

IN COOPERATION WITH

EDC | Center for Children & Technology

CENTER FOR CHILDREN & TECHNOLOGY

Developed by EDC | Center for Children & Technology in collaboration with Intel Corporation for the Intel Education Initiative

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Optional Resources and Guidelines for Evaluations

Many countries participating in Intel[®] Teach Essentials Course are conducting evaluations of the program. Each of these evaluations is likely to address questions about program quality about whether the program is being implemented as intended, whether teachers are receiving and responding to the core concepts of the training, and whether teachers follow up on what they learned with new activities in their classrooms.

This guide offers examples of several types of data collection instruments that can be integrated into an evaluation of this program to address questions related to program quality.

It is the responsibility of the country and regional education managers to identify the full range of evaluation objectives that are appropriate to address in a given country. Within that framework, education managers and evaluators can determine whether and how to make use of the instruments presented here. Nothing presented here is required for use in any evaluation of the Intel Teach Essentials Course.

These materials are divided into two groups of instruments that gather information: about the teachers' experience in the Essentials Course itself and about their follow up to the training, including their perceptions of the impact of the training on their practice. The materials are divided into sub-sections that can be integrated into locally developed evaluation instruments. In particular, local evaluators will need to develop local questions about relevant contextual and demographic information.

About the Training

This resource includes sample surveys items, interview questions, group interview questions, and observation protocols that target three dimensions of the training.

Using the Key Resources

- Did the teachers use the Intel Teach Essentials Course manual and CD-ROM during the training?
- What are teachers' reactions to the Sample Lesson Plans?
- What are teachers' reactions to the Unit Plan Template?

Communicating Key Teaching Messages

- How are teachers integrating Essential Questions into the unit plans they develop during the training?
- How are teachers integrating rubric assessment strategies into the unit plans they develop during the training?

Modeling of practices during the training

- Are the trainers modeling the teaching practices emphasized in the curriculum?
- (Only for Master Teacher trainings) Do Master Teachers feel prepared to replicate the training?

These materials are designed to be administered at the conclusion of training or within a week of teachers' completion of training.

About Participant Follow Up to the Training

This resource includes sample survey items, interview questions, group interview questions and observation protocols that target three dimensions of possible teacher follow-up to participation in the program.

Using technology to support teaching practices

- Do teachers use technology in new ways to support their teaching practices?
- How are teachers using their unit plan to integrate technology into their teaching of curricular content?

Teacher use of project-based approaches to teaching after participating in the training

• Do teachers use project-based teaching strategies in their teaching after the training?

Teacher perceptions of the role of technology in preparing their students for the future

• What do teachers think their students need to know about and be able to do with technology to be successful in later life?

About the Resources

These optional research items have been developed by Education Development Center's Center for Children and Technology as part of their evaluation of the Essentials Course. Any questions or feedback should be directed to:

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Optional Research Modules







Survey

Observation

Interview

Group Interview

Essentials Course					
Training Items					
Using the Key Resources					
PR	Did the teachers use the course manual and CD-ROM during the training?	✓			
SL	What are teachers' reactions to the Sample Lesson Plans?	\checkmark	\checkmark	\checkmark	\checkmark
UP	What are teachers' reactions to the Unit Plan Template?			\checkmark	
Communicating Key Teaching Messages					
EQ	How are teacher integrating Essential Questions into their unit plans?	\checkmark	\checkmark	\checkmark	
RU	How are teachers integrating rubric assessment strategies into their unit plans?			\checkmark	
Modeling Practices During the Training					
MO	Are the trainers modeling the teaching practices encouraged by the course?		✓		
MT	(MT Only) Do MTs feel prepared to replicate the training?	\checkmark		\checkmark	
Follow Up Items					
Technology to Support Teacher Practice					
TP	Are teachers using technology in new ways to support their teaching practice?	~		\checkmark	
UT	How are teachers using their unit plan to integrate technology into their teaching of curricular content?		\checkmark	\checkmark	
Teacher Use of Project-Based Approaches					
PB	Are teachers using project-based teaching strategies in their teaching after the training?	~	\checkmark	~	~
Perceptions of the Role of Technology to Prepare Students for the Future					
PS	What do teachers think their students need to know and be able to do to be successful?			\checkmark	~

Glossary

Case studies

Case studies are focused investigations of individual examples of the topic of study. The "case" may be an individual teacher, a school, or a training session. Case studies may utilize multiple methods of data collection to capture an in-depth description of one or more cases. For example, an evaluator might choose to conduct case studies of several teachers who have participated in a training program if he or she was interested in understanding the impact of the program on the individual. A completed case study presents the subject's "story" and provides detailed exploration of how the case illustrates answer to key evaluation questions.

