mobile Learning: Transforming the Delivery of Education and Training, Edited by Mohamed Ally
http://ref-notes.blogspot.com/2009/04/mobile-learning-transforming-delivery.html

Mobile Learning in Developing Countries http://www.col.org/resources/publications/trainingresources/knowledge/Pages/mobileLearning.aspx

mLearning: A Platform for Educational Opportunities at the Base of the Pyramid
http://ict4dev.org/wp-content/uploads/2010/12/mLearning_Report_Final_Dec2010.pdf

The Innovative Use of Mobile Applications in East Africa, by Johan Hellström, SIDA, 2010:12

Handout 1: Mobile Assessment Tools Worksheet

	Frontline SMS + Ushahidi	**Tangerine**	**SurveyToGo**
Summary			
Required Devices			
Data Collection			
Data Storage			
Data Analysis			
Data Presentation			

Resources	Introduction: http://www.frontlinesms.com/ http://ushahidi.com/ Free software: http://www.frontlinesms.com/ the-software/ Informational and case study videos: http://www.youtube.com/ watch?v=hEK0dTWgqzQ http://www.frontlinesms.com/ frontlinesms-in-action/video- audio/ http://ushahidi.com/ products/ushahidi-platform http://player.vimeo.com/vide o/7838030?title=0&byline=0& portrait=0	Introduction: http://www.tangerinecentral. org/ How-to guides: http://www.tangerinecentral. org/aboutsite Video: http://www.youtube.com/wa tch?v=ehmOKLltwz8&feature =player_embedded	Introduction and free software: http://www.dooblo.net/ stgi/surveytogo.aspx Demonstration video: http://www.youtube.com/ watch?feature=player_ embedded&v=l7nlqw W3GDM

OTHER REFERENCES LIKE THOSE PRESENTED ABOVE:

- UReport: http://www.ureport.ug/
- RapidSMS: http://www.rapidsms.org/en/develop/
- iFormbuilder: http://www.iformbuilder.com/
- Akvo Flow http://www.akvo.org/web/introducing-akvo-flow
- EchoMobile http://www.echomobile.org/public/main
- Magpi https://www.magpi.com/login/auth
- Nokia Data Gathering https://projects.developer.nokia.com/ndg/
- Open Data Kit http://opendatakit.org/
- MapBox http://mapbox.com/

	Frontline SMS + Ushahidi	Tangerine	SurveyToGo
Summary	Frontline SMS: A free open source software program that turns a laptop and a mobile phone into a central communications hub. It enables users to send and receive text messages with large groups of people through mobile phones. It can be used to conduct public surveys, as well as collect any type of information requiring simple answers that are less than 160 characters. Ushahidi: A free open source software for information collection, visualization, and interactive mapping. The tool uses the concept of crowd sourcing for social activism and public accountability. It offers observers the opportunity to submit reports using their phones or the Internet while simultaneously creating a temporal and geospatial archive of events. It is used with Frontline SMS.	Tangerine: A free open source electronic data collection software that is designed for mobile touch-screen devices (tablets or smartphones). It is used to record student responses in early grade reading (EGRA) and/or early grade math assessments (EGMA), as well as interview responses from students, teachers, head teachers, and other education stakeholders. It was created by RTI international. Tangerine Class: A new modified open-source version of Tangerine. It assists teachers in systematically collecting, analyzing, and using results from student assessments in order to inform their teaching. It can track students and their performance against curriculum standards, calculate scores, and help teachers revise their teaching practices based on student performance in math and reading.	SurveyToGo: A free open-source software that require no servers to install, no licenses to purchase, and no IT costs. Users download the software and create customized electronic surveys and questionnaires using 14 different types of questions. Once the survey is created on a laptop, it can be automatically deployed to hundreds of tablet computer or touch-screen PDAs. Surveys can be conducted both offline and online. Deploying SurveyToGo is NOT FREE (though the software is). Users must pay for each interview conducted (see details below).
Required Devices	-Brick cellphones -Windows/Mac laptop -(option GSM modem)	-Net books, tablets, or smartphones -Laptop -Internet connectivity to upload to a central server	-Android tablets, smartphones, or PDA -Windows laptop / PC -Internet connectivity/ offline capabilities

Data Collection	1) Download Frontline SMS 2) Follow setup instructions in software 3) Create an SMS question 4) SMS questions are deployed to users 5) Users respond via SMS 6) Responses are sent to a unified number that collects data	1) Register and log in to Tangerine website 2) Set language, sub-tests, and background questions with the assessment wizard 3) Edit sub-test letters, wordlist, instructions, and questions 4) Load assessment on tablets 5) Conduct assessment in the field using the tablet to ask questions and conduct the assessment 6) Load results using mobile phone network or WiFi connection	1) Download SurveyToGo 2) Create username/password 3) Follow instructions in the demonstration video 4) Create customized survey 5) Test survey with laptop by clicking on "run emulator" (free use and can conduct interview without paying) 6) Register PDA/smartphones 7) Test up to 10 interviews with PDAs (free) 8) Deploy survey to PDAs and pay for 10+ interviews (needs credit card info)
Data Storage	Data from incoming SMS lives on a local computer and can be exported to different platforms like Excel and Access.	Data is stored in the Tangerine Wizard online. It can be downloaded as a CSV file. For Tangerine Class, the functionality is at the tablet level for storage.	All data can be exported to various file formats (SPSS, Excel, Access, Word, etc).
Data Analysis	Data can be analyzed using one of the platforms indicated above.	Data for Tangerine-conducted assessments are analyzed using SPSS or Excel, for example. Data for Tangerine Class are assessed within a program embedded in the tablet, much like e-EGRA.	No data analysis feature of this software. It is mainly a survey collection tool.
Data Presentation	Ushahidi allows users to display data on maps. The platform allows for many different types of rich data to be mapped and compared.	Data for Tangerine is presented using traditional graphs and statistics. Data for Tangerine Class is presented to teachers by suggesting instructional decisions on pacing, ability grouping, use of materials, and suggestions to promote parental engagement in student learning.	It is possible to see where the surveys were completed. Sharing of findings need to be done via one of the data storage software packages indicated above (SPSS, Excel, Access, Word, etc).

Resources	Introduction: http://www.frontlinesms.com/ http://ushahidi.com/ Free software: http://www.frontlinesms.com/ the-software/ Informational and case study videos: http://www.youtube.com/ watch?v=hEK0dTWgqzQ http://www.frontlinesms.com/ frontlinesms-in-action/video- audio/ http://ushahidi.com/products/ ushahidi-platform http://player.vimeo.com/video /7838030?title=0&byline=0&p ortrait=0	Introduction: http://www.tangerinecentral. org/ How-to guides: http://www.tangerinecentral. org/aboutsite Video: http://www.youtube.com/ watch?v=ehmOKLltwz8&feat ure=player_embedded	Introduction and free software: http://www.dooblo.net/ stgi/surveytogo.aspx Demonstration video: http://www.youtube.com/ watch?feature=player_ embedded&v=l7nlqw W3GDM

Handout 6: Plan Benin Blog Post

Tapping networks: moto-taxis, SMS, and violence reporting in Benin
March 6, 2013, by Linda Raftree

As part of their efforts to reduce violence against children, Plan Benin is rallying motorcycle-taxi drivers to use SMS to report violence against children that they witness in the streets.

Florence Cisse, Plan West Africa's regional communications officer, says:
"The Zemidjan or 'Zem' swarm the streets of Cotonou like bees. They are everywhere; silent observers to all comings and goings. Now, they have received training on how to recognize cases of child trafficking or kidnapping which often occur on the same busy streets. Using SMS texting on their mobile phones, they send information which is tracked and mapped by Plan using Ushahidi, an open source Web-based technology platform. Plan then alerts authorities through partnerships with the Benin Central Office of Child Protection and ministries of Family, of Home Affairs, and of Justice who begin the process of retrieving the children or investigating the abuse."

"The Zem are always working on the streets, which is where children experience the greatest risk," said Michel Kanhonou, Plan Benin Programme manager. "The use of Ushahidi to track SMS texts and map the incidents of violence has helped to inform the authorities where, block by block, they need to invest greater resources to keep our children safe."

The Zem join youth, heads of police squads, community and religious leaders, and others who have received the training on how to recognize abuse and report it through simple SMS from Plan. Plan promotes a phone number that is used to collect the SMS on billboards and radio programmes.

This is the kind of innovation I think is most interesting – identifying existing networks and systems, and seeing how to enhance or expand them via new technologies. I'm looking forward to seeing how the program advances, and what Plan Benin learns from this effort to engage broader networks in preventing, tracking, and responding to violence against children.

The team in Benin has created a video about the violence reporting system, which uses both FrontlineSMS and Ushahidi. The technology tools, however, are only part of the program. In addition, the team launched billboard and community radio campaigns to promote the violence – reporting number; engaged local communities, government, child protection agents, and NGOs; and trained children, families, teachers, school directors, parents and community leaders (and now moto-taxi drivers!) about violence, its impact on children and how to respond to it. Children and young people have been involved in program design and implementation as well, and there have been thorough discussions on how to manage this type of sensitive information in a private and secure way.

http://ht.ly/ir3cv

Session 17: Mobile Devices for Assessment 2

Sectors:	Education; adaptable to other sectors
Training Package:	Community Data-Driven Decision-Making Workshop
Terminal Learning Objective:	Adapt CD3M data collection tools to local needs and use them to conduct the CD3M process cycle

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Session Rationale:	Mobile devices such as smartphones and video cameras can be used in order to conduct formative assessment of teachers' instruction as well as of students' learning levels. Participants will gain knowledge and skills of how to use video as a means of feedback or "Feedforward."
Target Audience:	PCVs and their work partners/colleagues
Trainer Expertise:	Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.
Time:	90 minutes
Prerequisites:	Session 4 - Developmental Evaluation
Version:	October 2013
Contributing Posts:	Guatemala Philippines

Session: Mobile Devices for Assessment 2		
Date:	**Time:** 90 minutes	**Trainer(s):**

Trainer preparation:
1. Prepare all training materials and handouts. There are training materials that are videos, which participants will need to view in the large group. If there is fast Internet connectivity, these videos can be viewed online (links are provided in the Instructions section). If there is no connectivity or if it is slow, then these videos should be viewed in the Handouts & Training Materials folder.
2. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
3. Review the important concepts and terms concerning mobile technologies and the different types of assessment packages to consider and prepare in order to effectively communicate and present CD3M findings.
4. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
5. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, and projector
    2. Smartphones that are charged with video capabilities (there should be an SD card in the phone in order to record and store memory) OR video cameras that are charged and have memory available
- **Handouts**
  Handout 1: "Feedforward" Principles
- **Trainer Materials**
  Trainer Material 1: Session 17 PowerPoint
  Trainer Material 2: Non-Fluent Reader Arabic – Video
  Trainer Material 3: Fluent Reader Arabic – Video

Session Learning Objectives:
Participants will
1. Explain how to use smartphones/videos to assess and provide feedback/Feedforward to teachers on their instruction.
2. Explain how to use smartphones/videos to assess students.

