Chapter 9

Learning Assessment

Assessment is the careful judgment from close observation of learners throughout their learning process. It requires the phases of collecting, analyzing, and reporting data through the whole process of information literacy learning (AASL, 1998). Evaluation differs from assessment in the sense that it usually places value on when the student finishes a task. Assessment is a more comprehensive process, because it gathers information on students´ performance during their whole information literacy learning process, as well as when they finish their task. Another important difference between these two terms is that assessment "…is done with the student, while evaluation is done to the student's work. Assessment should engage students in the inquiry and production to communicate and demonstrate what they know" (AASL, 1998, pp. 67). The following aspects include the main factors to take into account when assessing information literacy learning:

<u>Why assess?</u>

- Improve student growth (formative)
- Improve instruction (formative)
- Recognize accomplishment (summative)
- Modify or improve the program (summative)

<u>Importance of assessment</u>

- Students´ achievement is linked to the assessment techniques (Wiggins, 1998)
- Assessment is critical in determining if student learning is occurring (Jones, A. J. and Gardner, C. as cited in Stripling, 1999)
- Find superior ways to evaluate students´ abilities to use academic skills (Baron, 1995)
- Unlock students´ success through assessment (Baron, 1995)
- Performance-based learning and assessment can be implemented at all grade levels and among all disciplines
- Current testing just audits what students do
- Ability to merge assessment and instruction into a single strategy
- There should be] Can conduct ongoing, continuously measuring of student performance throughout the learning cycle (Jones, A. J. & Gardner, C., as cited in Stripling, 1999)
- Information literacy assessment should be integrated into the rest of the curriculum across all levels and all disciplines

Focus on independent learning

- Assessment should be performance-based, so that students are prepared for life not just for school
- By promoting self-assessment techniques, students learn how to evaluate information to solve problems, make decisions and become independent learners
- Enable students to create a set of assessment strategies and criteria to monitor their work (Donnahan, J. and Stein, B. B., as cited in Stripling, 1999)
- Help students in self-reflection
- Assessment should be deliberately designed to improve and educate student performance
- Authentic assessment means measuring student performance based on tasks that are relevant and used in real life (Baron, 1995)
- Design and use assessment focused on the learner's needs

Focus on higher level thinking

- The new information literacy focus is on information searching, evaluating, and utilizing, rather than on source location and retrieval

Information literacy should emphasize higher level thinking processes (applying, synthesizing, and evaluating information), in addition to lower thinking activities (recalling and comprehending information) (Donnahan, J. and Stein, B. B., as cited in Stripling, 1999)

- Teach information processes, such as decision making and problem solving, rather than just knowledge of information, so that students master the ability to learn
- Make information processes explicit in all the assessment techniques
- Assignments and assessments must link process skills with information presentation (Jones, A. J. and Gardner, C., as cited in Stripling, 1999)

Questions of the IL learning facilitator

- What am I trying to assess?
- What have students learned?
- How do participants feel about their own learning?
- Are students really learning?

Questions for the assessment process (Wiggins, 1998)

- Does the assessment measure what it says it measures?
- Is the scoring criteria clear, objective, and explicitly related to the standards?
- Is the scoring system reliable and does it adequately discriminate degrees of work quality?
- Is the task being assessed a challenging one?
- Does the assessment technique offer an appropriate learning challenge for students?
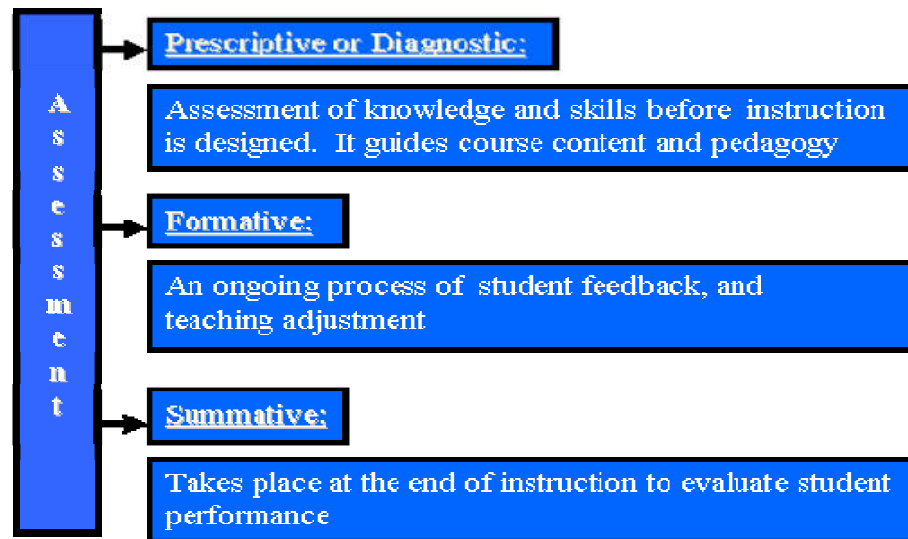- Does the task being assessed reflect real-world challenges, contexts, and constraints?

Example (Stec, E., 2004). "Select the major assessment criteria and break it into smaller components. These units not only clarify your assessment criteria, they should be the basis of curriculum design. Here is an abbreviated example: What have students learned?

- Can the students incorporate appropriate journal articles into their research papers?
- Can the students locate appropriate journal indexes? In print?
- Can they use computers for electronic searching?
- Can students create a useful search strategy?
- Do they know sufficient words for keyword searches?
- Do they understand controlled vocabulary & use it?
- Do the students employ Boolean search strategies effectively?
- Do students select peer reviewed articles for their research?"(p. 3).

