

		Observing MEES Standards/Indicators	Developing MEES Standards/Indicators	Demonstrating MEES Standards/Indicators
Types of Videos	Interviews with Students ¹ (p. 136-137)	Standard 2	Indicator 7.1	Indicator 7.2 (if student understanding from the interview is then used as evidence to plan possible future instruction)
	Videos of Classroom Lessons ¹ (p. 137) (Unedited, full-length videos ² – p. 343 - that provide a more authentic experience of normal instructional routines and show how elements of the classroom are inter-related)	Indicators 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, 6.5, and 7.1 depending on the focus		
	Pre-Service Teacher Selected Videos ¹ (p. 137) (Having pre-service teachers find examples of strategies for visible student thinking and effective questioning)	Provides opportunities for indicators 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, 6.5, and 7.1 through searching for and watching videos	Indicators 1.1, 1.2, and 1.3 and Indicator 2.2 (by exposing pre-service teachers to more strategies to implement) Indicators 4.1, 4.2, 4.3 and 4.4 Indicator 8.1	Indicators 4.1 and 4.2 (if selecting videos that show effective strategies for visible student thinking) Indicators 4.3 and 4.4 (if selecting videos that show effective questioning) Indicator 8.1
Video Selection Criteria	Focus on the Content Portrayed ¹ (p. 137-139) (including a variety of subjects, instructional strategies, procedures, and student activities)	Indicators 1.1, 1.2, and 1.3 Indicator 3.1	Indicators 1.1, 1.2, and 1.3 Indicator 3.1	
	Teaching that Makes Student Thinking Visible ¹ (p. 137-139) (Including clear audio of teacher-student or student-student interactions or clear images of student work)	Indicators 4.1, 4.2, 4.3, and 4.4 Indicator 5.2	Indicators 4.1, 4.2, 4.3, and 4.4 Indicators 7.1	Indicators 7.1 and 7.2 (if student learning is used to monitor student progress then as evidence to plan possible future instruction) Indicator 8.1 (if student thinking is used to reflect on the effectiveness of the lesson)
	A Diversity in the Backgrounds of the Students and Teachers ¹ (p. 137-139) (A variety of SES and ethnic backgrounds)	Indicators 2.1, 2.2, and 2.3 Indicators 6.2, 6.3, and 6.5	Indicator 2.3 Indicator 6.5	

Watching Process	<p>Shared Viewing³ (Pre-service teachers and instructors viewing lessons at the same time and following them with collaboration, discussion, and critical reflection)</p>	Indicators 9.1 and 9.2	Indicators 8.1, 8.2, and 8.3 Indicators 9.1 and 9.2	Indicators 8.1, 8.2, and 8.3 Indicators 9.1 and 9.2
	<p>Pre-Service Teachers Deriving Information About the Classroom² (p.339) (Rather than being told the information ahead of time – ex.: being told to look for the rules while observing rather than being given the rules beforehand – more effective at promoting reflective thinking)</p>	Indicators 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.5, 7.1, 7.2, & 7.3 depending on the focus	Indicators 2.1, 2.2, and 2.3: Noticing and inferencing differentiations based on students' needs and interests Indicator 5.3: Noticing and identifying proactive classroom management strategies	
	<p>Worksheets to Guide Observations² (p.342) (Cognitively prepares pre-service teachers by developing observation skills with the guidance of an instructor⁴ – p. 298)</p>	Indicators 1.1, 1.2, 1.3, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.3, 7.1, & 7.2 depending on the focus of the observation tasks	Indicator 1.4 Indicators 2.1, 2.2, and 2.3 Indicator 3.1 Indicators 4.3, and 4.4 (For the indicators above: evidence shows that pre-service teachers are able to focus more on student learning, engagement, and critical thinking after developing observation skills ^{2 4}) Indicator 8.1	Indicator 8.1 (if used to then discuss the lesson and reflect on the effectiveness of the observed tasks)
	<p>Recording Instructional Methods or Techniques and their Positive and Negative Effects² (p. 342 & 348) (Provides a more targeted approach to early observations and practice reflecting on the effectiveness of different methods)</p>	Indicators 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5.2, 5.3, 6.1, 6.3, 7.1, & 7.2 depending on the focus	Indicators 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 4.1, 4.2, 4.3, 4.4, and 6.1 depending on the methods recorded and critiqued Indicators 7.1 and 7.2 Indicator 8.1	Indicator 7.2 (if critiques to the used methods and their outcomes on student learning are then used to plan possible alternative instruction) Indicator 8.1
	<p>Text Chat Features During Observations³ (p. 429-430) (including the pre-service teachers and instructors)</p>	Indicator 8.1 Indicators 9.1 and 9.2	Indicator 8.1 Indicators 9.1 and 9.2	Indicator 8.1 Indicators 9.1 and 9.2