Phase / Time / Materials	Instructional Sequence
Motivation 15 minutes Smartphone with video capabilities SD card (usually in the smartphone) OR cable to connect to laptop Laptop Projector, screen Training Material 1: Session 17 PowerPoint	**The Benefits of Video** Participants reflect on how video can be used to help visualize practice (teaching practice). 1. Ask a participant if he/she would be willing to volunteer to be videotaped. Explain that you would like someone to demonstrate an icebreaker activity that he or she does with students in the classroom. This could be a game, a song, or a routine. Indicate that this could be a short 1-minute activity. 2. Participant conducts the activity while you film him/her using the video camera or the smartphone. 3. Quickly transfer the digital file to your laptop, either by connecting the video camera/smartphone to the computer or inserting the SD card into the laptop. 4. Explain to participants that we are going to watch the video again. Say or paraphrase: "*While we review this recording, think of all the small things that I did that were positive. Let's just focus on the positive here. There will be a lot of things to comment on. We don't want to overload the person who is getting the comments. We could focus on the negatives, but that may be too much information at the same time. Let's let the person in the video know what s/he did that was great so that s/he knows what s/he can keep doing!*" 5. Participants watch the video and then comment based on the guidelines mentioned. 6. [SLIDE 2]: Ask participants: "*What are the benefits of videotaping ourselves? What are the benefits of reflecting on what is done correctly?*" • Answers to highlight: *Videos help us see what we are doing in our classes. They also help us visualize what we are doing right. They help us during trainings and we can see our colleagues doing something great that we strive to do. Focusing in the positives helps to boost our confidence. It helps us to understand what we should continue doing.*

Phase / Time / Materials	Instructional Sequence
Information 30 minutes Computer, projector, and screen Training Material 1: Session 17 PowerPoint Handout 1: "Feedforward" Principles Training Material 2: Non-Fluent Reader Arabic Training Material 3: Fluent Reader Arabic	**Using Video for "Feedforward" Learning** Participants learn about how to use video to give feedback and understand students' levels, as well as the concept of "Feedforward." 1. [SLIDE 3]: Explain to participants the following: "*Videos can be created so that we can see what teachers are doing in the classroom. Video can be used to help provide information to those teachers on what they are doing well. It can also help teachers see what things they can work on in the future. First we will talk about the technique called 'Feedforward,' which is an approach that helps teachers see what they are doing well.*" 2. Distribute Handout 1: "Feedforward" Principles. Ask certain participants to read it out load, one-by-one. 3. [SLIDE 4]: Ask: "*What are the major parts of Feedforward? What does Feedforward NOT do? How would we view the video with the teacher who was filmed?*" (Answers found in the handout) 4. [SLIDE 5]: Indicate to participants that videos can also help teachers see what they can improve upon. Say or paraphrase: "*We can also look at videos of teachers and help them focus on 1-2 practices that they can improve upon. We don't want to overload teachers. We don't want to always tell them where they need to improve. We need to boost their confidence and help them understand what they are doing very well. However, we can all improve.*" 5. [SLIDE 6]: Explain that videos can also be used as assessment evidence for student assessments. Say or paraphrase: "*We can also film students to better understand how they are performing. Videos can be taken to show as a pre and post-test, especially around oral reading fluency. A teacher could film each student at the beginning of the year reading a short passage. The teacher could then film a student 2-3 months later reading a similar short passage. The teacher can sit with the student and compare the progress. The student will see what they are learning and doing well. A teacher could also use the videos during parent-teacher*"

Phase / Time / Materials	Instructional Sequence
	conferences in order to show parents their children's progress as well as indicate where they need to work together to help the children improve. 6. Show the two videos (one of a non-fluent reader and one of a fluent reader in Arabic). Explain to participants that even though they may not understand Arabic, they will see the different levels of students. • Non-fluent Reader in Arabic: Training Material 2 or http://vimeo.com/49173220 • Fluent Reader in Arabic: Training Material 3 or http://vimeo.com/49173635 7. [SLIDE 7]: Ask participants to indicate what the indicators of fluency were in these two videos and how these could be used to help students progress: • Answers: "*The fluent reader tracks, sounds out words, speaks with expression, reads swiftly, and makes little mistakes. A non-fluent reader tries to track and cannot sound out letters, does not read with expression, reads slowly, and makes many mistakes. Videos can help parents see where their student may be struggling and make concrete suggestions of how the non-fluent student can make progress and where the fluent reader can make further leaps.*"
Application 20 minutes Flip chart Markers Tape	**Video for CD3M** Participants brainstorm ways to apply video for the CD3M process cycle 1. Ask participants to think back to the CD3M process cycle. Ask five people to come up, one-by-one, and recreate the cycle on a flip chart. 2. Indicate that participants will work with a partner to brainstorm all the ways video could be used in the five stages of the CD3M process cycle. 3. Participants meet in the large group. Conduct a debriefing and write out participants, ideas, per the CD3M process cycle step. • Possible Ideas: *Video can be used to: observe teachers and provide them with formative assessments, observe students*

Phase / Time / Materials	Instructional Sequence
	and track their oral reading fluency progress (or any other component of reading progress), demonstrate to children positive behaviors when presenting findings on classroom behavior change, compare environment print situations in different schools … and more!
Assessment	**Learning Objective 1:** Achieved in Practice and Application sections **Learning Objective 2:** Achieved in Practice and Application sections
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

Dowrick, P.W., Kim-Rupnow, W.S., & Power, T.J. (2006). Video feedforward for reading. The Journal of Special Education, 39(4), 194-207

EQUIP 3 Youth ICT
http://idd.edc.org/sites/idd.edc.org/files/Youth_ICT_Toolkit_FINAL.PDF

EduTech is the World Bank Blog on ICT use in Education
http://blogs.worldbank.org/edutech/videos/mobiles-0

Mobile Learning: Transforming the Delivery of Education and Training, edited by Mohamed Ally
http://ref-notes.blogspot.com/2009/04/mobile-learning-transforming-delivery.html

Mobile Learning in Developing Countries http://www.col.org/resources/publications/trainingresources/knowledge/Pages/mobileLearning.aspx

mLearning: A Platform for Educational Opportunities at the Base of the Pyramid
http://ict4dev.org/wp-content/uploads/2010/12/mLearning_Report_Final_Dec2010.pdf

The Innovative Use of Mobile Applications in East Africa, by Johan Hellström, SIDA, 2010:12

Handout 1: "Feedforward" Principles

Feedforward is a developmental approach where teachers/students watch themselves in brief videos in which they perform successfully in challenging situations
- This form of self-modeling takes snapshots of videos of teachers/students mastering new skills to show the future capability of an individual
- Feedforward videos can be created after videotaping individuals and then editing the clips so only the positive skills are present
- This requires the observer to have a video camera (either with a smartphone or standard video camera), as well as video editing software (such as Microsoft Moviemaker or I-movie)

Major Principles of "Feedforward"
- Videos are "perfect lessons" of teachers used for teacher training or one-on-one coaching sessions (these are edited clips put together)
- Videos present real teachers presenting lessons in a real classroom/real students practicing skills
- Videos are short (no longer than 3 minutes)
- Videos capture one concrete skill/ability
- Videos focus on one activity during a lesson plan and not the whole lesson plan

Benefits of "Feedforward" Principles
- The clips use skills and techniques that the students/teachers already know they can do
- It provides clear examples of what the best teaching practices are/what students can do
- There are real teachers/students that others can relate to
- Focusing on small and specific skills does not overload teachers and students

How to create "Feedforward" Videos?
- Teach one or more teachers how to successfully teach a component skill and have them demonstrate the skill
- The teacher practices in class; if the teacher makes a mistake coach the teacher in class
- Film the specific skill
- Edit the films
- Use the film to show the teacher and other teachers what they are capable of

**Dowrick, P.W., Kim-Rupnow, W.S., & Power, T.J. (2006). Video Feedforward for reading. *The Journal of Special Education, 39*(4), 194-207

http://www.creating-futures.org/keystosuccess/feedforward/

Session 18: Gender Analysis Tools

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Adapt CD3M data collection tools to local needs and use them to
Objective: conduct the CD3M process cycle

Session Rationale: Gender equality has been identified as one of the Millennium
                                Development Goals (MDG), highlighting its importance to
                                development. Moreover, according to the World Bank, investment in
                                girls' education yields some of the highest returns of all development
                                investment. Important decisions need to be made by communities
                                in order to improve the access, retention, and performance of girls in
                                school.

                                Communities need to have gender analysis tools that uncover how
                                gender works to create unfavorable conditions for girls at school.
                                Gender responsive strategies map out where there are inconsistencies
                                in the school and in classrooms, as well as during instruction and use
                                of classroom materials. Conducting CD3M gender analyses will permit
                                communities to create next steps to being more gender responsive.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                monitoring and evaluation and an understanding of the sector that is
                                being featured in the workshop. Workshop materials are designed for
                                the Education sector, but can be adapted to other sectors as well.

Time: 2 hours, 30 minutes

Prerequisites: Session 4 - Developmental Evaluation

Version: October 2013

Contributing Posts: Guatemala
                                Philippines

Session: Gender Analysis Tools		
Date:	**Time:** 2 hours, 30 minutes	**Trainer(s):**

Trainer preparation:
1. Textbooks with images (enough textbooks for each participant to conduct a gender analysis).
2. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
3. Review the important concepts and terms concerning gender responsiveness and the different types of gender analysis tools to consider and prepare in order to effectively communicate and present CD3M gender responsive findings.
4. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
5. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Computer, screen, and projector
    2. Marker
    3. Flip chart paper
    4. Various textbooks of different levels (with pictures)
- **Handouts**
    Handout 1: Gender and Sex (see separate PDF file)
    Handout 2: Gender Responsive Approaches Introduction to Tools
    Handout 3: Textbook Gender Analysis Tool
    Handout 4: School-Community Equity Interview Guide
    Handout 5: Classroom & Instruction Gender Analysis Tool Ideas
- **Trainer Materials**
    Trainer Material 1:   Session 18 PowerPoint

Session Learning Objectives:
Participants will
1. State the difference between the terms "gender" and "sex."
2. Identify issues that keep girls from attending school.
3. Practice gender analysis tools (textbook gender analysis, school-community equity analysis, classroom instruction gender-analysis).
4. Develop appropriate and effective strategies and approaches for addressing the issue of girls' education within their communities.

