



Relationship Between Purpose, Types and Elements of Instruction and Assessment

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ABSTRACT

Instruction and assessment are commonly used terms in teaching and learning processes. The meaning of these critical concepts in education have been studied and documented by various scholars overtime. Curriculum is a continuous reconstruction, moving from the learner's present experience out into that represented by the organized bodies of truth that disciplines. Curriculum is also all the learning experiences planned and directed by the school to attain its education goals ,aims and objectives. All scholars point to the fact that curriculum consists of all that the school or college may select and consciously organize for the purpose of developing the personality of learners and for making behavior change in them. A curriculum purpose is achieved through instruction. Instruction is defined as a process of facilitating a learner to acquire knowledge, skills, attitudes and values through organized schedules. The purpose of instruction is evaluated through assessment. Assessment refers to a process by which information is obtained relative to some known objectives or goals. Assessments is a abroad term that includes testing. Assessments measure progress at the end of a programme. Assessment determine the extent to which a programme goal/goals have been achieved. The definitions of these educational terminologies denote a strong relationship instruction and assessment. The purpose of this paper is to analyze the relationship among these concepts with a view of enabling an effective alignment in teaching and learning process. The major relationship between instruction and assessment lie in purpose, types and elements.

Key words: Purpose, Types, Elements, Instruction and Assessment.

PURPOSE OF INSTRUCTION AND ASSESSMENT

There exists great relationship between the purpose of instruction and assessment. In instruction, the main purpose is to facilitate student achievement of intended learning objectives with a focus on learners behavior change whereas in the assessment, the main purpose is to gather information about student progress or to determine student interest about their learning process. In instruction and assessment, the purpose plays complementary role in facilitating the achievement of the intended learning outcomes. Chaminda(2008) points out that it is important to formulate the learning outcomes and then measure the extent to which these outcomes or goals have are being attained.

RELATINSHIP BETWEEN TYPES OF INSTRUCTION AND ASSESSEMENT

One major relationship between types of instruction and types of assessment is the complimentary role they play in achievement of learning outcomes. Engelmann and Camine (1982) outlines various types of instruction and the role each one of them plays in the achievement of learning out comes. On the other hand Herlen (2006) discusses two main types

of assessments and the role they play in the achievement of learning outcomes. The types of instruction are many as compared to the types of assessments. However both are complementary in the teaching and learning process,

TYPES OF INSTRUCTION

(i) Direct instruction

The Direct **instruction** strategy is highly teacher-directed and is among the most commonly used. Directed instruction follows a definite structure with specific steps to guide pupils towards achieving clearly defined learning outcomes, Gronlund (2004). The teacher maintains the locus of control over the instructional process and monitors pupils' learning throughout the process. Benefits of direct instruction include delivering large amounts of information in a timely manner. Also, because this model is teacher directed, it lends itself to designing instruction that is developmentally appropriate to pupils' ages and stages.

Principles of Direct Instruction

The most commonly used principles include:

(1) Introduction/Review

The first step in DI is for the teacher to gain the pupils' attention. Sometimes this step is referred to a 'focusing event' and is meant to set the stage for learning to take place. At this stage, the pupils are 'informed' as to what the learning goal or outcome is for the lesson and why it is important or relevant. This step can either take the form of introducing new information or building upon what has been previously learned or covered as a review

(2) Development

Once the goal is communicated to pupils, the teacher models the behavior (knowledge or skill) that pupils are ultimately expected to demonstrate. This step includes clear explanations of any information with as many examples as needed to assure pupils' understanding (depending on pupils' learning needs) of what is to be learned. During this step, the teacher also "checks for understanding" by asking key questions relative to what is to be learned or by eliciting questions from pupils. At this stage, teachers can also use 'prompts' (visual aids, multimedia presentations, etc.) to encourage pupils to process information successfully.

(3) Guided practice

Once the teacher is confident that enough appropriate examples and explanation of the material to be learned has been modeled with sufficient positive pupil response to the instruction, activities or tasks can be assigned for pupils to practice the expected learning with close teacher monitoring. It is at this stage that teachers can offer assistance to pupils who have not yet mastered the material and who may need more 'direct instruction' from the teacher.

