

# Video-Viewing Guide

Unit 4: Observing Standards-in-Action

Content Area: Mathematics



Standards-in-Action

U.S. DEPARTMENT OF EDUCATION  
OFFICE OF VOCATIONAL AND ADULT EDUCATION

## Innovations for Standards-Based Education



## VIDEO-VIEWING GUIDE

### UNIT 4: OBSERVING STANDARDS-IN-ACTION

CONTENT AREA: MATHEMATICS

LEVEL: NRS LEVEL 4: ADULT BASIC EDUCATION INTERMEDIATE HIGH

#### **Video Features:**

Johnson County Adult Education

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## Directions

Review the following observation form with the attendant questions and points before watching the videotaped lesson. Then put the guide aside while you watch the video, and take notes on a blank observation form or separate paper. Because of the central nature of the lessons, you can also use your own state standards to determine which standard(s) are reflected in the lessons. Drawing on your notes, use the questions to guide a discussion about what constitutes concrete evidence and how that translates into scoring.

# Kansas Board of Regents Adult Education

## Mathematics Content Standards:

M1.5 Percentages

M1.5.7 Find a given percent of a number

M1.5.8 Find the whole from a given percentage and part

M1.5.9 Calculate percents one or two decimal places

M1.5.11 Calculate percent increase and decrease

## SIA Observation Tool

### Effective Teaching and Learning Practices<sup>1</sup>

E = Evident  
NFE = Not Fully Evident

1. Curriculum <i>content</i> of the lessons is aligned to the demands of standards.	E/NFE	Evidence
a. Instructor presents lesson clearly reflecting the concepts/skills of one or more of the standards.		How close to the class objectives are these standards?
b. Instructor outlines a well-defined standards-based lesson objective stated in terms of the desired student learning outcomes.		<p>How specific are the lesson outcomes, as identified by the instructor?</p> <p>What means does she use to define the lesson objectives?</p> <p>Are they understandable to students? Do you have a sense of the knowledge and skills the lesson is trying to foster (e.g., increased efficacy, increased mastery, assembling elements into larger wholes, increased accuracy)?</p> <p>Throughout the lesson, how often does the instructor refer back to lesson objectives? What does she say and do?</p> <p>How does she involve students in defining the lesson objectives?</p>
c. Students use resources directly related to the targeted standards.		As you observe the various activities students are asked to complete throughout the lesson, were there any that seemed off-point?

<sup>1</sup> For the purposes of Standards-in-Action, a “standard” is defined as the most specific level of outcome used by a state to indicate what students should know and be able to do. These can include indicators, objectives, and benchmarks.

2. Cognitive level of learning activities is aligned to the demands of the standards.	E/NFE	Evidence
a. Instructor poses questions that stimulate student thinking beyond recall.		<p>As the instructor works with students, how often does she impart information vs. ask questions? Does the balance feel right?</p> <p>Are there a variety of problems? Did students seem interested?</p>
b. Instructor allows appropriate wait-time (3 or more seconds) after posing questions.		<p>Throughout the lesson, do you have a sense that students are given time to express their thinking?</p> <p>How often does she ask students to explain their answers?</p> <p>When the instructor asks questions, does she seem comfortable with wait-time?</p> <p>Once she asks a question, does she stay silent or does she fill the space with more questions or explanations? Count the seconds that she waits at different times throughout the lesson.</p>
c. Instructor asks students to elaborate on and justify their answers.		<p>How often does she ask students to explain or elaborate on their answers, i.e., how they got their answer, what it means, etc., at different parts of the lesson?</p> <p>Can students answer with a “yes” or “no” or one-word answer?</p> <p>How often does she invite students to follow up on one another’s comments?</p>
d. Instructor activates students’ metacognitive skills (e.g., models strategies, inquires about students’ strategies).		<p>Throughout the lesson, did she prompt students with questions that resemble the following: “Why are we practicing this skill?” “Can you explain the strategies you are using to complete this task?” “What method did you use?” “Why do you like that method?” “How will it help you?” “How will you use what we are learning outside of class?” or “What did we learn today?”</p>
e. Students work on assignments reflecting the highest demands posed by the standards targeted by the lesson.		<p>As she scaffolds the lesson, what are the demands of the various problem sets?</p> <p>How did the instructor build challenges into the various assignments?</p>