Phase / Time / Materials	Instructional Sequence
Motivation 20 minutes Trainer Material 1: Session 18 PowerPoint Handout 1: Gender and Sex Flip chart Markers	**Introduction to Gender & Sex** Participants define gender and sex and give examples of gender roles. 1. Explain to participants that you are going to conduct a little icebreaker to explore what is meant when talking about "gender." Ask participants to do the following: 2. Clap your hands if you understand what gender means. 3. Snap your fingers if the concept of gender is new to you. 4. Point your thumb down if you think the definition of gender is related to biological differences in males and females. 5. Put your thumb up in the air if you think that gender is learned and socially constructed and played out by our roles and behaviors. 6. Put both hands in the air if you think that gender can change over time. 7. Put your head down on the table if you think that gender is constant and never changes. 8. Stand up if you think gender is different for each person based on his/her culture, religion, age, language, sexual orientation, ethnic group, family structure, and place. 9. Sit down if you think that gender affects your access to resources, benefits, power, and security. 10. [SLIDE 2] Using the slide and Handout 1: "Gender and Sex," clarify the difference between the terms sex and gender. **Sex** Cannot Be Changed Without Medical Intervention • Only women can give birth • Only men can supply sperm • Male sexual organs • Female sexual organs **Gender** Changeable • Women can do traditionally male jobs as well as men. • Men can take care of children as well as women. • Education, tradition, beliefs, and custom shape gender

Phase / Time / Materials	Instructional Sequence
	roles and responsibilities for boys, girls, women, and men 11. Ask participants to give other examples to show they see the distinction. 12. Ask for examples of gender roles from their community. What jobs do women and men traditionally do? Are these roles changing? 13. What about in education? What have they observed about gender roles in school? Their observations may be recorded on a flip chart.
Information 30 minutes Trainer Material 1: Session 18 PowerPoint Handout 2: Gender Responsive Approaches – Introduction to Tools	**Gender Responsive Approaches and Tools** Participants reflect on the reasons for gender disparities and provide gender analysis tools to help understand the equity environment of the school. 1. [SLIDE 3]: Use the slides to present the importance of education and the reasons for gender disparity. 2. Say or paraphrase: "*Education is widely recognized as critical to national development. An increase in access and quality of education relative to national population is critical to socioeconomic growth and productivity, increased individual earnings and, subsequently, reduced income inequalities. Further, education contributes significantly to improved health, reduction of poverty, enhanced democracy, good governance, and effective leadership. It is the responsibility of every nation, therefore, to provide education to every citizen. Unfortunately, education systems are often characterized by gender disparities in favor of either boys or girls. For example, at the primary level, there are districts where many girls are not attending schools and when they enroll, they drop out much sooner than boys. The major issues that influence this trend include:* 3. [SLIDE 4]: Say or paraphrase: "**Early Marriages:** *Teen-age marriages are a reality for many young women. In many parts of the world, parents encourage the marriage of their*

Phase / Time / Materials	Instructional Sequence
	daughters while they are still children in hopes that the marriage will relieve the financial burdens on the family. This practice not only compromises the development of girls but may result in early pregnancy, social isolation, and low formal education levels."
	4. [SLIDE 5]: Say or paraphrase: "***Gender Stereotypes*** *are often reinforced instructional materials. Culture teaches children what it means to be a boy or a girl. Young people are influenced by messages to conform to a variety of expectations and to preserve a set of values that emphasize the differences between genders.* ***National policies*** *may promote gender equality in education, but there are inadequate programs to directly address inequalities in education."*
	5. [SLIDE 6]: Say or paraphrase: "***Inadequate gender awareness and expertise*** *persist despite gender mainstreaming and the emphasis often place on a gender analysis.* ***Inadequate reliable sex-disaggregated data*** *at all levels hampers the Education sector's ability to assess progress beyond access and participation. Sex disaggregated data are used mainly for reporting on global commitments and rarely for policy making or project preparation."*
	6. Ask participants how they feel about these practices? Are they prevalent in their country? What is being done to improve the situation?
	7. [SLIDE 7]: Present the definition of Gender Responsive School by saying or paraphrasing: "*A gender responsive school is one in which the academic, social, and physical environment and its surrounding community take into account the specific needs of both girls and boys. This implies that the teachers, parents, community leaders and members, and the boys and girls are all aware of and practice gender equality."*
	8. Distribute Handout 1 – Gender Responsive Approaches – Introduction to Tools. Ask participants to read the handout. Explain that the tools presented will help schools and communities better understand how they are gender responsive and what needs to improve to be more gender responsive at the school and in classrooms.
	9. Once participants have finished reading, ask if they have any questions. Answer their questions.

Phase / Time / Materials	Instructional Sequence
	10. Next, indicate that during the remainder of this session, participants will explore each type of tool, except the "School Equity Profile," which they have already tried out during Session 9 – Education Environment Assessments.

Practice 1
 	
30 minutes
 	
Trainer Material 1: Session 18 PowerPoint
 	
Handout 3: Textbook Gender Analysis Tool
	Gender Analysis in Textbooks and Instructional Materials
	Participants conduct a gender analysis and indicate types of gender-fair materials to create.
	
	1. Inform the participants that we will examine textbooks in order to create strategies to create a more inclusive gender friendly environment.
	
	2. Ask the participants to form groups of 2-3 (depending on how many textbooks you have).
	
	3. Using Handout 3, they are to do an analysis of textbooks.
	
	4. [SLIDE 8]: Once they have done their analysis, present the following criteria to help them brainstorm ways to create supplemental instructional materials that are more gender responsive (if needed).
	    • Materials should acknowledge and affirm variation – men and women are not all the same.
	    • Materials should be inclusive – they need to be about both men and women as well as people from different ethnic groups.
	    • Materials should be accurate.
	    • Materials should be affirmative – stressing the dignity and worth of all people.
	    • Materials should be integrated – they must weave together experiences and the lives of both men and women.
	
	5. Invite participants to share their inclusive gender-fair instructional materials concepts.

Phase / Time / Materials	Instructional Sequence
Practice 2 30 minutes Handout 2: Gender Responsive Approaches – Introduction to Tools Handout 4: School-Community Equity Interview Guide	**Gender Responsive School-Community Interview Guide** Participants will learn about and practice using the school-community gender responsive interaction analysis tool. 1. Review the school-community interview guide introduction presented in Handout 2. 2. Distribute Handout 4: School-Community Equity Interview Guide. 3. In groups of 2-3, participants will get together to practice using and recording interview answers, where participants will simulate the role of parents and what parents may say. 4. After the simulation, participants will indicate how they could use this tool in their schools. 5. In the large group, participants explain how they could use, as well as adapt, this tool to better understand gender perspectives of parents. 6. Together, brainstorm different initiatives that could be conducted to help create gender-fair activities and initiatives for parents.
Application 30 minutes Trainer Material 1: Session 18 PowerPoint Handout 2: Gender Responsive Approaches – Introduction to Tools Handout 5: Classroom & Instruction Gender Analysis Tool Ideas	**Gender Responsive Classroom-Instruction Observation Tools** Participants create a gender responsive instruction-classroom observation tool. 1. Review the classroom and instruction gender analysis introduction presented in Handout 2. 2. Distribute Handout 5: Classroom & Instruction Gender Analysis Tool Ideas. 3. [SLIDE 9]: In groups of 2-3, participants will get together to review the sample tools. They will have to create their own observation tools. Remind them that in Session 8, we also looked at observation tools. Invite them to review these tools, as well as those on Handout 5 to create their own observation

Phase / Time / Materials	Instructional Sequence
Flip charts Markers Tape	tool. Indicate that they will have to explain why they have chosen certain types of observations over others. 4. Participants post their observation tools on a flip chart. 5. [SLIDE 10]: Conduct a gallery walk, where participants walk around the room reading the observation tools. Invite them to reflect on the following questions: • How does the gender tool attempt to address gender? • What do you like about the tool? • What needs to improve around a gender analysis in the tool? 6. In the large group, participants present how they will use their tools. They also present their answers to the questions posed during the gallery walk. 7. Together, brainstorm different initiatives that could be conducted to help create gender-fair activities and initiatives based on findings from the classroom-instructional observation.
Assessment	**Learning Objective 1:** Achieved in Information section **Learning Objective 2:** Achieved in Information section **Learning Objective 3:** Achieved in Practice 1, Practice 2, and Application sections **Learning Objective 4:** Achieved in Practice 1, Practice 2, and Application sections
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

Creative Associates International. (2002). Toolkit for Assessing and Promoting Equity in the Classroom: A Production of the Equity in the Classroom (EIC) Project. Washington, D.C.: USAID. Retrieved from http://www.glp.net/c/document_library/get_file?p_l_id=473711&folderId=12858&name=DLFE-971.pdf

INEE. (2012). Education in Emergencies Training Module 16: Gender Responsive Education. Retrieved from http://www.ineesite.org/uploads/files/resources/1.Gender_Facilitators_Guide_Final_.pdf

UNESCO Bangkok. (2009). Promoting Gender Equality in Education – Gender in Education Network in Asia-Pacific (GENIA) Toolkit. Retrieved from http://www.unescobkk.org/education/gender/resources/genia-toolkit/

