Indicators of Instruction for Engagement, Empowerment, and Deep Understanding, Retention, and Transfer of Knowledge

Components (6)	Indicators (16)	Indicator Definitions
	Standards-based	Addresses district, state, and/or national content and technology literacy standards as required in the local setting
Content and		
Learning Goals	Challenging	Requires that students move beyond knowledge and comprehension to engage in application, analysis, synthesis and/or evaluation
Learning Tasks	Authentic/Meaningful	Requires students to: (1) participate in a real-life or simulated scenarios; (2) assume an adult and/or professional roles; (3) enact a complex set of thinking/problem-solving strategies typically used by adults/professionals; (4) use technologies and processes that adults/professionals use in their daily life/work; (5) grapple with open-ended questions; (6) solve ill-structured problems, often with unpredictable results and multiple solutions; and (7) produce products for audiences that would use/care about the results, especially to produce some positive effect, opportunity, or change.
	Student-directed	Emerges from the interests and questions posed by students; takes new and unexpected directions as new knowledge is discovered and processed; Requires students to take responsibility and make decisions related to their own learning
	Multi-disciplinary	Involves integrating knowledge and skills from other disciplines to solve problems and address issues. Supports the use of reading, writing, and math across the curriculum
	Culturally responsive	Incorporates students' cultural and/or linguistic knowledge, prior experiences, and performance styles to make learning more appropriate and effective for them; it teaches to and through the strengths of students and their cultural traditions. Recognizes community's "funds of knowledge."
Student Roles	Explorer	Pursues new ideas/tools; pushes the envelope in ideas and research
	Teacher	Helps others learn in formal and informal contexts
	Producer	Develops products of real use to themselves and others
Teacher Roles	Facilitator	Engages in negotiation, stimulates discussion, and monitors the process of learning, but does not control or over-simplify student tasks
	Guide	Helps students to construct their own meaning by modeling, mediating, explaining when needed, clarifying, redirecting focus, and providing options
	Co-learner/ Co-investigator	Considers self as a learner who is willing to: (1) explore areas outside his or her current expertise; (2) allow students to pursue questions to which he or she does not have answers; and (3) collaborate with others to acquire needed knowledge and skills
Social Interactions	Collaborative	Establishes a context where students must co-construct knowledge with others; understand multiple perspectives; and learn to respect diversity
Assessments	Performance-based	Involves producing and assessing a product or performance, usually for a real audience and purpose. Assessment is based on what is considered exemplary performance. Rubrics describing exemplary performance are often used.
	Seamless, Ongoing	Provides students with feedback on performance throughout the entire learning process, not only at the end of learning activities.
	Generative	Includes students in the cyclical, non-linear process of creating assessment criteria, reflecting on actual products produced, and revising the criteria to describe exemplary performance

Adapted from:

Jones, B. Valdez, G., Nowakowski, J Rasmussen, C. (1995). *Plugging In*. Oakbrook, IL: North Central Regional Educational Laboratory, p. 9.

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