3. Standards are translated into lesson content <i>relevant</i> to adult students.	E/NFE	Evidence
a. Instructor ties standards-based lesson to students' goals, interests, or needs.		<p>How does she explicitly tie the lesson objective of percents to students' goals or interests?</p> <p>How does she relate percents to real-life activities?</p> <p>Does she tie the lesson to goals/interests at the beginning, end, or throughout the lesson?</p> <p>What evidence do you have that the instructor knows about students' lives and interests? What specific things does she say to indicate this?</p>
b. Students actively participate in the lesson through class discussions, group projects, etc., instead of doing solitary seatwork or listening to extended lectures.		<p>Is the lesson dominated by teacher talk or student talk?</p> <p>Is the lesson dominated by lecture or discussion?</p> <p>What do you notice about the students? Are they bored, animated, or is it hard to tell?</p> <p>Did only some students actively participate in discussions? Many? Most? All?</p>
c. Students have varied opportunities (beyond worksheets) to apply new learning in authentic or practical adult-oriented contexts.		<p>Were the activities practical and useful? List them.</p> <p>Were the assignments worksheets or were students asked to solve authentic problems?</p>

4. Standards are addressed by a <i>coherent progression</i> of learning.	E/NFE	Evidence
a. Instructor explicitly links lesson content to previous lessons or what students already know.		<p>Does the instructor refer to previous lessons? How does she do this? What does she say?</p> <p>What does she do to jog the memory of students about what they already know about percents?</p> <p>Does she ask them or tell them what they know?</p> <p>As she reviews what they have learned about percents, do most students seem to understand? How quickly do students respond and how many are involved in answering this question?</p>
b. Students have prerequisite knowledge/skills to understand lesson content.		<p>Do you think students were prepared for this lesson? How do you know?</p> <p>What does their verbal and nonverbal (face and body language) communication tell you about whether they are prepared for this lesson?</p> <p>How does the instructor check on students' prerequisite skills?</p>
c. Instructor incorporates standards in a lesson in a manner that builds on their natural connections.		<p>Besides learning about percents, what other aspects of mathematics does she bring into the lesson?</p> <p>Are these aspects well integrated into the lesson?</p>
d. Instructor closes lesson by: <ul style="list-style-type: none"> <li>• reviewing lesson objectives;</li> <li>• summarizing student learning; and</li> <li>• previewing how the next lesson builds on that learning.</li> </ul>		<p>Does she close the lesson?</p> <p>Does she review the lesson objectives?</p> <p>Does she summarize student learning in a manner understandable to students?</p> <p>Do you have a sense about what the next lesson will cover?</p>

5. Students' level of understanding is assessed during the lesson and instruction is adjusted accordingly.	E/NFE	Evidence
a. Instructor regularly checks whether students are mastering standards-based lesson content (e.g., circulates to check on students' work, monitors verbal responses).		<p>When students are working in groups or individually, does she circulate?</p> <p>Does she monitor their verbal responses? How do you know?</p> <p>During whole-class discussions, do you hear from a wide variety or only a handful of students?</p> <p>How does she make sure she hears from all students?</p> <p>When the instructor calls on students to share a problem they have solved, what gives you the sense that she knows whether they “got it” or not?</p>
b. Instructor provides students with prompt, specific feedback to correct misunderstandings and reinforce learning.		<p>What strategies does she use to reinforce their learning?</p> <p>How do you know that she is listening carefully to the answers of students? What does she do when a student says something that is not precise or exactly right?</p> <p>When she gives feedback, does she mostly lead students to the right answers through questioning or by providing the “right” answers to them?</p>
c. Students signal understanding of lesson content before instructor introduces new ideas.		<p>What were the various ways in which students were asked to demonstrate concepts, to check on what they know?</p> <p>As the lesson moves on to percent increase and decrease, do students seem as sure about what they are doing?</p> <p>As the lesson moves to the final partner activity, to what extent do students signal they understand the content? Are all students ready to move on?</p>

5. Students' level of understanding is assessed during the lesson and instruction is adjusted accordingly. (Continued)	E/NFE	Evidence
d. Instructor provides supplemental instruction for students who show that they need it (e.g., individualized or peer tutoring, re-teaching, review of basic skills).		<p>Does it appear that some students need additional instruction on some aspects of percent?</p> <p>Does the teacher provide supplemental instruction?</p> <p>Does the instructor appear to have a way to check further to see which students might need more assistance?</p>
e. Instructor provides extension activities for students who complete classwork, instead of leaving them idle or unchallenged.		<p>Were any students bored while waiting for others to finish?</p>
f. Students evaluate and reflect on their own learning.		<p>At the end of the lesson, how does the instructor activate students' metacognition?</p> <p>Does she ask them to reflect on their learning?</p>