GENDER AND SEX

Sex

Biological; Born With

Therefore

Cannot Be Changed

1. Only women can give birth.

2. Only men can supply sperm.

Gender

Socially Constructed; Not Born With

Therefore

Changeable

1. Women can do traditionally male jobs as well as men.

2. Men can take care of children as well as women.

GENDER ≠ WOMEN

WID, GAD, AND PACA   (PAGE 17 OF 17)   19
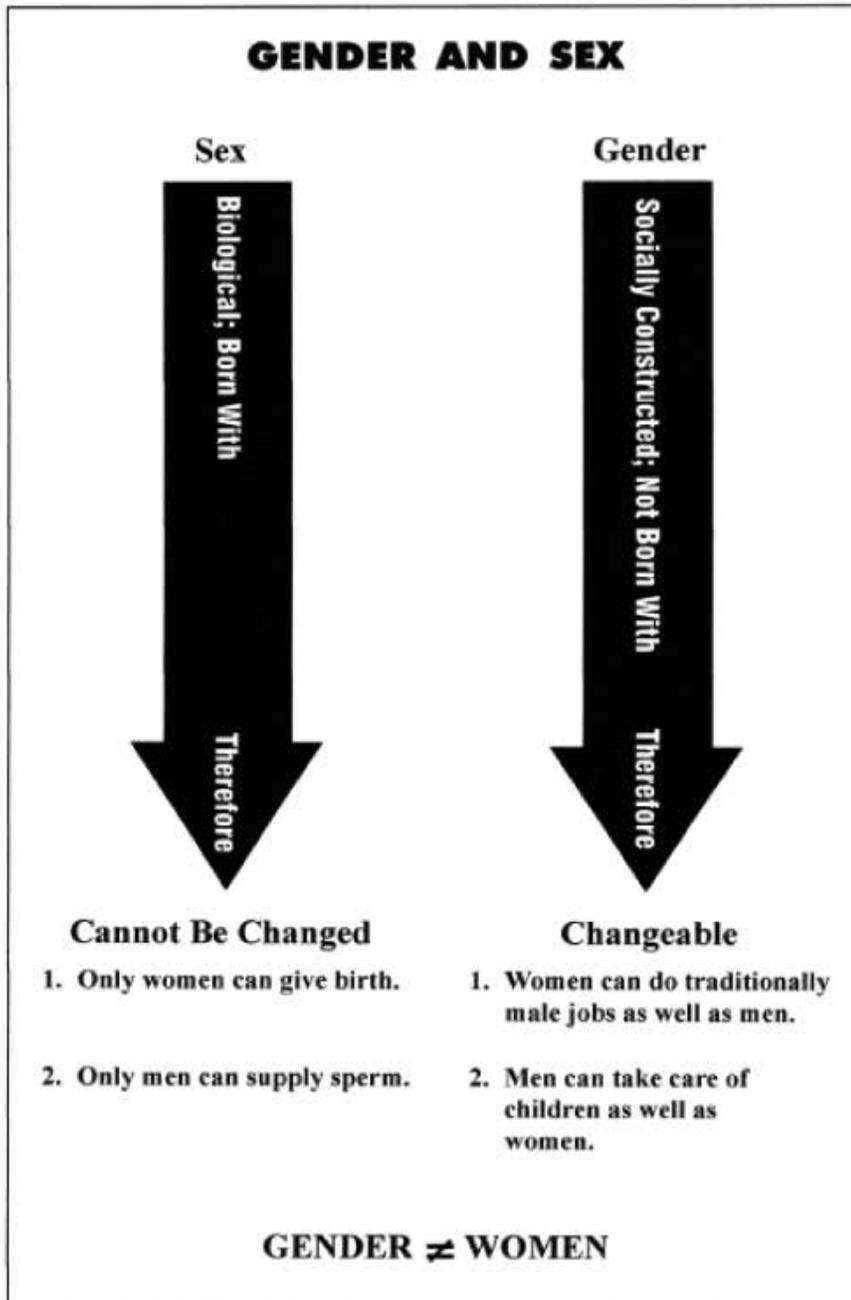
Handout 2: Gender Responsive Approaches – Introduction to tools

The tools presented below help school communities conduct gender responsive analyses to determine the extent of responsiveness, as well as necessary improvements:

School Equity Profile (SEP)
-The SEP collects data at the school level to reveal possible problems of persistence and dropout that impact girls and boys differently. It helps to engage the school community in the experience of analyzing school data for trends and patterns that may point to needed gender responsive improvements.
-The SEP is a simple tool for providing baseline data for measuring improvements in equity.
-The SEP asks simple questions:

- Is the school environment healthy and friendly for girls and boys?
- Does it reflect good models in regards to roles for girls and boys?
- Are there female and male teachers and role models to be followed by girls and boys?
- Are there equal opportunities for girls and boys that are promoted in order to develop leadership abilities. How?

Textbook Gender Analysis
-The school community can identify stereotypes in textbooks and other instructional materials that can limit children's dreams and visions of who they can become. If there are few options and alternatives that are available, these stereotypes will only become standards by which students will judge themselves and others. Teaching materials need to demonstrate that there can be equal opportunities for both men and women. This will help both male and female students feel more secure and self-confident about their own intellectual capacities, decision-making abilities, and their academic and professional potentials.
-The tool requires the revision and analysis of different types of instructional materials (i.e., textbooks, instructional guides, and more) in order to detect aspects that may hinder gender equity.
-The textbook gender analysis tool gathers information that allows one to determine if:

- Girls and boys are taught specific gender roles
- Achievement expectations and personal growth are the same for girls and boys
- Role models are offered to reflect new social roles for women and men
- The stereotypes reinforcing images of girls and boys in certain disciplines are invalidated (i.e., eliminating the stereotype that girls can't do well in math or sciences)
- The materials analyzed intentionally include the notion of gender equity

-School communities then articulate how they can create their own gender-fair materials.

Community-School Equity Interview Guide

-The school community is the foundation for learning and socialization that contributes to students' development and concepts of self. The school and community need to work together in order to create a gender responsive environment that promotes the success or both girls and boys.

-The community-school equity interview guide aims to help identify factors related to quality and equity in education influenced by the family or school that may have a negative and positive impact on students.

-The objective of this tool is to obtain the opinion of parents in regards to their expectations of education on their daughters and sons.

-The result of these interviews could help to improve relations between the community and the school by reinforcing gender responsive actions and working toward gender equity.

Classroom Gender Analysis

-Observers visit classrooms to examine and record the following:

- How girls and boys are treated in the classroom?
- Where girls and boys are seated in the classroom?
- How do girls and boys get opportunities to participate?
- What types of chores and duties are assigned to girls and boys?
- How are girls and boys portrayed in materials hung in the classroom and used during instruction?
- How do girls and boys interact together?

Creative Associates International. (2002). Toolkit for Assessing and Promoting Equity in the Classroom: A Production of the Equity in the Classroom (EIC) Project. Washington, D.C.: USAID.

***UNESCO. (2009). Promoting Gender Equality in Education: Gender in Education Network in Asia-Pacific (GENIA) Toolkit. Bangkok, Thailand: UNESCO Bangkok.*

Handout 3: Textbook Gender Analysis Tool

Textbook / Subject: _____   Textbook / Level: _____

Quantitative Analysis		
Section	**Number of Girls or Women**	**Number of Boys or Men**
Pages _____ to _____		

Qualitative Analysis		
Representation	**Girls or Women Keyword(s) Describing Activity**	**Boys or Men Keyword(s) Describing Activity**
Family role and relationship		
Professional activities		
Other activities		
How portrayed? (nurturers, economic producers, leaders, victims, etc.)		
Role models		
Personal characteristics		
Cognitive ability and achievement		
Psychological traits		
Stereoytping language		
Illustrations		
Places		

Randomly choose two illustrations in the text book you have and answer the following questions:

a. How many men and how many women do you see?

b. What roles are men playing?

c. What roles are women playing?

d. Are these pictures gender responsive? Explain.

e. How could the illustrations be improved to be more gender responsive?

Scan a chapter of the text and analyze it for gender stereotypes:

a. How many times do the names of and/or pronouns for women/men, boys/girls appear in the textbook?

b. What roles are they portraying?

c. Could some of the role be reversed?

d. In your opinion is the book gender responsive?

e. Select one illustration or sample text in the textbook that is not gender responsive and make it gender responsive.

Creative Associates International. (2002). Toolkit for Assessing and Promoting Equity in the Classroom: A Production of the Equity in the Classroom (EIC) Project. Washington, D.C.: USAID.

Handout 4: Community-School Equity Interview Guide

| #	CRITERIA	YES	NO	WHY?
1	Attend, when invited, meetings to be informed about child's academic progress			
2	Get involved in activities required by the school			
3	Give same amount of freedom and support to daughters compared to sons			
4	Mothers are in charge of children's education			
5	Teachers value family's opinion/input in order to understand the students' behavior			
6	The school solicits and uses family's suggestions when planning the education program			
7	Teachers foster communication, dialogue, and conversation among students			
8	It is observed that teachers favor certain students and/or certain kinds of students			
9	Teachers take into account students' limitations and responsibilities in the home			
10	The school educates girls to become leaders in society			
11	School prepares students to choose non-traditional careers			
12	Actions are taken in case of sexual harassment toward girls and boys			
13	Students are aware of what is allowed and what is forbidden in school			

#	CRITERIA	YES	NO	WHY?
14	Students have a voice in school that ensures that their rights are respected			
15	Within the family context, daughters and sons may express themselves when defending their rights			
16	School allows students to practice their freedom, creativity, and initiative			
17	School promotes leadership among students			
18	School supports emotional, affective, and moral development of students			
19	School supports sex education for girls and boys			
20	School supports the attendance of pregnant girls and adolescents			

Girls' major problems in school:

Boys' major problems in school:

Expectations of daughter's future:

Expectations of son's future:

Handout 5: Classroom and Instruction Gender Analysis Tool Ideas

Below, please find example data collection tools for classroom and instruction-based observation for conducting a classroom gender analysis. These tools can be adapted and reworked to match a particular classroom context. They can be used as a guide to create one's own tools.

Idea: Classroom Map
1. Draw a map of the classroom, labeling the front, back, door, windows, board, fan, heaters, etc.

