

REGIONAL TRAINING FOR EXTERNAL EVALUATORS
ORGANIZED BY EDUCATION REFORM INITIATIVE OF SOUTH EASTERN EUROPE
MODULE 3 - DATA COLLECTION AND ANALYSIS

TRAINERS
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DURATION
Face-to-face hours: 12h Self-study time: 2h (before the in-presence session)

PARTICIPANTS
Number of trainees: 25

OBJECTIVES
<p>This training activities will:</p> <ul style="list-style-type: none"> - Outline the connection between the EE framework and the data collection strategy of evaluators. - Distinguish the purpose and the utility of quantitative and qualitative data in an EE process. - Illustrate the most common techniques used to analyse quantitative and qualitative data. - Demonstrate how to develop questionnaire items within an EE process. - Point out key topics suitable for classroom observation and synthetise them. - Exemplify the analysis of qualitative data to triangulate with other information, in accordance with the EE framework. - Explain how to develop EE interview protocols tailored to different respondents.

CONTENTS
<ul style="list-style-type: none"> - Strategy for data collection and analysis according to the evaluation framework. - Quantitative and qualitative data analysis. - Questionnaires development and use within the evaluation process. - Classroom observation analysis and use within the evaluation process. - Document analysis and use within the evaluation process. - Interviews construction for use within the evaluation process.

ACTIVITIES AND LEARNING OUTCOMES		DURATION
Section 1	<p>Learning outcomes - at the end of this section the trainees will be able to:</p> <p>Use the reference framework appropriately to define the information and data collection strategy.</p> <p>Recognize different techniques for analysing qualitative and quantitative data.</p> <p>Identify effective strategies to use evaluation indicators and descriptors within the EE framework.</p> <p>Design questionnaire items according to the EE framework and audiences.</p> <p>Critically analyse quantitative data as part of an EE process.</p>	5 min
	<p>Step 1: Before the training session, trainees read the support texts (3.1, 3.2 and 3.3) (self-study time).</p> <p>Step 2:</p>	

	<p>The trainer projects the PowerPoint (3.4) presentation and presents the work schedule for the development of Module 3, its contents, objectives and learning outcomes of section 1.</p> <p>Step 3: The trainer introduces the discussion topics included in the PowerPoint (3.4) presentation: What factors have the greatest influence on the strategy for data collection and analysis in the external evaluation process? How can external evaluators ensure a consistent and rigorous use of the quality standards included in the reference framework? What challenges does the use of evaluation descriptors implies?</p> <p>Step 4: Group-work: in groups of 4/5 people, the trainees discuss the given topics and systematize their conclusions.</p> <p>Step 5: Presentation: the spokesperson for each group presents the conclusions to the plenary, in 3 minutes.</p> <p>Step 6: Lecture: the trainer synthesizes key ideas on the discussed topics using the PowerPoint presentation (3.4).</p> <p>Step 7: The trainer distributes the EE Framework (3.5), questionnaire reports (pupils, parents, and teachers) (3.6) and the academic results of a given school (3.7) (data from de Portuguese Ministry of Education) and gives them a scrip with task guidelines (3.8).</p> <p>Step 8: Group-work: in small groups, the trainees carry out the proposed task guidelines (3.8).</p> <p>Step 9: Presentation: the spokesperson for each group presents the conclusions to the plenary (7 min each).</p> <p>Step 10: Lecture: the trainer synthesizes key ideas on the discussed topics using the PowerPoint presentation. (3.4).</p> <p>Step 11: Q&A and feedback: the trainer asks the trainees if they have further questions and closes the training section.</p>	<p>5 min</p> <p>20 min</p> <p>15 min</p> <p>20 min</p> <p>5 min</p> <p>60 min</p> <p>35 min</p> <p>10 min</p> <p>5 min</p> <p>180 min</p>
Section 2	<p>Learning outcomes - at the end of this section the trainees will be able to: Critically use different classroom observation forms to real-world scenarios. Critically synthesize what resulted from the classroom observation.</p>	
	<p>Step 1: Before the training session (self-study time), trainees read the support text (3.9), the guiding questions for observing pedagogical interaction – The Portuguese class observation form – IGEC (3.10) and pages 22-24 of Teach Observer Manual – The World Bank (3.11).</p> <p>Step 2: Lecture: the trainer introduces the learning outcomes of section and synthetises key ideas about classroom observation, based on the support texts using the PowerPoint presentation (3.4).</p> <p>Step 3: Lecture: The trainer summarizes the differences of two different observation forms that will be used in the next steps – Each small group is divided into 2: group 1 receives The Portuguese form (IGEC) (pedagogical interaction) - Form 1 (3.12) and group 2 receives The World Bank form (B area: “Instruction”, 3. “Lesson facilitation” and 4. “Checks for understanding” - Form 2 (3.13).</p> <p>Step 4: Viewing a video (3.14): the trainer shows the video of the classroom to observe (video excerpt of a Biology class - from the beginning to min 9’ and from min 21’ to 26’).</p> <p>Step 5: Individual work: individually the trainees observe the classroom video (3.14) and fulfil the given forms - Form 1 (3.12) or Form 2 (3.13).</p> <p>Step 6: Group-work: in small groups, the trainees discuss the topics included in the PowerPoint (3.4) presentation:1) Systematize the conclusions of the class observation comparing findings 2) Identify additional sources of information that can be used to validate and triangulate with classroom observation synthesis of findings.</p>	<p>15 min</p> <p>15 min</p> <p>15 min</p> <p>20 min</p> <p>60 min</p>