Lesson Analysis Framework	Lesson Analysis Framework (Santagata & Guarino: "Using Video to Teach Future Teachers to Learn From Teaching")¹			
	1. Identifying Lesson Learning Goals	Indicators 3.1 and 3.2	Indicator 3.2	Indicator 3.2
	2. Analyzing Student Thinking and Learning (Through visible student learning or student work examples)	Indicators 4.1, 4.2, 4.3, and 4.4	Indicator 7.1	Indicator 7.1
	3. Constructing Hypotheses About the Effects of Teaching on Students' Learning	Indicators 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, and 6.5 depending on the lesson observed	Standard 2 Indicator 7.1 Indicator 8.1	Indicator 7.1 Indicator 8.1
	4. Using Analysis to Propose Improvements in Teaching	Indicator 2.2 Indicator 3.1 Indicators 4.1, 4.2, 4.3, and 4.4	Indicator 2.2 Indicator 3.1 Indicator 4.4 Indicators 7.1 and 7.2 Indicator 8.1	Indicator 2.2 Indicator 3.1 Indicator 4.4 Indicators 7.1 and 7.2 Indicator 8.1
Post-Watching Activities	Ongoing Discussion Threads Among Pre-Service Teachers, Instructors, and In-Service Mentor Teachers ³ (p. 429-430)	Indicators 8.1 Indicators 9.1 and 9.2	Indicators 8.1 Indicators 9.1 and 9.2	Indicators 8.1 Indicators 9.1 and 9.2
	Small-Group then Whole-Group Debriefs ² (p. 343) (where lessons are reinterpreted to make inferences about the complexity of planned classroom instruction)	Indicators 1.1, 1.2, 1.3, 1.4, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1 and 6.3 depending on the focus	Indicators 2.1 and 2.2: Inferencing differentiations based on students' needs and interests Standard 3: Recognizing the importance of long-range planning and curriculum development Indicator 8.1	Indicator 8.1

¹ Santagata, R., Guarino, J. Using video to teach future teachers to learn from teaching. *ZDM Mathematics Education* **43**, 133–145 (2011). <https://doi.org/10.1007/s11858-010-0292-3>
Great resource for all levels of field experiences and includes the lesson analysis framework

² Salajan, F., & Duffield, S. (2019) Enhancing Pre-service Teachers' Professional Practice Through Reflection on the Action of Others: The Development of the Heterospective Reflection

Framework Informed by Virtual Field Experiences, *The Teacher Educator*, 54:4, 333-358. <https://doi.org/10.1080/08878730.2018.1557309>

Includes a lot of information on guiding beginning field experiences and developing observation skills

³ Heafner, T., & Plaisance, M. (2012). Shared viewing as an approach to transforming early field experiences. *Contemporary Issues in Technology and Teacher Education*, 12(4). Retrieved from <https://citejournal.org/volume-12/issue-4-12/current-practice/shared-viewing-as-an-approach-to-transforming-early-field-experiences/>

Presents ideas that are more similar to culminating field experiences that include professional collaboration and reflection

⁴ Hixon, E. & So, H.J. (2009). Technology's Role in Field Experiences for Preservice Teacher Training. *Journal of Educational Technology & Society*, 12(4), 294-304. Retrieved June 23, 2020 from <https://www.learntechlib.org/p/74980/>.

Reviews the pros and cons of both traditional and virtual field experiences and provides research and evidence for cognitively preparing pre-service teachers to benefit more from observations