Example of a Classroom Map
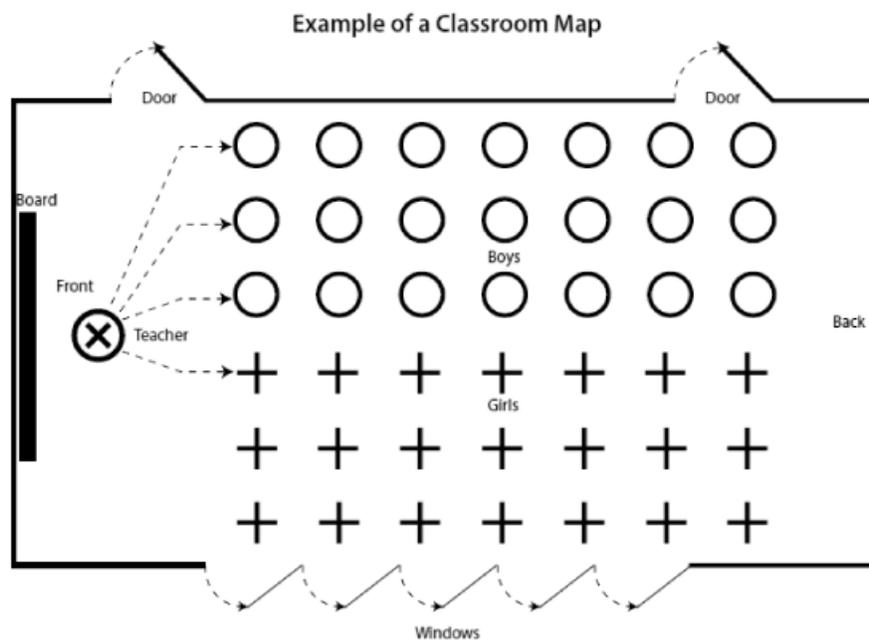
2. Mark where girls sit and where boys sit, as well as where the teacher sits
3. Indicate who the teacher indicates to ask and answer questions
4. Does the teacher talk to girls and boys equally?
5. Attention should be paid to the quality of communication with girls and boys

Idea: Classroom Information
1. Are groups used as a method of instruction? If so, how do boys and girls act together?
2. Do the things on the walls (pictures, stories, charts, etc.) depict an equal number of male and females?
3. Do the pictures or charts on the wall show equal numbers of male and female characters?

	# Girls/Women	# Boys/Men
Wall posters (Total #:)		

4. Are male and female characters portrayed in gender-stereotyped ways?
5. Do girls and boys have equal access to materials? (i.e., count the number of textbooks you see girls and boys using during the lesson(s) that you observe. Does every child have a pen and pencil and an exercise book?)

	# Textbooks	# Pens/Pencils	# Exercise Books
# Girls Present:			
# Boys Present:			

6. Is there enough light in the classroom for both boys and girls?
7. If there are chairs and tables in the classroom, does every child have one?
   - How many boys do not have chairs?
   - How many girls do not have chairs?
8. Is there a fan or heater in the classroom?
9. Does the air/heat reach every child?
10. Is there any offensive/bad language addressed to girls and/or boys or written on the desks, tables, and walls?

Idea: Teacher Calling Students/Students Writing on Board
1. How many times does the teacher call on or address a girl or boy during the lesson? Place an (x) in the box below. Later count the total (x) marks.
2. How many times do girls or boys go to the chalkboard to write during the lesson?

	Girls	Boys	TOTAL
Teacher calls on student			
Student goes to the board			

3. Who cleans up the board for the teacher? A boy or a girl?
4. Ask the teacher if and how the board cleaning is assigned. Are both girls and boys equally assigned this task?

Idea: Interviews
1. Interview with a teacher. Ask him/her:
   a. How many of the boys do you expect will go on to secondary school?
   b. How many of the girls do you expect will go on to secondary school?
   c. Think of the top two girls in the class. What work do you think they will do after they finish their education? Why?
   d. Think of the top two boys in the class. What work do you think they will do after they finish their education? Why?
   e. How are the class leaders chosen?
   f. Who is the class leader (monitor) in this class? (girl or boy)
   g. What are her/his duties?
   h. Who is the assistant class leader (monitor) in your class? (girl or boy)
   i. What are her/his duties?
   j. How is each school leader (leader/assistant leader) chosen?
   k. What are her/his duties?
   l. How many girls are in the top 20 in you class for math? For language? For science?

2. Interview the students. Ask at least three girls and three boys:
   a. Where do you sit in the classroom? Do you like sitting there?
   b. Do you often participate in the class (talking with the teacher and classmates and going to the chalkboard)?
   c. Do you like to go to school and to be in your classroom? Why or why not?
   d. What is your favorite subject?
   e. What is the subject you like the least?
   f. How much education do you hope to receive? Up to which grade do you think you can study?
   g. What kind of work do you want to do when you finish school?
   h. What kind of work should girls/women do? Why?
   i. What kind of work should boys/men do? Why?

**UNESCO. (2009). Promoting Gender Equality in Education: Gender in Education Network in Asia-Pacific (GENIA) Toolkit. Bangkok, Thailand: UNESCO Bangkok.

Session 19: Professional Development Needs Assessment

Sectors: — Education; adaptable to other sectors

Training Package: — Community Data-Driven Decision-Making Workshop

Terminal Learning Objective: — Adapt CD3M data collection tools to local needs and use them to conduct the CD3M process cycle

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Session Rationale: — Training and professional development helps to bridge the gap between the expected level of teacher performance and their actual performance. Participants will benefit from the opportunity to discuss the different aspects of teacher professional development.

Target Audience: — PCVs and their work partners/colleagues

Trainer Expertise: — Programming and/or training staff with a strong foundation in monitoring and evaluation and an understanding of the sector that is being featured in the workshop. Workshop materials are designed for the Education sector, but can be adapted to other sectors as well.

Time: — 2 hours

Prerequisites: — Session 4 - Developmental Evaluation

Version: — October 2013

Contributing Posts: — Guatemala
Philippines

Session: Gender Analysis Tools		
Date:	**Time:** 2 hours	**Trainer(s):**

Trainer preparation:
1. The facilitator should be familiar with the concept and principles of professional development.
2. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
3. Review the important concepts and terms concerning professional development in order to effectively communicate and present CD3M findings related to instruction and classroom practices/management.
4. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
5. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Flip chart
    2. Markers
    3. Computer, screen, and projector
- **Handouts**
   Handout 1: Designing a Proposal for a Teacher Development Program
- **Trainer Materials**
   Trainer Material 1:   Session 19 PowerPoint

Session Learning Objectives:
Participants will
1. Identify qualities of an ideal teacher and reflect on how teachers influence student performance.
2. Explain the concept of professional development.
3. Explain the need for, and benefits of, ongoing teacher professional development.
4. Design a proposal for the implementation of a training program.
5. Evaluate training effectiveness.

Phase / Time / Materials	Instructional Sequence
Motivation 15 minutes Flip chart and markers Trainer Material 1: Session 19 PowerPoint	**Qualities of a Good Teacher** Participants reflect on what makes a "good" teacher. 1. Explain the rationale and objectives for this session. 2. Ask participants to think about an excellent teacher they have had or observed. Ask what made the teacher so good. Brainstorm and write responses on a flip chart. Some guiding questions may include the following: What qualities did that teacher possess? Skills? Knowledge? Attitudes? Education? Training? 3. Ask if good teachers are born or developed through training and experience. 4. [SLIDE 2]: Show slide <u>pre-service</u> and <u>in-service</u> professional development and have participants discuss the differences and relative merits of the two.
Information 30 minutes Trainer Material 1: Session 19 PowerPoint	**Mini Lecture** Participants learn about the concept and principles of professional development. 1. [SLIDE 3]: **Explain THE CONCEPT OF PROFESSIONAL DEVELOPMENT** Professional Development focuses on the process of building the knowledge and skills of teachers (as professionals) to enable them to take up new responsibilities and challenges. Therefore, it seeks to assist the teachers in achieving higher levels of professional competence, especially in relation to subject content, teaching strategies, uses of technology, and other efforts that promote a positive school learning culture. The terms professional development, staff development, or in-service education tend to be used interchangeably. The overall purpose of professional development of teachers is to improve knowledge, skills, and attitudes of teachers, with the ultimate goal of improving school performance. The specific benefits of teacher training and professional development include:

Phase / Time / Materials	Instructional Sequence
	- Increased confidence, morale, motivation, and commitment. - Recognition, enhanced responsibility (in relation to the teachers tasks and duties), and opportunities for promotion and pay increases. - A feeling of personal satisfaction and achievement. 2. Ask participants what other benefits teachers get from ongoing professional development. 3. [SLIDE 4 & 5]: Present the slides on the principles of effective professional development. **PRINCIPLES OF EFFECTIVE PROFESSIONAL DEVELOPMENT[3]** Effective professional development does the following: - Focuses on teachers as central to student learning, yet includes all other members of the school community. - Focuses on individual, collegial, and organizational improvement. - Respects and nurtures the intellectual and leadership capacity of teachers and others in the school community. - Reflects lessons learned and best practices in teaching, learning, and leadership. - Enables teachers to develop further expertise in subject matter; teaching strategies, technology, and other essential elements in teaching. - Promotes continuous inquiry and improvement in the school environment. - Is planned collaboratively by participants and facilitators. - Contains a coherent long-term plan. - Is evaluated on its impact on teacher effectiveness and student performance. - Guides subsequent professional development efforts. 4. At the end, ask participants if they have other principles to add and if they agree or disagree with these principles

Phase / Time / Materials	Instructional Sequence
Practice 15 minutes Flip chart Markers	**Group Discussion** Participants discuss professional development programs they already know. 1. In small groups, have participants choose a professional development program they have experienced or are familiar with. Have them discuss which of the principles of effective professional were met and not met in professional development programs. 2. Ask them: *"Knowing what you know now, how would you have changed the professional development program?"*
Application 60 minutes Trainer Material 1: Session 19 PowerPoint Handout 1: Designing a Proposal for a Teacher Development Program Flip chart Markers	**Designing a Professional Program** Participants design a teacher development program using the principles they have learned and present their ideas to the group. 1. [SLIDE 6]: Ask the participants to work in groups to design a proposal for a teachers professional program based on the above principles that they feel would improve the teaching and learning in their community. The proposal should consist of three phases: needs assessment, training, and evaluation. The following questions will help guide their proposals: • What methods will be used to collect data for a needs assessment? • What are the expected outcomes of the training? • How will the training be delivered? • How will the effectiveness of the training be evaluated? 2. The amount of time needed for this activity will vary. They will report back to the whole group.

Phase / Time / Materials	Instructional Sequence
Assessment	**Learning Objective 1:** Achieved in Motivation section
	Learning Objective 2: Achieved in Information section
	Learning Objective 3: Achieved in Practice section
	Learning Objective 4: Achieved in Application section
	Learning Objective 5: Achieved in Application section
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:

Macedonia e-Schools Final Report. US-AID 2008. http://pdf.usaid.gov/pdf_docs/PDACP160.pdf

First Principles: Designing Effective Education Programs For In-Service Teacher: Compendium. USAID 2011.
http://www.equip123.net/docs/E1-FP_In-Svc_TPD_Compendium.pdf

Handout 1: Designing a Proposal for a Teacher Development Program

Education leaders are often responsible for professional development of teachers in their communities. They should have basic knowledge and skills in professional development if they are to provide leadership that will promote comprehensive professional growth of teachers.

