

GLOSSARY

Part-I Module 3

Competency-based Education Teaching in Competency-based Systems

Module	Term / Word	Where Introduced?	Definition	Reference
3	Assessment <i>as</i> learning	Part 4: Evolving Educator Roles	Assessment <i>as</i> Learning is the use of ongoing self-assessment by students in order to monitor their own learning, which is characterised by students reflecting on their own learning and making adjustments so that they achieve deeper understanding.	Western and Northern Canadian Protocol (WNCP). (2006). Rethinking Classroom Assessment: Assessment for Learning, Assessment as Learning, Assessment of Learning.
3	Bloom's Taxonomy	Part-3: Focus on Development of Higher-order Skills	A model for classifying thinking into cognitive levels of complexity. Bloom's Taxonomy was first presented in 1956 through the publication, <i>The Taxonomy of Educational Objectives, The Classification of Educational Goals,</i>	Anderson, L.W. and Krathwohl, D.R. (Eds.) (2001). A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives: Complete Edition. New York: Longman. Bloom, B.S. (1956). Taxonomy of Educational Objectives, Handbook 1:

			<i>Handbook I: Cognitive Domain.</i> This taxonomy identifies six levels within the cognitive domain, from the simple recall or recognition of facts, at the lowest level, through increasingly more complex levels, to the highest level which is classified as evaluation. During the late 1990s, the original Bloom's Taxonomy was revised (Anderson and Krathwohl, 2001). In the 2001 version of Bloom's Taxonomy, the names of the six major cognitive process categories or levels were revised to indicate action (verbs) rather than non-action (nouns). These levels are: Remembering, Understanding, Applying, Analyzing, Evaluating and Creating.	Cognitive Domain. New York: Longman.
3	Cognitive map	Part-3: Focus on Development of Higher-order Skills	A cognitive map is a mental representation of the layout of one's environment. It seems	

			that many animals, not just humans, are able to form a mental representation of an environment that they have been in or are currently in. For example, when a friend asks you for directions to your house, you are able to create an image in your mind of the roads, places to turn, landmarks, etc., along the way to your house from your friend's starting point. This representation is the cognitive map.	
3	Cognitive sciences	Part-1: Base Pedagogy on Learning Sciences	Cognitive Science is the study of how the human mind stores, processes, organises, manipulates and uses information. This type of study is done through structured experiments that are designed to precisely measure the mental processes that control these abilities.	

3	Creativity	Part-3: Focus on Development of Higher-order Skills	Creativity is the ability to produce new ideas.	
3	Critical Thinking	Part-3: Focus on Development of Higher-order Skills	Being a critical thinker (and thus the meaning of critical thinking) means that you do not simply accept arguments or perspectives that are presented to you blindly. Instead, you think about things carefully, consider different aspects of the arguments, evaluate the merits, and generally make more in depth conclusions.	
3	Learning Cycle / Cycle of learning	Part-2: Build Student Agency and Ownership	The learning cycle is an inquiry-based teaching approach and a philosophy of education/model of instruction that can promote critical thinking, active learning and meaningful learning (Marek et al. 2003; Sowell 1993). Marek et al. (2003) and Sowell (1993) refer to the	Marek, E. A., Laubach, T. A., & Pedersen, J. (2003). Preservice elementary school teachers' understanding of theory-based science education. <i>Journal of Science Teacher Education</i>, 14(3), 147–159. Sowell, J. E. (1993). A learning cycle approach to art history in the classroom. <i>Art Education</i>, 46(2), 19–24.

			three-phase learning cycles that include exploration, invention, and organization.	
3	Learning goals	Part-2: Build Student Agency and Ownership	Goals describe the broad, overarching expectations of what students should be able to do by the end of the course, specifically what knowledge students should possess and/or what skills they should be able to demonstrate. Instructors use goals to design course assignments and assessments, and to determine what teaching methods will work best to achieve the desired outcomes.	
3	Learning progression	Part-2: Build Student Agency and Ownership	The term learning progression refers to the purposeful sequencing of teaching and learning expectations across multiple developmental stages, ages, or grade levels.	

3	Lesson plan	Part 5: Evolving Educator Competencies	A lesson plan is a teacher's daily guide for what students need to learn, how it will be taught, and how learning will be measured. The most effective lesson plans have six key parts: Lesson Objectives Related Requirements Lesson Materials Lesson Procedure Assessment Method Lesson Reflection	
3	Long-term memory	Part-1: Base Pedagogy on Learning Sciences	The term long-term memory refers to the unlimited capacity memory store that can hold information over lengthy periods of time. By saying "lengthy periods of time" we mean that it is possible for memories in LTM to remain there for an entire lifetime.	
3	Mastery Learning	Part 4: Evolving Educator Roles	Mastery learning refers to a shift in responsibilities, so that a	

			student's success or failure is more reliant on the instruction and not necessarily a student's ability. The difficulty of a mastery learning environment is in giving students a sufficient amount of time to learn and using teaching methods so that all students can reach the same level of learning. Mastery learning is based on the idea of narrowing achievement gaps between students in the same classroom.	
3	Motivation	Part-1: Base Pedagogy on Learning Sciences	Motivation is defined as the desire and action towards goal-directed behavior.	
3	Reflection	Part 5: Evolving Educator Competencies	Reflection is a meaning-making process that moves a learner from one's experience into the next with deeper understanding of its relationships with and connections to other	Rodgers, C. (2002). Defining reflection: Another look at John Dewey. Teachers College Record, 104, 842–866.

			experiences and ideas... It is a means to essentially moral ends.	
3	Transfer of learning	Part-1: Base Pedagogy on Learning Sciences	Transfer of learning means the use of previously acquired knowledge and skills in new learning or problem-solving situations. Thereby similarities and analogies between previous and actual learning content and processes may play a crucial role.	
3	Webb's Depth of Knowledge / Webb's Taxonomy	Part-3: Focus on Development of Higher-order Skills	Webb's Depth of Knowledge was created by Norman Webb from the Wisconsin Center for Education Research. Webb's definition of depth of knowledge is the degree or complexity of knowledge that the content curriculum standards and expectations require. Webb's Depth of Knowledge includes four levels, from the lowest (basic recall) to the	Webb, N. (November, 2005). Depth-of-Knowledge levels for four content areas. Presentation to the Florida Education Research Association, 50th Annual Meeting, Miami, Florida.

			highest (extended thinking).	
3	Working memory	Part-1: Base Pedagogy on Learning Sciences	Working Memory is like your brain's task list or sticky notes. As information is coming into your brain, you are both processing it and, simultaneously, storing it. It's necessary to learn, reason, and remember.	