Elements of Engaged Learning Technologies

Variable	Engaged Learning Indicator	Indicator Definition
Vision	Responsible for Learning	Students are actively involved in setting goals, choosing tasks, developing assessments, etc. Students have the big picture of learning and the steps in mind.
	Strategic	Students develop a repertoire of thinking/learning strategies.
	Energized by Learning	Students have a passion for learning. They are not dependent upon rewards.
	Collaborative	Students develop new understandings in their conversations and work with others.
Tasks	Authentic	Real world jobs. Jobs are interesting to students.
	Challenging	Difficult enough to be interesting, but not totally frustrating.
	Multidisciplinary	Integrates information from several disciplines to solve problems.
Assessment	Performance-Based	Performance is for a real audience. Performance serves a real purpose.
	Generative	Assessments mean something to students. Students may produce information, products, services.
	Seamless and ongoing	Students learn during assessment. Assessment is a portion of instruction.
	Equitable	Culture fair
Instructional Model	Interactive	Teacher and program are responsive to the students' needs, requests, etc.
	Generative	Instruction is focused upon constructing meaning, providing meaningful activities and experiences.
Learning Context	Collaborative	Students are part of a learning community. Activities are collaborative.
	Knowledge-Building	Learning experiences are set up to bring many perspectives to solving problems.
	Empathic	Learning environment is set up to value diversity, multiple perspectives, and the strengths of students.
Grouping	Heterogeneous	Small groups contain students with different ability levels and backgrounds.
	Equitable	Groups are organized so that all students get a chance for meaningful learning during some portion of their school year.
	Flexible	Groups are organized for different purposes so each student is a member of different groups. Each student works with different people.
Teacher's Roles	Facilitator	Engages students. Negotiates, stimulates. Directs project work, but does not control.
	Guide	Helps students construct their own meaning by modeling, mediating, redirecting focus, providing options.
	Co-Learner/Co-Investigator	Teacher considers himself/herself to be a learner. Teacher is willing to take risks and explore areas outside his/her expertise. Teacher collaborates with other teachers.
Students' Roles	Explorer	Students have the opportunity to explore. Technology tools stretch ideas and research.
	Learning Apprentice	Teachers act as mentors and coaches. Teachers encourage students to do real research.
	Teacher	Students are encouraged to teach others in informal and informal helping sessions.
	Producer	Students develop products of real use for themselves and others.

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Access	Connective	Connected to the Internet and other Resources
	Ubiquitous	Equipment is pervasive and conveniently located for individual rather than central use.
	Interconnective	Students and teachers interact by communicating and collaborating in diverse ways.
	Designed for Equitable Use	All students have access to rich, challenging learning. They interact, and they create useful products.

Variable	Engaged Learning Indicator	Indicator Definition
Operability	Interoperable	Capable of exchanging data easily among diverse formats and technologies.
	Open architecture	Allows users to access various vendor's software.
	Transparent	Users are not aware of how the hardware and software operate.

Variable	Engaged Learning Indicator	Indicator Definition
Organization	Distributed	Technology and systems are not centralized, but exist across a number of people, environments, and situations.
	Designed for user conditions	Users can provide input, users can contribute resources on demand.
	Designed for collaborative projects	Technology responds to the user. Teachers are able to diagnose and prescribe new learning.

Variable	Engaged Learning Indicator	Indicator Definition
Engagability	Access to challenging tasks	Technology allows access to tasks, data, and learning opportunities that stimulate thought and inquiry.
	Enables learning by doing	Technology offers access to stimulating, goal-based learning and real-world problems.
	Provides guided participation	Technology responds to the learner, and teacher is able to prescribe new learning.

Variable	Engaged Learning Indicator	Indicator Definition
Ease of Use	Effective helps	Technology provides help that are more than glossaries. The software gives demonstrations of procedures and shows how tasks are performed.
	User friendliness/ User control	The technology is free from overly complex procedures. The technology facilitates the user in acquiring data and tools on demand.
	Fast	The technology has fast processing speed. The technology is not down for long periods of time.
	Available training and support	Training is readily available and convenient. Ongoing support is available.
	Provides just enough information, just in time	Technology allows for random access, multiple points of entry, and different levels and types of information.

Variable	Engaged Learning Indicator	Indicator Definition
Functionality	Diverse tools	Technology enables access to the full diversity of generic information and context-specific tools basic to learning in the 21st century.
	Media use	Technology provides the ability to use multimedia techniques.
	Promotes programming and authoring	The technology provides the tools (e.g., coaches, wizards, assistants) that are used to make other tools.
	Supports project design skills	The technology facilitates the development of skills related to project design and implementation.