

<b>STANDARD SECTOR INDICATOR CODE:</b> ED-015-A	<b>Teachers: Science/Math Teaching Techniques</b> - Number of teachers, out of the total number of teachers the Volunteer worked with, who used new or improved teaching techniques. (ED-015-A)	
<b>EDUCATION SECTOR</b>	<b>Sector Schematic Alignment</b> <b>Project Area:</b> Math, Science, ICT <b>Project Activity Area/Training Package:</b> Teaching Math/Science/ICT	
<b>Type:</b> Outcome	<b>Unit of Measure:</b> Teachers	<b>Disaggregation:</b> <b>Sex:</b> Male, Female
<b>Definitions:</b>  <b>Improved Teaching Techniques include but is not limited to</b> – used locally available materials in math or science instruction; provided math or science instruction situated in local needs or contexts; used inquiry based learning (brainstorming ways to analyze then solve a problem or research a phenomenon); made concepts more understandable through the use of manipulatives (blocks or other counters used to support math instruction) or other (everyday objects from the community; applied different techniques for observing, analyzing and recording phenomena or situations; taught science using a variety of learning styles; made conceptual connections between new or different sessions in the course; or applied principles from one instructional unit to another more frequently.		
<b>Rationale:</b> An increase in the number of teachers who improve math or science instruction through the use of new or improved teaching techniques will result in students’ improved analytical and critical thinking skills.		
<b>Measurement Notes:</b>  <ol style="list-style-type: none"> <li><b>Sample Tools and/or Possible Methods (for Peace Corps staff use):</b> Volunteers should use data collection tools to measure progress against project indicators. A data collection tool to measure this indicator could be based on one of the following methods—observation, interview—though there may be other data collection methods that are appropriate as well. For more information on the suggested methods, please see <a href="#">Appendix I in the MRE Toolkit</a>. Also be sure to check <a href="#">this link</a> on the intranet page as sample tools are regularly uploaded for post use. Once a tool has been selected and/ or developed for the post, staff should have a few Volunteers and their partners pilot it, and then distribute and train Volunteers on its use.</li> <li><b>General Data Collection for Volunteer Activities:</b> All Volunteer activities should be conducted with the intention of achieving outcomes – knowledge change (short-term), skills demonstration (intermediate-term), and behavioral changes (intermediate to long term) as defined by the progression of indicators within the objectives of a project framework. The progression of measurement for all Volunteer activities should begin with baseline data being conducted prior to the implementation of an activity (or set of activities), followed by documenting any outputs of the activities and then later at the appropriate time, measurements of specific outcomes (see “Frequency of Measurement”).</li> <li><b>Activity-Level Baseline Data Collection:</b> Activity-level baseline data should be collected by Volunteers/partners before or at the start of their activities with a teacher or group of teachers. It provides a basis for planning and/or assessing subsequent progress or impact with these same people. Volunteers should take a baseline measurement regarding the outcome(s) defined in this data sheet. Volunteers should collect baseline information early in their work with teachers, and may use their judgment to determine timing because the</li> </ol>		

information will be more accurate if the Volunteer has built some trust with the teachers first. The information for the baseline measurement will be the same or very similar to the information that will be collected in the follow-on measurement (see “Frequency of Measurement”) after the Volunteer has conducted his/her activities and it is usually collected using the same data collection tool to allow for easy management of the data over time.

Because Volunteers are expected to implement relevant and focused activities that will promote specific changes within a target population (see “Unit of Measure”), taking a baseline measurement helps Volunteers to develop a more realistic snapshot of where teachers within the target population are in their process of change instead of assuming that they are starting at “0.” It also sets up Volunteers to be able to see in concrete terms what influence their work is having on the teachers they work with during their service. Please note that data collection is a sensitive process and so Volunteers will not want to take a baseline measurement until they have been able to do some relationship and trust-building with the person/people the Volunteer is working with, and developed an understanding of cultural norms and gender dynamics.

- 4. Frequency of Measurement:** For reporting accurately on this outcome indicator, Volunteers must take a minimum of two measurements with teachers of the target population reached with their activities. After taking the baseline measurement (described above), Volunteers should take at least one follow-on measurement with the same teacher(s), typically after completing one or more activities focused on achieving the outcome in this indicator and once they have determined that the timing is appropriate to expect that the outcome has been achieved. Once Volunteers have measured that at least one teacher has achieved the indicator, they should report on it in their next VRF.

Volunteers may determine to take more than one baseline and one follow-on measurement with the same teacher (or group of teachers) for the following valid reasons:

- a. Volunteers may want to measure whether or not any additional teachers initially reached with activities have now achieved the outcome in the indicator, particularly for any activities that are on-going in nature (no clear end date);
- b. Volunteers may want to enhance their own learning and the implementation of their activities by using the data collected as an effective monitoring tool and feedback mechanism for the need to improve or increase their activities;
- c. A Peace Corps project in a particular country may choose to increase the frequency of measurement of the indicator and Volunteers assigned to that project will be required to follow in-country guidance.

In all cases, any additional data collection above the minimum expectation should be based on the time, resources, accessibility to the target population, and the value to be gained versus the burden of collecting the data. Following any additional measurements taken, Volunteers should report on any new teachers achieving the outcome in their next VRF.

- 5. Definition of Change:** The minimum change to report against this indicator is any teacher improving math or science instruction by using new or improved teaching techniques. Since the indicator does not specify how many techniques should count, the use of one or more techniques is the minimum change implied. Regardless of what teaching techniques the teacher was already using, the use of a new or improved teaching technique by that teacher is the change identified in this indicator.
- 6. General Reporting in the VRF:** The “number achieved” (or numerator) that Volunteers will report against for this indicator in their VRFs is the number of teachers who, as a result of working with the Volunteer improved

math or science instruction by using new or improved teaching techniques. The “total number” (or denominator) that Volunteers will report on for this indicator in their VRFs is the total number of teachers who participated in the activities designed to meet this indicator.

- 7. Reporting on Disaggregated Data in the VRF:** This indicator is disaggregated by “Sex.” When reporting in the VRF, a Volunteer should disaggregate the teachers who achieved the outcome based on male and female gender.

**Data Quality Assessments (DQA):** DQAs are needed for each indicator selected to align with the project objectives. DQAs review the validity, integrity, precision, reliability, and timeliness of each indicator. For more information, consult the Peace Corps MRE Toolkit.

**Alignment with Summary Indicator:** ED IMPROVED TEACHERS