(4) Closure

As a final step to this model, closure brings the whole lesson to a 'conclusion' and allows the teacher to recap what was covered in the lesson. It is meant to remind pupils about what the goal for instruction was and for preparing them to complete the independent practice activities that are then assigned by the teacher.

(5)Independent Practice

Activities or tasks related to the defined learning outcomes are assigned in this step usually after pupils have demonstrated competency or proficiency in the 3rd step. Independent practice is meant to eliminate any prompts from the teacher and is meant to determine the degree of mastery that pupils have achieved. (Homework can be classified as an independent practice because it is meant to provide the opportunity for pupils to practice without the assistance or help from the classroom teacher.

(6)Evaluation

Evaluation tools are used to assess pupils' progress either as it is occurring (worksheets, classroom assignments, etc.) or as a culminating event (tests, projects, etc.) to any given lesson. Evaluation of pupils' learning provides the necessary feedback to both the teacher and the pupil and can be used to determine whether expected learning outcomes have In indirect instruction, the learner acquires information by transforming stimulus material into a response that requires the learner to rearrange and elaborate on the stimulus material.

(ii) Indirect instruction

Indirect instruction is student-centered. It is best used when the process of arriving at a conclusion or a product is as important as a conclusion or a product itself. Types of indirect instruction include problem solving , case studies ,inquiry based learning, reflective discussions and concept attainment.

(iii)Interactive instruction

Interactive instruction is student-centered and requires students to interact with one another to acquire new understanding of a concept.Brainstorming,tutoring, and interviewing are examples of interactive activities.

(iv) Independent instruction

Independent instruction is student-centered. It is used in building decision making abilities. In independent study instruction, the student teachers herself/himself under the supervision of a teacher. Distance education is prime example of independent study because the learner has very little interaction with the teacher. Some of independent study activities include: Research papers, essay wring, assignment presentations etc.

(v).Experimental instruction:

Experimental instruction is also student centered. In the experimental instruction the importance lies in the process of arriving at a conclusion or product and not the conclusion or a product itself. Students are more likely to retain the information because they are actively engaged and participate in the learning experience. In the experiment, instruction students often teach one another.

TYPES OF ASSESSMENTS

There are two types of assessments commonly used in teaching and learning; Formative and Summative Herlen. (2006). Formative assessment are in-process evaluations of student learning that are typically administered in multiple times during a unit ,course or academic program.

Formative assessments

The general purpose of formative assessment is to give educators in-process feedback about what students are learning or not learning so that instructional approaches, teaching materials and academic support can be modified accordingly. Formative assessments are usually not scored or graded, and they may take a variety of forms, from more formal quizzes and assignments to informal questioning techniques and in-class discussions with students. Formative assessments are commonly said to be for learning because educators use the results to modify and improve teaching techniques during an instructional period, while summative assignments determine end results. Harlen(2006). The formative assessment evaluates the extent to which instructional learning outcomes have been achieved during the learning of process.

Summative assessments

Summative assessments on the other hand are used to evaluate students learning at the conclusion of a specific instructional period –typically at the end of a unit, course ,semester,program,school-year. Summative assessment are typically scored and graded tests ,assignments or projects that are used to determine whether students have learned what they were expected to learn through defined instructions period. Chaminda(2008)

Authentic assessment is aligned with curriculum. It assesses what is taught and what is valued. Deciding the important outcomes is always not easy but it is a critical first step in creating authentic assessments.

When assessment is aligned with instruction, both students and teachers benefit. Students are more likely to learn because instruction is focused and because they are assessed on what they are taught. Teachers are also able to focus, making the best use of their time. Assessment involves real learning, teachers can integrate assessment into daily instruction and classroom activity. Assessment can be in class questions, quizzes, tests, written assignments, research papers ,presentations Benson(2003).

ELEMENTS INSTRUCTION AND ASSESSMENT

Elements of instruction

Instruction is purposeful interaction to increase a learner's knowledge or skills in a specific, pre-determined fashion, Chaminda(2008). The following elements are adapted from Gagné's **nine universal steps of instruction** and should be included in the instructional design of teaching and learning.