There are three basic phases in any professional development programs. These include:

- Assessment
- Training
- Evaluation

Phase 1 - Assessment of Professional Development Needs

Training and professional development helps to bridge the gap between what should happen (the expected level of performance) and what is happening (i.e., the actual performance of the teachers). A training need, therefore, exists when there is a gap or deficiency between the expected and actual level of performance of teachers. A **training needs analysis** (TNA) or assessment is, therefore, a process of determining if professional development in terms of **knowledge, skills,** and **attitudes** is required to close the gap identified. Subsequent to the analysis is the development of behavioral objectives.

a) Conducting a Training Needs Analysis

A proper and systematic approach to professional development needs demands these types of analyses.

- **Organizational analyses** - This entails examination of school objectives, resources, and environment. A good way to approach this analysis is to do a SWOT (strengths, weakness, opportunities, and threats) analysis of the school organization.

- **Strengths** - These are internal factors likely to enhance performance (e.g., adequate teaching and learning resources, well trained staff).

- **Weaknesses** - These are internal factors likely to impede or affect performance (e.g., inefficiency in the use of school resources, lack of commitment among some staff members, etc.)

- **Opportunities** - These are external factors, which could favor the school (e.g., support of parents and the community, lowering of taxes in the purchase of computers).

- **Threats** - These are external factors that could be detrimental to the school (e.g., insecurity, late disbursement of funds (from the Ministry of Education) to purchase school instructional materials).

- **Task analysis** - This involves a review of job descriptions (duties and responsibilities) and the conditions under which they are performed. This helps to determine what the content of the training should be.

- **Person analysis** - This is focused on the teachers. The intention is to determine what skills knowledge and attitudes are required of teachers to enhance their performance in service delivery.

Based on the three forms of analysis, needs can, therefore, be identified from:

- Complaints from teachers, students, quality assurance and standards officers, area education officers, parents, and other stakeholders.

- Poor quality of teaching

- Conflicts among staff

- Poor student academic achievement

- Staff turnover

The methods of conducting need analysis include use of interviews, questionnaires, and observation schedule.

Examples of areas of need that where may require professional development:

Curriculum Implementation

Classroom management

Student assessment and evaluation

Questioning skills

Student motivation

Child-centered pedagogical skills

Quality standards in education

Meeting diverse learner needs

Use of ICT in curriculum instruction

School Management

Financial management

Motivation of staff

Data analysis and interpretation for decision making

School safety

Access, equity, and retention of students

Emerging and Contemporary Issues

Gender issues in education

Drugs and substance abuse

Human rights

Conduct Training Needs Analysis in any 10 primary schools in the district, specifically in Curriculum Implementation

Prepare a TNA questionnaire which should be administered to Class 1, 4, and 8 teachers in each of the 10 schools. The questionnaire should contain the following questions:

1. How long have you taught since graduating?
2. Which subjects do you teach in school?
3. What difficulties do you face when teaching the subjects?
4. What knowledge do you need to do your job better?
5. What skills do you need to do your job better?
6. What attitudes/beliefs do you need to do your job effectively?

After conducting the exercise, summarize the findings to each question.

What are the main skills, knowledge, and attitudes needed by the teachers?

b) Behavioral Objectives

Once the specific needs have been determined, the next step is to determine the desired outcomes of the training program. These outcomes should be stated in terms of behavioral objectives, which involve the acquisition of knowledge, skills, or change of attitudes. Thus, it is desirable for all the objectives to be stated in terms of observable behavior or performance. To do so, the objectives must be SMART (i.e., Specific, Measurable, Attainable, Relevant, and Time-bound).

Specific: The objective must be precise and exact in explaining what is to be achieved in terms of improved work performance.
Measurable: The objective must be written in a manner that is easy to measure.
Achievable: The objective should be stated in a manner that is reasonable to expect the trainee to achieve.
Relevant: The objective should be relevant to the work the teachers are performing.
Time-bound: The objective should clearly state the time in which the teacher is expected to achieve the desired results.

Learning outcomes should cover the basic domains, which every learning experience should contain. The two key domains are the cognitive domain and affective domain. Cognitive mainly focuses on knowledge and understanding and this is the intellectual domain. Affective domain focuses on attributes like feelings, attitudes, interest, appreciation, which are beliefs and values.

Lastly, in writing objectives it is important to use verbs that will allow for easy measurement or evaluation of the objective. Useful verbs for learning outcome include: recognize, solve, list, state, explain, select, construct, identify, etc. Amorphous verbs, such as know, understand, appreciate, and enjoy, should be avoided because they are not easy to measure.

Examples of SMART training objectives
By the end of the session the participant should be able to:

      I)   Identify the causes of disruptive classroom behavior among Class 8 pupils

      II)   List the characteristics of pupils with disruptive behavior problems

Examples of vaguely stated objectives
By the end of the training session, the participant should be able to:

      I)   Use the knowledge acquired to improve learners understanding of mathematics

      II) Appreciate the use of ICT in teaching various components of mathematics

Phase 2 - Professional Development Techniques

This phase involves determining the content, methods, materials, and budget.

a) Selecting the Content

Once the task of developing objectives is accomplished, the next step is to decide on the course content. The determination of the content should be informed and guided by the objectives. There is normally a tendency to include too much content — too much even for a two-week training workshop. This is often based on the wrong assumption that the broader the scope of the content the more meaningful the training session will be.

Determining the content should be guided by what the participants:

- **Must know**: What must be learned to achieve the objective

- **Should know**: What should be included if possible

- **May know**: What may be included but is not really necessary to achieve the objectives

b) Methods of delivering content

There are a variety of methods that can be used in a professional development program. These methods can be placed into two categories:

    I)   Traditional methods

    II)   Modern methods

Traditional Training Methods

These methods include:
- On the job training
- Classroom Instruction
- Formal education
- Blended learning
- Distance learning
- Cascading

    I.   In which program have more teachers been trained at I) primary and II) secondary school level?

    II.   How many teachers who have been targeted for training have, to date, not been trained? Why?

    III.   What measures have been put in place to ensure that the teachers are trained?

i) On the Job Training

In this type of training, learning takes place in the teachers' actual environment. On the job training can be conducted by an experienced teacher, head of the subject, or head of department and involves the new, in-experienced teachers. On the job training can take the form of:

- **Peer coaching:** Teachers turning to each other for help on improving instruction

- **Mentoring:** The process of peer assistance in which better trained and experienced teachers assist less well trained or less experienced teachers to grow professionally

For the experienced teachers, **clinical supervision** is a commonly used strategy. This is a form of direct assistance given to teachers with a view to helping them improve instruction. It is goal-oriented, combining school needs with personal growth needs of teachers. The clinical supervision process generally involves:

- Pre-conference with teachers

- Observation of classroom

- Analyzing and interpreting observation

- Post-conference with teachers

- Critique of previous four steps

ii) Classroom Instruction

This is perhaps the most common professional development technique and can take various forms, which include:

- **Lecture**: Oral presentation by the trainer or facilitator. It is a quick and simple way of imparting knowledge to trainees but creates little room for trainee participation.

- **Role playing**: This method entails trainees acting out a role with other trainees. This method enables the trainees to gain knowledge and skills in human relations (e.g., dealing with a difficult parent).

- **Case study discussion**: This is a discussion undertaken by a small group of trainees on real or fictional school cases or incidents, for example, how to ensure effective classroom management and cope with the attendant challenges.

- **Conference:** This is a small group discussion among the trainees on selected topics (e.g., student indiscipline and its implication for learning). The trainer moderates the discussion.

iii) Formal Education:

This involves teachers developing themselves professionally by enrolling for degrees in education at the university level. For example, many teachers who were holders of a certificate or diploma in education have attained a B.Ed. degree. Other teachers have pursued master's degree courses in fields like educational management, educational planning, curriculum studies, science education, math education, education technology, and education psychology.

Electronic Training

In recent years, computerized and Internet-based systems have completely revolutionized the training process. The main methods include:

> **i) Computer-Based Training**: This system entails the use of computer-based systems to interactively enhance ones knowledge and skills in an area of interest.

> **ii) E-learning Portal**: This is a Learning Management System that can be customized to institutional objectives. Many organizations have developed free access e-learning portals using such platform as Moodle. The online method is increasingly becoming popular because of its versatility. It can facilitate teaching and learning (interactively) with many students who are widely dispersed geographically. More importantly, the unit cost as a method of teaching and learning is minimal in the long run. However, the main drawbacks include minimal interaction between the teacher and learner and its inability to hold learners, attention.

Phase 3- Evaluating the Professional Development Program

The ultimate desire for any training and development effort is to ensure that the trainees improve in their abilities to perform in relation to service delivery. However, it is common knowledge that many of the evaluation approaches tend to focus on outcomes grounded on the training objectives rather than its impact in terms of, for example, student performance and achievement, student change of behavior, efficiency in the use of school resources, etc. The evaluation of the professional development effort, however, constitutes an important process. There are four main attributes that can be evaluated. These include:

I) **Reaction**: This entails evaluating the trainees' reaction to various facets of the program. Trainees could, for example, be asked whether they liked the program, and their views about the course content, methods, trainers, etc. However, this approach is not useful because it does not focus on school outcomes.

II) **Learning**: This involves testing the trainees to find out whether they actually learned the principles, skills, facts, etc. that they were supposed to learn.

III) **Behavior**: This is determining whether the trainees on-the-job behavior have changed because of the training (i.e., have the teachers, for example, improved their on the job-performance a result of the training? Change of teacher behavior can be measured by direct observation, from comments of quality assurance and standards officers, other teachers, and from performance appraisals).

IV) **Results**: This assesses the effect of the training on pupil achievement or other school outcomes. Any worthwhile TPD initiative or effort should focus more on this approach, as the ultimate goal of the teaching learning process is to facilitate all-around development of the pupil.

The best approach to determine the effectiveness of the professional development effort would be to compare two groups: the **experimental** and the **control groups.**

The **experimental group** would constitute the trainees that have participated and completed the professional development program. The **control group** would constitute a group of teachers who have not received any training.

To gauge if there are any differences between the two groups and impact of the program, two phases of data would be collected. First, relevant output data would be obtained for both groups **before** training. Second, performance of the two would be determined after training to find out if there is any improvement in the experimental group.

Session 20: Action Planning and Workshop Conclusion

Sectors: Education; adaptable to other sectors

Training Package: Community Data-Driven Decision-Making Workshop

Terminal Learning   Communicate with colleagues and community members about the
Objective: importance of making data-driven decisions to improve education

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Session Rationale: Participants will want to apply what they have discussed during the
                                  workshop to their own work in their communities and schools. This
                                  session gives them an opportunity to review the CD3M steps that they
                                  have planned, as well as plan the next steps for actually conducting
                                  the CD3M process with feedback and guidance from other participants
                                  and the facilitators. It also provides closure to the workshop.