	Step 7: Presentation: the spokesperson for each group presents the conclusions to the plenary (6 min each).	30 min
	Step 8: Lecture: the trainer synthesizes the main ideas using the PowerPoint (3.4) presentation.	15 min
	Step 9: Q&A and feedback: the trainer asks the trainees if they have further questions and closes the training section.	5 min
	Step 10: Formative self-assessment form – Sections 1 and 2 (3.15)	5 min
		180 min

MATERIALS

- 3.1 Support text no. 8: *Quantitative and qualitative data*
- 3.2 Support text no. 9: *Quality standards for evaluation: indicators and descriptors*
- 3.3 Support text no. 10: *Questionnaire development*
- 3.4 PowerPoint presentation
- 3.5 EE Framework
- 3.6 Questionnaire reports (students, parents, and teachers)
- 3.7 Academic results of a school
- 3.8 Scrip with task guidelines
- 3.9 Support text no. 11: *Classroom observation*
- 3.10 Guiding questions for observing pedagogical interaction – The Portuguese class observation form – IGEC.
- 3.11 Teach Observer Manual – The World Bank (pp. 22-24)
<https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/949541542659103528/teach-observer-manual>
- 3.12 Form 1 – The Portuguese class observation form – IGEC (Pedagogical interaction)
- 3.13 Form 2 – The World Bank form (B area: “Instruction” - 3. “Lesson facilitation” and 4. “Checks for understanding”).
- 3.14 Video excerpt of a Biology class - from the beginning to min 9’ and from min 21’ to 26’ (full version online: “AP Biology class observation” <https://www.youtube.com/watch?v=omzd691qjGI>)
- 3.15 Formative self-assessment form (Sections 1 and 2)

Section 3	Learning outcomes - at the end of this section the trainees will be able to: Analyse critically qualitative data in accordance with the EE framework. Use data triangulation to make fair and valid judgements evidence-based.	
	Step 1: Before the training session, trainees read the support texts (3.16) (self-study time).	
	Step 2: Brainstorming: the trainer introduces the learning outcomes of the section and asks the trainees to suggest strategies to build strong evaluation evidence.	5 min
	Step 3: Group-work and case study: in small groups, the trainees carry out the tasks indicated on the script (3.17), using the given materials according to EE framework (3.5) - excerpts from a school development plan/ programme (3.18), school internal evaluation report (3.19), annual work plan (3.20).	60 min
	Step 4: Presentation: The spokesperson for each group presents the conclusions to the plenary (4 min each).	20 min
	Step 5: Lecture: the trainer systematizes the key ideas about triangulation, using the PowerPoint presentation (3.4)	10 min
	Step 6: Q&A and feedback: the trainer asks the trainees if they have further questions and closes the training section.	5 min
	100 min	

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Section 4	Learning outcomes - at the end of this section the trainees will be able to: Tailor interview questions to various groups of interviewees according to the EE framework.	
	Step 1: Group-work: in small groups, write four/five questions to be used in the interviews - tasks indicated on the script (3.21).	45 min
	Step 2: Presentation: The spokesperson for each group presents the conclusions to the plenary (3 min each).	15 min
	Step 3: Lecture: the trainer synthesizes the main ideas using the PowerPoint (3.4) presentation.	10 min
	Step 4: Q&A and feedback: the trainer asks the trainees if they have further questions and closes the training section.	5 min
	Step 5: Formative self-assessment form - Sections 3 and 4 (3.22).	5 min 80 min

MATERIALS
<p>3.4 PowerPoint presentation</p> <p>3.16 Support text no. 12: <i>Evidence gathering to substantiate evaluative judgments</i></p> <p>3.17 Scrip with task guidelines</p> <p>3.18 Excerpt from a school development plan/ programme</p> <p>3.19 Excerpt from a school internal evaluation report</p> <p>3.20 Excerpt from a school annual work plan</p> <p>3.21 Script with task guidelines</p> <p>3.22 Formative self-assessment form (Sections 3 and 4)</p>

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<p>Essential:</p> <p>EQET SEE (2022). <i>Regional standard of competences for external evaluators, ERI SEE</i>. https://eqet.erisee.org/publications/</p> <p>Molina, E., Melo Hurtado, C. E., Pushparatnam, A., & Wilichowski, T. M. (2019). Teach: Observer Manual (No. 132204; pp. 1–48). The World Bank. http://documents.worldbank.org/curated/en/949541542659103528/Teach-Observer-Manual</p> <p>Support texts number 8, 9, 10, 11 and 12.</p>
<p>Further reading:</p> <p>Ahmad, S., Wasim, S., Irfan, S., Gogoi, S., Srivastava, A., & Farheen, Z. (2019). Qualitative v/s. Quantitative Research—A Summarized Review. <i>Journal of Evidence Based Medicine and Healthcare</i>, 6, 2828-2832.</p> <p>AITSL (2011). <i>Australian Professional Standards for Teachers</i>. www.aitsl.edu.au/docs/default-source/apst-resources/australian_professional_standard_for_teachers_final.pdf</p> <p>Archer, J., Cantrell, S., Holtzman, S. L., Joe, J. N., Tocci, C. M., & Wood, J. (2016). <i>Better feedback for better teaching: A practical guide to improving classroom observations</i>. John Wiley & Sons. https://files.eric.ed.gov/fulltext/ED600487.pdf</p> <p>Archibald, M. M. (2016). Investigator triangulation: A collaborative strategy with potential for mixed methods research. <i>Journal of mixed methods research</i>, 10(3), 228-250.</p> <p>Caudle, S. L. (2004). Qualitative data analysis. <i>Handbook of practical program evaluation</i>, 2(1), 417-438.</p> <p>Denzin, N. (1973). <i>The research act: A theoretical introduction to sociological methods</i>. Transaction Publishers.</p> <p>Denzin, N. K. (2001). The reflexive interview and a performative social science. <i>Qualitative research</i>, 1(1), 23-46.</p>

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