

Online Resource 7.19 Ninth-Grade Lesson Example

Description of Unit:	Learning Intention, <i>I will . . . Make inferences and justify conclusions from sample surveys, experiments, and observational studies.</i>		
	Success Criteria:		
	Surface	Deep	Transfer
	I will . . .	I will . . .	I will . . .
	<ul style="list-style-type: none"> Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. 	<ul style="list-style-type: none"> Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. Evaluate reports based on data. 	<ul style="list-style-type: none"> Evaluate the conclusions of arguments using statistical information. Produce and present a solution to a problem using quantitative data.
Leverage	<ul style="list-style-type: none"> Students are asked to debate with one another and use their prior math and statistical knowledge to make a case. In learning partners, the students then prepare to make a case in front of the entire class. The teacher listens to the students' remarks and then shares the learning intentions and success criteria. <i>Review the learning intention of the unit</i> <i>Review the success criteria for the lesson</i> <i>Review student current knowledge/ideas/questions</i> 		
Link	<ul style="list-style-type: none"> The teacher writes down areas of strength in student arguments and areas of growth. The teacher provides feedback to students and a rationale for why/how the lessons over the next few weeks will be helpful in handling the case studies students will use to complete the unit. <i>Align feedback, instruction, and learning strategies to surface, deep, and transfer</i> <i>Align tasks to the surface, deep, and transfer</i> <i>Focus students on "progress of learning"</i> 		
Lift	<p>Students are given a paper and pencil assessment to measure their individual performance towards the learning intentions and success criteria of the unit.</p> <ul style="list-style-type: none"> Summarize student learning relative to learning intentions and success criteria Review individual performance and next steps in learning 		