Target Audience: PCVs and their work partners/colleagues

Trainer Expertise: Programming and/or training staff with a strong foundation in
                                  monitoring and evaluation and an understanding of the sector that is
                                  being featured in the workshop. Workshop materials are designed for
                                  the Education sector, but can be adapted to other sectors as well.

Time: 2 hours, 30 minutes

Prerequisites: Session 4 - Developmental Evaluation
                                  Session 5 - Quantitative Methods
                                  Session 6 - Qualitative & Mixed Methods
                                  Session 10 - Quantitative Analysis
                                  Session 11 - Qualitative & Mixed Methods Analysis

Version: October 2013

Contributing Posts: Guatemala
                                  Philippines

Session: Action Planning and Workshop Conclusion		
Date:	**Time:** 2 hours, 30 minutes	**Trainer(s):**

Trainer preparation:
1. The facilitator should review the CD3M process cycle, as well as list the different types of CD3M process cycle projects that participants have chosen to explore since the beginning of the workshop.
2. Read this session in its entirety. Be ready to paraphrase and provide answers to the different questions and activities proposed.
3. Review all handouts and be comfortable explaining them and help participants work with them during the small group work.
4. Appropriate and prepare all equipment, handouts, and trainer materials indicated below.

Materials:
- **Equipment**
    1. Flip chart
    2. Markers
    3. Computer, screen, and projector
- **Handouts**
    Handout 1: CD3M Process Cycle Review Worksheet
    Handout 2: Action plan template
- **Trainer Materials**
    Trainer Material 1: Session 20 PowerPoint
    Trainer Material 2: CD3M Steps and Element Strips

Session Learning Objectives:
Participants will
1. Explain how, when, and with whom they will apply their CD3M process cycle project, explored during the workshop, to their local school setting.
2. Incorporate into their plans feedback from fellow participants and staff members.

Phase / Time / Materials	Instructional Sequence
Motivation 30 minutes Trainer Material 1: Session 20 PowerPoint Trainer Material 2: CD3M Steps and Element Strips Handout 1: CD3M Process Cycle Review Worksheet	**CD3M Review and Explanations** Participants review the steps of the CD3M cycle, as well as the example projects that they have been planning throughout the workshop. 1. [SLIDE 2]: Explain to participants that they are going to receive the different elements and steps of the CD3M process cycle. Ask a participant to give a quick summary of the process cycle. Present the instructions by saying or paraphrasing: "*Each participant will receive either a graphic or steps that describe the CD3M process cycle. Participants will need to locate the graphic where their step is located. Together as a team, they will tape the elements of the step together. They will then post in the room their CD3M step.*" 2. Distribute pieces of paper/graphic to each participant using Training Material 2 – CD3M Steps and Elements Strips. 3. Participants locate each other and post the elements of each step. 4. Participants report their elements back to the group, following the CD3M process cycle order. 5. [SLIDE 3 & 4]: Next, indicate to participants that you are going to distribute Handout 1: CD3M Process Cycle Review Sheet. Say or paraphrase: "*In your school groups, work together to fill out this worksheet. You will review the CD3M process cycle project that you have developed from the beginning of the workshop. This will be easy for you for Steps 1, 2 and 3, since you have already filled out the CD3M worksheets throughout the workshop. When you arrive at Steps 4 and 5, brainstorm on what data you think you will receive, as well as strategies for presenting data and creating a plan of action with your community.*" 6. Participants fill out Handout 1 : CD3M Process Cycle Review Worksheet

Phase / Time / Materials	Instructional Sequence
Information 10 minutes Trainer Material 1: Session 20 PowerPoint Handout 2: Action Plan Template	**Action Planning Template** The facilitator explains how to develop an action plan. 1. Tells participants that this is their chance to work together with their colleagues from their school to decide *exactly* how they will apply their CD3M proposed projects in their schools. Remind them of the first day/first session concept of "pay it forward." Ask them to consider how they'll share this information with others, as well as what they will do to incorporate it into their own work. 2. [SLIDE 5]: Distribute Handout 2: Action Plan Template. Say or paraphrase: "*Working together in your school groups, you will fill in this action plan template, which is a list of concrete and feasible steps and details toward completely one cycle of the CD3M process. Here are some quick tips for when you and your group fill out the action plan:* • *The more specific, the better* • *Stress quality over quantity* • *List one detailed action per CD3M step that you agree you can really do and that will benefit your teaching, students, school, rather than 10 less detailed, less feasible steps"* 3. [SLIDE 6 & 7]: Review the action plan template with participants. If participants have access to laptop computers during the workshop, give them the template on the computer and ask them to fill it in electronically (this makes it easier to share later).
Practice 50 minutes	**Action Planning in Groups** Participants work on an action plan in their school groups. 1. In their school groups, participants fill in their action plan.

| Phase / Time / Materials	Instructional Sequence

Application
 	
60 minutes
 	
Trainer Material 1: Session 20 PowerPoint
	Feedback
	Participants exchange ideas and provide feedback on their action plans before their final presentation.
	
	1. Introduce a feedback activity called "Ambassadors." Explain that the value of getting feedback from others is that they might remind you of something you didn't think of before, or help you decide whether an action item is feasible. By sharing ideas, each group can strengthen its own action plans.
	2. [SLIDE 8]: Explain the exercise by stating the following instructions:
	• *First Journey: Send someone from your group on a journey to another group. They are an ambassador.*
	  o *Ambassador – explain action plan to new group*
	  o *Listeners – provide feedback, including ideas the presenter may not have thought of, suggestions*
	• *Second Journey: Rotate again.*
	• *Return home. Share the feedback you received with your school colleagues. Consider refining your action plan.*
	
	3. Conduct feedback sessions.
	
	<u>BREAK</u>
	
	4. After a break, give groups a few minutes for last-minute edits of their plans.
	
	5. Next, ask all members of each group to come to the front of the room and share their action plan with others. Each group should take about 5-10 minutes to explain how they plan to apply the workshop principles to their work and group members can take questions and additional feedback.
	    <u>Note:</u>
	    In the Philippines, select staff was invited to act as a "feedback panel" for these group action plan presentations. This model has worked well in other workshops in the Philippines. Staff on the panel gave comments and feedback to each action plan.

Phase / Time / Materials	Instructional Sequence
	6. Conclude workshop with daily evaluation AND all-workshop evaluation.
	7. Conduct certificate ceremony.
	8. Country director or office staff and facilitator can give closing comments.
Assessment	**Learning Objective 1:** Achieved in Motivation, Information, and Practice sections **Learning Objective 2:** Achieved in Application sections
Trainer Notes for Future Improvement	Date & Trainer Name: [What went well? What would you do differently? Did you need more/less time for certain activities?]

Resources:
INEE. (2012). Education in Emergencies Training Module 16: Gender Responsive Education. Retrieved from http://www.ineesite.org/uploads/files/resources/1.Gender_Facilitators_Guide_ Final_.pdf

Handout 1: CD3M Process Cycle Review Worksheet

Fill out the CD3M diagram below with your project-related information (what you have proposed since the beginning of the workshop):
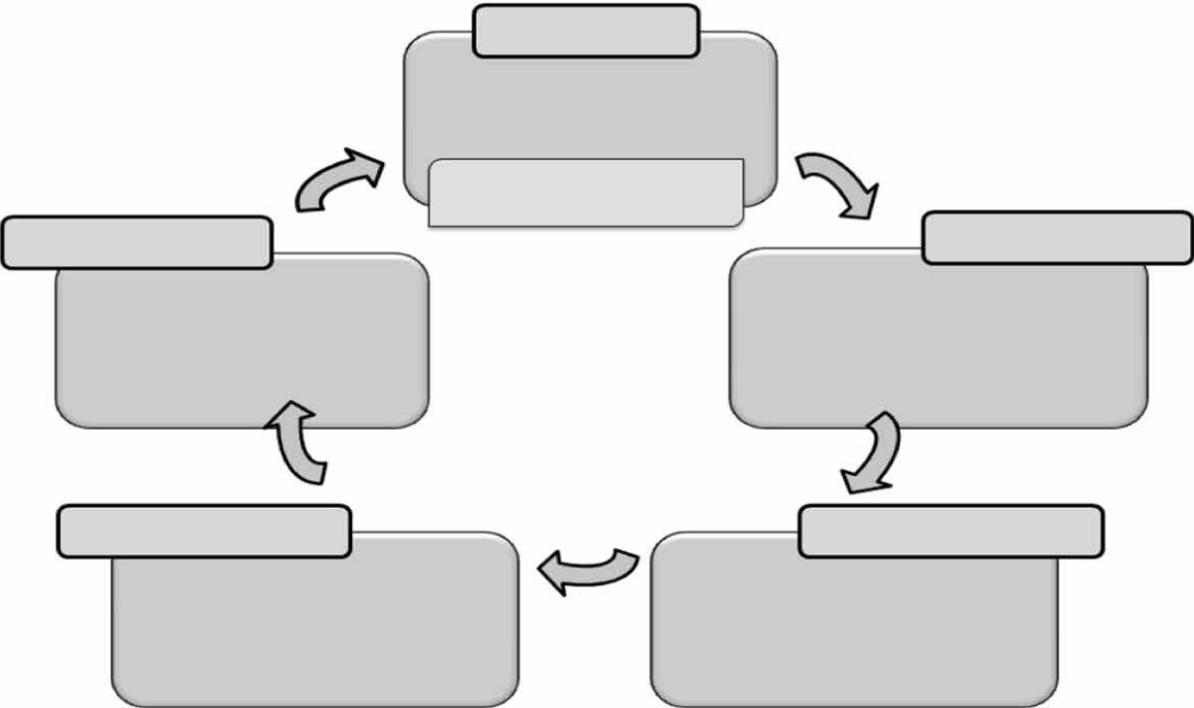
Handout 2: Action Plan Template

CD3M Step	What is needed?	Target group / Who?	Where?	When?	How? What is the process?	Why? What are the benefits?	What is the time frame?	Who is the person responsible for this step?	Budget needed, if any
Step 1 – PROBLEM What is the problem?									
Step 2 – PLAN OF ACTION What data do I have? What data do I need?									
Step 3 – DATA COLLECTION How will I gather data?									
Step 4 – DATA ANALYSIS What does my data say?									