Group Interview

Group interviews are structured conversations, guided by a facilitator, with small groups (usually three to six) of specific types of individuals. Like individual interviews, group interviews are useful for getting indepth information about program participants' experiences, and enable an evaluator to gather a wider variety of opinions in a shorter amount of time. Sometimes the dynamic of a group interview can stimulate a more detailed discussion than might occur in an individual interview.

Evaluators should be thoughtful about whom they ask to participate in a group interview. For example, it may not be effective to have teachers participate in the same event as their principal, since the principal's presence may make teachers less willing to discuss challenges or complaints.

Interviews

Interviews are structured conversations with research subjects that generate a consistent body of information across subjects. Interviews are usually designed to be conducted with specific types of people (i.e., teachers or directors). They are useful for gathering in-depth information about participants' experiences with the program and what they have learned.

Observations

Observation is a process of watching and recording specific aspects of a given event. Observations allow an evaluator to determine exactly how particular dimensions of a given event are unfolding. Protocols structure the observation process so the observer can focus on specific issues that are relevant to the goals of the evaluation. Observation is often used to help determine if the program is being implemented as intended, or how participants or students are responding to the key messages of a program.

Review of teacher and student work

Teacher and student work can be collected and analyzed using a rubric that allows for systematic analysis of the content of the work. Intel Teach Essentials Course evaluators can choose to use rubrics included in the program curriculum to review teacher unit plans or student work and to determine the extent to which that work reflects core ideas presented in the training.

Sample

A sample is the total number of individuals to whom a given data collection instrument is administered. There are several other terms that are connected to the issues of sampling which are explained below:

Sample size: The number of individuals for whom a certain type of data was collected. This number is often noted as *N* in data reporting. There is no simple correct answer when trying to determine an adequate sample size. Sample size is dependent on the research strategies used, the nature of the target population and the feasibility of reaching the population. Also, the sample size needed is dependent in part on what the researcher hopes to be able to say with the data. For some research strategies there are statistical operations to calculate the needed sample size, whereas for other strategies the sample size is at the researchers' discretion.

Target population: The group of people a researcher is seeking to gather information about. A target population might be all program participants; those participants who completed the training in a given time period; or those program participants who live in certain cities or regions. An important early step in designing any data collection strategy is defining the target population. Note that targeting a population does not mean that data must be collected from every individual in that population.

Response rate: This is the percentage of the sample population for whom data is actually collected (such as, the subset of a group given a survey that actually completes it). For example, if 2,000 surveys are sent out and 500 are returned, the response rate for the survey is 25%. The higher the response rate to a survey, the more confident an evaluator can be in the representativeness of the data.

Surveys

A survey is a written set of questions that the respondent completes independently. The survey questions can either be closed-ended, meaning the survey offers a set list of answers, or open-ended, meaning the respondent can answer in her own words. Surveys can be used to obtain data from larger numbers of people than methods, such as interviews and observations.

Some useful links for more information:

<u>http://cecommerce.uwex.edu/pdfs/G3658_3.PDF</u> This publication discusses different types of sampling. From the University of Wisconsin Cooperative Extension.

<u>http://www.ojp.usdoj.gov/BJA/evaluation/guide/index.htm</u> The link connects to the United States Bureau of Justice Assistance guide to program evaluation, and contains basic information on how to conduct a program evaluation. There are some useful links on the left side navigation panel, such as a glossary, and useful links as well.

<u>http://www.extension.psu.edu/evaluation/</u> This site, hosted by the Penn State Cooperative Extension and Outreach, provides information to design and implement a useful program evaluation. It has some good resources as well.

<u>http://cyfernet.ces.ncsu.edu/cyfres/browse_2.php?search=Evaluation</u> This is a compilation of evaluation resources, with practical research-based information. Created by the Children, Youth and Families Education and Research Network.