

Evaluation Criteria for Katherine Burden's Science 8 Lesson on Lenses

		<i>Meets Expectations</i>	<i>Approaching Expectations</i>	<i>Does Not Yet Meet Expectations</i>
Construction of knowledge	The learner is given the opportunity to identify one's own previous knowledge			
	Learners have access to resources to help them problem solve			
	Learners are able to affect the environment in some way (<i>able to manipulate or construct something</i>)			
	Hypermedia is used as a medium to construct knowledge, not just deliver information			
	Learning is student-centered			
Process not product	The learning process is driven by connections to related topics			
	Learners have choice in their demonstration of understanding			
	Learners are permitted feedback and revision throughout the learning process			
Multiple perspectives	Learners are provided an opportunity to exchange ideas with each other			
	Learners are given opportunities for collaboration			
	Learners are able to reconstruct their own meanings after collaboration			
Situated cognition	The problem presented to learner is authentic and represents a real-world task			
	Lesson challenges and supports learner			
	All contextual information around the problem are present			
Reflexive cognition	Students can articulate their understanding throughout the learning process			
	Students can examine their personal beliefs about the subject			

	Learners are encouraged to be self-aware and self-regulatory			
Cognitive apprenticeship	Scaffolding in the lesson allows the learner to outperform			
	Students are provided with the appropriate coaching and support from the teacher			
Process-based evaluation	Cognitive tools allow learners to show understanding beyond verbal discussion			
	Assessment tests the learning outcomes			
	Students monitor their own learning			
	Students are able to reflect on their learning			
Predict, Observe, Explain Model (POE)	Learners are asked to predict a solution to an authentic problem based on their previous knowledge			
	Learners actively observe and manipulate information to develop a solution to the problem			
	Learners compare their new solutions to the old one and explain any differences			
	Learners share their solutions with others			

References:

Learning Resources Unit @ BCIT (2003). Constructivist e-learning methodologies: A Module development guide. *Pan-Canadian Health Informatics Collaboratory*. Retrieved from <https://connect.ubc.ca/bbcswebdav/courses/SIS.UBC.ETEC.530.66C.2014S12.33210/download/unit5-construct-method.pdf>

Matthews, M. R. (1994). *Science Teaching*. New York: Routledge, Chapter 7 [pdf]