Step 5 – FUTURE ACTION Data Sensitivities									
Step 5 – FUTURE ACTION Sharing Findings									
Step 5 – FUTURE ACTION What do I do next?									
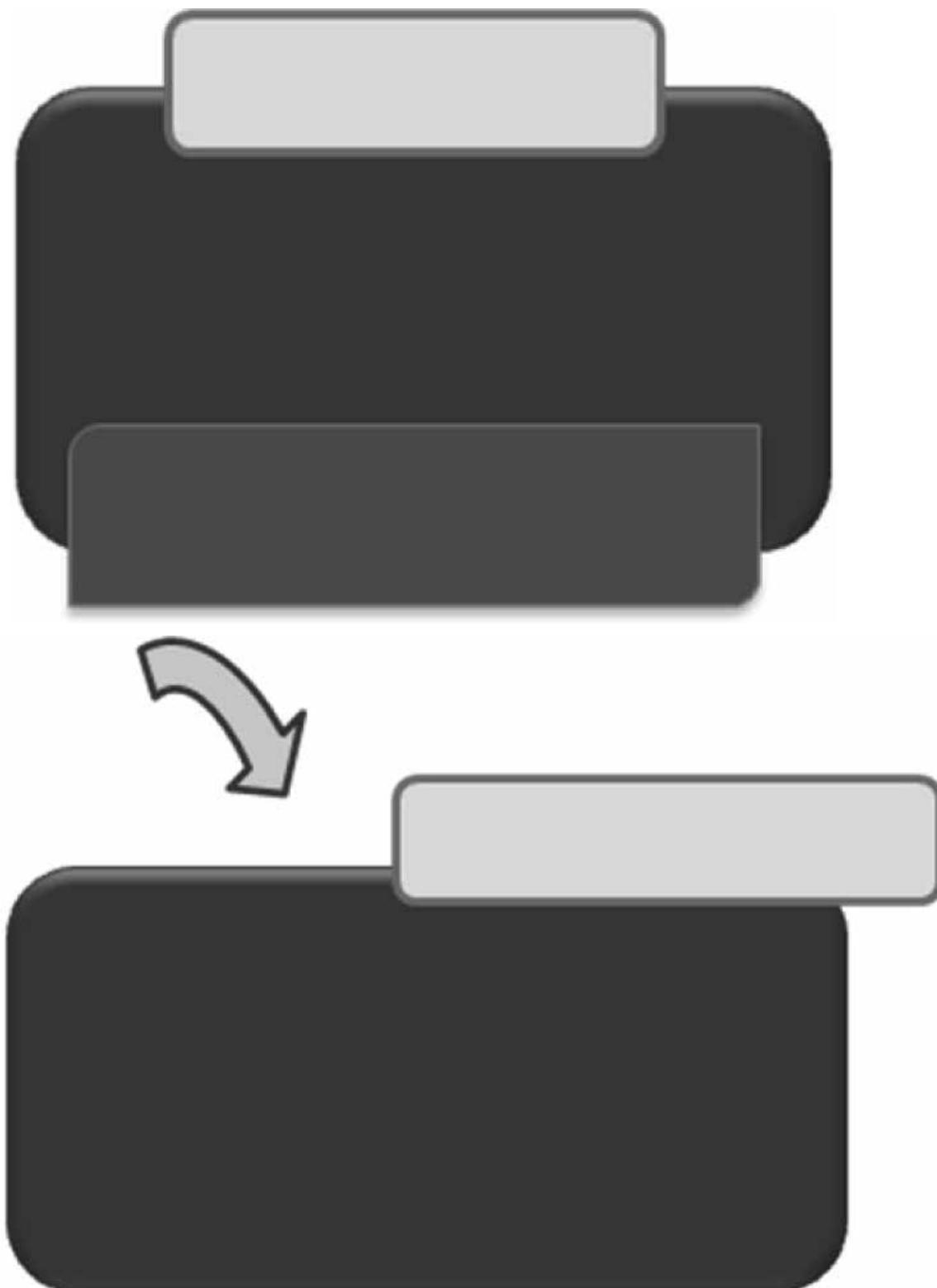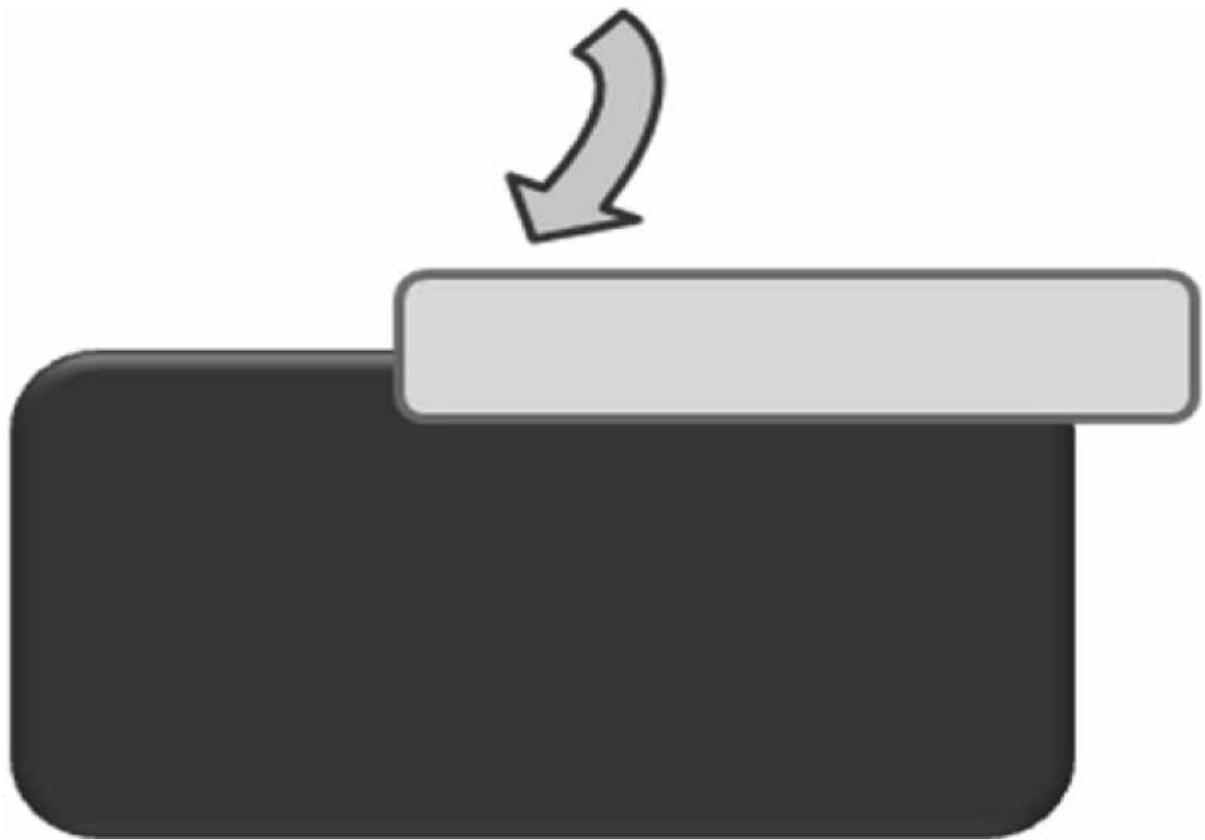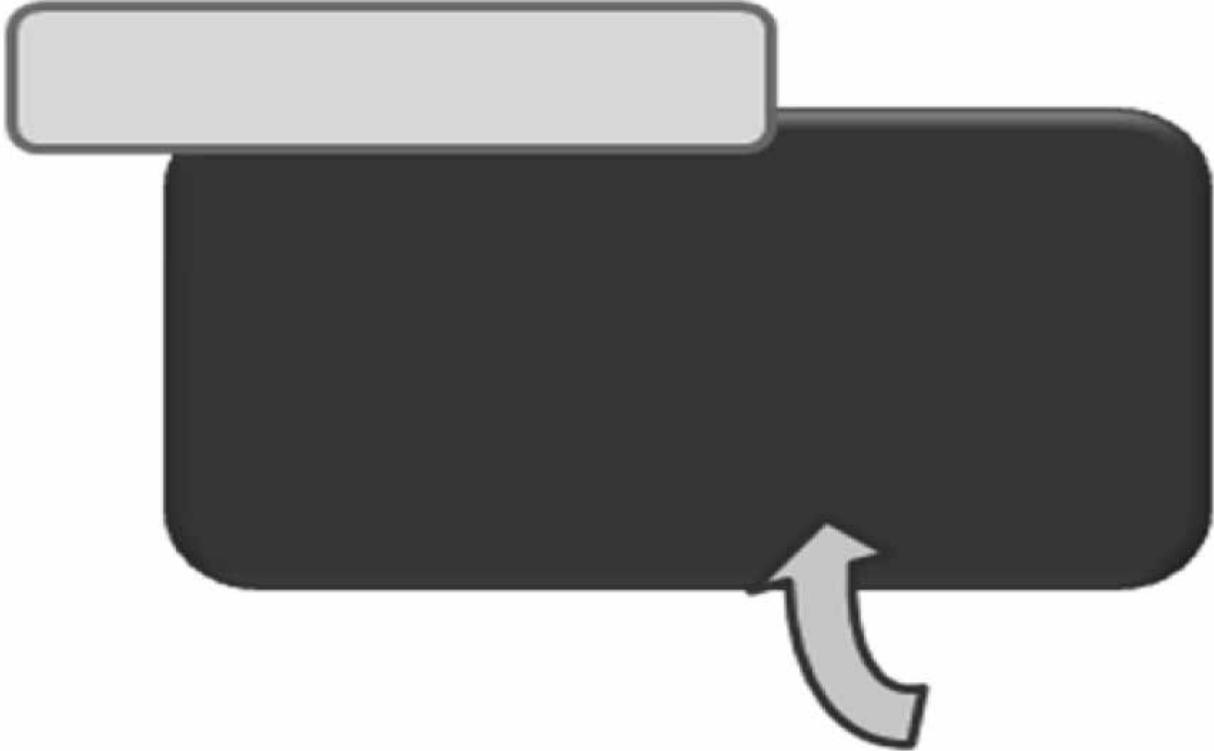
PROBLEM

What is the problem?

What is happening?

PLAN OF ACTION

What data do I currently have?

What data do I need?

DATA COLLECTION

How will I gather data?

Tools & Data Collection Process

DATA ANALYSIS

What does my data say?

How do I know?

What did I learn?

FUTURE ACTION

What do I do next?