(i) Motivate the Learner

The use of graphics, color, animation, and sound are often used as external stimuli to gain attention and motivate learners. :

(ii) Explain what is to be Learned

In an online course it is essential to let the learners know exactly what they will be responsible for at the end of the instruction. This helps them focus on relevant information and take responsibility for their learning. The hypertext environment of the Web allows students to make individual associations with learning materials while browsing, and each learner chooses to follow a different set of links in a different order and thus make their own associations and

connections with the learning material. This is positive in that learners explore materials according to their own thought patterns which enhances retention. However, as instructional designers, we cannot allow our students' attention (and learning) to be drawn away from our desired outcomes, thus it is important to clearly state the objectives of each course module as well as what the learner is expected to do.

(iii) Recall Previous Knowledge

With Web pages it is easy create links from your site to others. Multiple links allow learners with diverse backgrounds and knowledge bases to review previously learned information before new information is offered. By identifying similarities and differences between existing knowledge and the knowledge to-be-learned, students more quickly grasp relevant information.

(iv) Present the material to be learned

Text, Graphics, simulations, figures, pictures, sound, etc. can all be used in online course delivery to present the learning material. Online instructors should use a variety of teaching strategies in order to accommodate different learning styles. This Web offers a dynamic environment where multiple presentation strategies are possible.

(v) Provide guidance for learning

Providing guidance for learning helps students integrate new information into an already existing knowledge base. The hypertext environment of the web allows for presentation to be easily structured and for examples to be integrated into the presentation of the instructional materials. With examples, students can relate the new information into a familiar context.

(vi) Active involvement

Most educators would agree that for learning to take place, the learner must actively process and make sense of available information. An active learner will integrate new knowledge more readily than a passive learner. In order to encourage active involvement with the learning material, an instructor must provide opportunities for performance or practice. The discussion element of an online course can provide an excellent opportunity for students to become actively involved in their learning by discussing issues and concepts relevant to the learning material. Group work and projects provide more opportunities for learners to become actively involved with the course material.

(vii) Provide feedback

The online environment provides many opportunities for meaningful feedback for students. In discussion forums, instructors can give feedback to students either individually or in groups. Students can also view each others' work online and offer feedback to their peers. Online quizzes can give students immediate feedback and links to related materials for further study.

(viii) Testing

Assessment of student learning is essential to know whether learning has occurred and if remediation is necessary. Online quizzes can be used to assess student learning, but they should not be the only method by which students are evaluated. Because of the possibility of immediate feedback, online quizzes are sometimes integrated into course design to offer students opportunities for self-assessment and review. Other means of assessment are projects, written

assignments, case studies, and essay questions. Some instructors require students to take proctored exams either on campus or at other locations.

(ix) Providing enrichment or remediation

The final step in instruction should provide learners with either remediation (in areas where comprehension is lacking), or enrichment (featuring associated information which extends or applies their knowledge). In an online environment, this can be provided through links to additional resources. In this way, learners can receive relevant, specific information to match the

ELEMENTS OF ASSESSMENTS

There are two main types of assessment in teaching and learning. Each has unique elements as discussed here below

ELEMENTS OF FORMATIVE ASSESSMENT

Brookhart(2000) identifying 10 elements of formative assessment which are critical in the achievement of learning outcomes.

1. Requires students to take responsibility for their own learning.
2. Communicates clear, specific learning goals.
3. Focuses on goals that represent valuable educational outcomes with applicability beyond the learning context.
4. Identifies the student's current knowledge/skills and the necessary steps for reaching the desired goals.
5. Requires development of plans for attaining the desired goals.
6. Encourages students to self-monitor progress toward the learning goals.
7. Provides examples of learning goals including, when relevant, the specific grading criteria or rubrics that will be used to evaluate the student's work.
8. Provides frequent assessment, including peer and student self-assessment and assessment embedded within learning activities.
9. Includes feedback that is non-evaluative, specific, timely, and related to the learning goals, and that provides opportunities for the student to revise and improve work products and deepen understandings.
10. Promotes metacognition and reflection by students on their work.

ELEMENTS OF SUMMATIVE ASSESSMENT

1. Evaluate learning/understanding at the end of a checkpoint.
2. Used for accountability of schools, students, and teachers.
3. Usually higher stakes than other assessment forms.
4. Preparation and review is helpful for best performance.

CONCLUSION

Assessments should reveal how well students have learned what we want them to learn while instruction ensures that they learn it. For this to occur, assessments, learning objectives, and instructional strategies need to be closely aligned so that they reinforce one another.

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