Types of Learning Assessment (Stec, E., 2004). The three types of assessment are:

- Prescriptive or diagnostic. It assesses the knowledge and skill of participants before the instruction is designed. These can take the form of standardized or instructor developed tests, auditions or review of a student's prior work.

- Formative. It provides feedback about student learning while the instruction is ongoing and allows the instructor to adjust teaching methods during a course. For example, requiring students to write a one page 'reaction paper' to a reading assignment, or prepare an annotated bibliography of research materials several weeks before the research paper is completed.

- Summative. A final evaluation of the criteria for assessment occurring at the end of instruction, i.e. multiple choice question, essays given under controlled conditions, or an evaluation of citations used in the student's research paper or a portfolio review. The latter two examples require development of an assessment 'rubric'. Assessment of students' feeling about instruction can take the form of questionnaires or focus groups. These techniques do not evaluate learning and are often mistakenly used for that purpose (p. 3).

Figure 11. Assessment

Prescriptive or Diagnostic:

Assessment of knowledge and skills before instruction is designed. It guides course content and pedagogy

Formative:

An ongoing process of student feedback, and teaching adjustment

Summative:

Takes place at the end of instruction to evaluate student performance

Assessment techniques. There are different assessment methods to support students throughout the information literacy learning process. Here are the primary recommended tools:

- Checklists. These are lists to guide students in the accomplishment of their assignments. They include the different stages, levels or items necessary to complete the assignment. Checklists should be visual task reminders to improve student growth. Checklists should be provided at the beginning of the assignment so that they can be used during the whole learning project or task for self-feedback.

- Rubrics. A rubric is a precisely structured assessment that guides students to achieve a successful performance. It normally includes a graded list of the attributes students ought to perform in their learning tasks. The successful and unacceptable range of performance levels should avoid evaluative language, i.e., judgment labels. Terms should be descriptive of the success outcome the student is to obtain (Donnahan, J. & Stein, B. B., as cited in Stripling, 1999). The rubric can be divided according to the process steps with clear indication of each element to be considered to reach the desired goal.

- Conferencing. A technique that is based on a discussion with the learner, among learners, or among the whole class to orally reflect on the information literacy processes. It can be done at the different stages of the information tasks, as well as at

the end of the process. It uses questions posed by the facilitator inquiring about the process of learning.

- Portfolio. It consists of the accumulation of student work over time and integrated into a final package of IL process products. Portfolios are useful assessment techniques because it gives students the possibility of seeing their learning products become integrated into a final product. They show that students learned (content standards) and/or are able to do (performance standards) (Jones, A. J. & Gardner, C., as cited in Stripling, 1999). They are an excellent way to measure the efficiency of attaining the learning goals, and evaluate the effectiveness of learning strategies, and the clarity of knowledge presentation.

- Reports. These are useful essay exercises as long as they are not cut and paste exercises or a repetition of the information in printed or electronic sources with little synthesis or no evaluation of the retrieved information. Merely producing printed reports defeats the purpose of teaching (Jones, A. J. and Gardner, C., as cited in Stripling, 1999).

- Traditional tests.   The list of questions with open or structured answer options is also useful, as long as it does not focus on content of knowledge. Tests can be used when time is limited or when the assessment is specifically focused on a certain aspect of learning.

- Other approaches. An integral evaluation emphasizes the need to triangulate the intended learning outcomes with teaching interventions and assessment into a seamless whole (Bligh, 1998). A similar method is proposed by Biggs, (1999), whose SOLO (Structure of Observed Learning Outcomes) model offers a structure for assessing thinking skills.

Figure 12. Assessment Techniques
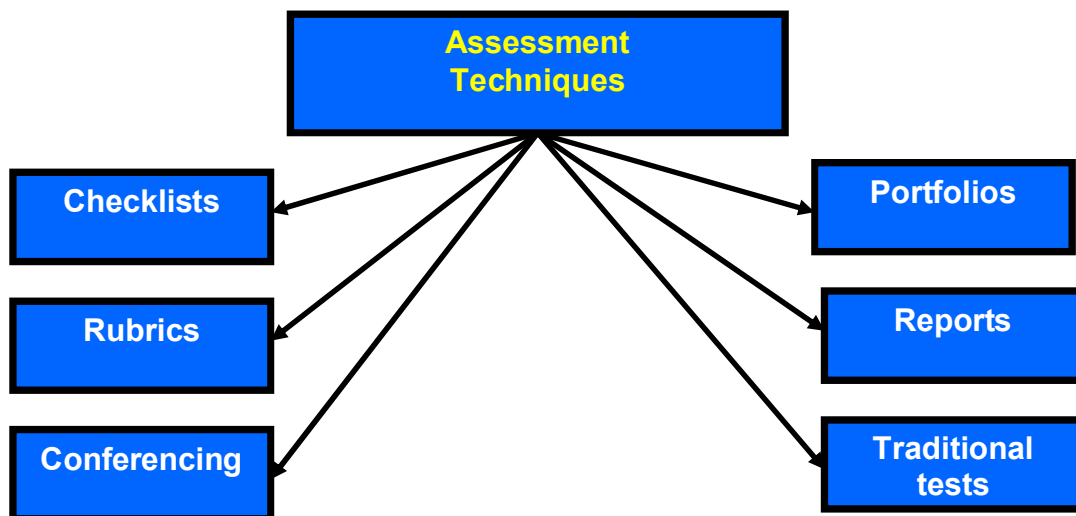
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