Evaluate: The Who, What, When, Why, Where, and How

Purpose:

Evaluate judicious uses of technology in the mathematics classroom.

Descriptor:

Participants will review the instructional phases of this professional development and the classroom-ready lessons according to the list of attributes generated in the elaborate phase of the professional development. Revisions to the list of attributes may occur. Participants will engage in discussion about how each lesson exhibits a judicious use of technology; i.e., participants will address the question, "How does the use of technology in this student lesson help me teach the concepts and skills more effectively and efficiently?"

Duration:

2 hours

Materials:

Small (1" x 1.5") restickable notes Chart paper Markers Tape to adhere chart paper to the wall

Leader Notes:

The Evaluate phase allows participants to reflect upon their experiences and apply their knowledge to a new situation. The facilitator can deduce from the participants' actions how well they have been able to develop a sense of the judicious use of technology.

- 1. Distribute small restickable notes to each participant.
- 2. Assign different phases of this professional development to pairs of participants.
- 3. Prompt each pair of participants to use the restickable notes to highlight locations in each phase of the professional development that make judicious use of technology, according to the criteria on the Transparency: Encouraging Judicious Use of Technology. Participants should use the restickable notes to highlight those attributes of the teaching strategies outlined during the Elaborate Phase of this professional development. Sample responses may include:
 - Allowing students to enter data into a web-based tool that automatically creates a stemand-leaf plot allows the students to analyze the organization of data. As students analyze the organization of the data, they develop a list of attributes for a stem-and-leaf plot.
 - Asking students to graph on chart paper first encourages students to think about how to set up the graphing calculator to illustrate the graph in its entirety.

- Technology use is thoroughly integrated into this phase of the lesson.
- Was the graph of the data what we expected? Why?
- 4. After each pair has had time to evaluate the given phase of the professional development, prompt each pair of participants to create a summary of its findings on chart paper.

- 5. Identify a location in the room for each phase of the professional development. Direct participants to post their summaries in the appropriate location.
- 6. Perform a gallery walk through each phase, asking participants to determine which teaching strategies for judicious use of technology seemed to have the greatest impact on the given phase.
- 7. Prompt participants to share any new thoughts to add to the classroom suggestions for each teaching strategy.
- 8. Distribute the classroom-ready lessons to each participant. Prompt each participant to continue the evaluation process for judicious use of technology, using the classroom-ready lessons as the context for evaluation. The participants should use the restickable notes to highlight those parts of each lesson that reflect the four teaching strategies for developing judicious use of technology.
- 9. As time allows, offer small-group and whole-group opportunities for participants to share what participants highlighted.
- 10. Redirect participants' attention to the four statements made at the beginning of the professional development session. Ask the participants if they would "shift" the placement of their sticky dots. If they respond with a "Yes," ask the participants why they would shift the placement of their sticky dots.
- 11. Draw an end to the professional development session with a parting thought rather than a closing thought so that participants leaving thinking "How will I use what I learned?" rather than "That was a good session." Examples of such parting thoughts include:
 - a. As you leave, please consider ways that you might include the use of data and technology in your classroom next week.
 - b. As you leave, please consider how you might best make use of the computer or computers available for your classroom use.
 - c. As you leave, please consider how students might be equipped to ask better questions about what they are learning when they have graphing calculators in their hands.

Transparency: Encouraging Judicious Use of Technology

- How did the activity promote careful decision making about the use of technology?
- How did the activity integrate technology into the learning of mathematics?
- Was technology use ever restricted for the purpose of enhancing learning? Why?
- How did the technology facilitate discussion about "statistical sense"?





Gallery Walk Observations

	How did the activity promote careful decision making about the use of technology?
Man in the Box Explore/Explain I	How did the activity integrate technology into the learning of mathematics?
	Was technology use ever restricted for the purpose of enhancing learning? Why?
	How did the technology facilitate discussion about "statistical sense"?

tn	nt ³	Teaching Mathematics TEKS Through Technology Grades
	Grams of Fat Explore/Explain II	How did the activity promote careful decision making about the use of technology?
		How did the activity integrate technology into the learning of mathematics?
		Was technology use ever restricted for the purpose of enhancing learning? Why?
		How did the technology facilitate discussion about "statistical sense"?

tr	nt ³	Teaching Mathematics TEKS Through Technology Grades
	Trials! Trials! Trials! Explore/Explain III	How did the activity promote careful decision making about the use of technology?
		How did the activity integrate technology into the learning of mathematics?
		Was technology use ever restricted for the purpose of enhancing learning? Why?
		How did the technology facilitate discussion about "statistical sense"?

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	How did the activity promote careful decision making about the use of technology?
	How did the activity integrate technology into the learning of mathematics?
How Much Longer? Elaborate	Was technology use ever restricted for the purpose of enhancing learning? Why?
	How did the technology facilitate discussion about "statistical sense"?