ASSIGNMENT 502 THEORIES, PRINCIPLES AND MODELS IN EDUCATION AND TRAINING.

Task C Research activity

PMelville
# Table of Contents

Introduction .......................................................................................................................... 2

The function of an assessment ............................................................................................... 2

Who benefits from an assessment? ....................................................................................... 2

Models of assessment ........................................................................................................... 3

   Competency model ............................................................................................................ 3

   Non-competency model .................................................................................................. 4

Linking learning theory and assessment ............................................................................. 4

Black and William ................................................................................................................ 5

Types of assessments ........................................................................................................... 5

   Initial Assessment ........................................................................................................... 5

   Diagnostic Assessment .................................................................................................. 6

   Group Profile ................................................................................................................ 6

Feedback or a formative assessment .................................................................................... 6

Medals and missions ............................................................................................................ 6

Mock exam .......................................................................................................................... 6

Summative assessment ...................................................................................................... 7

Assessment FOR Learning .................................................................................................. 7

Assessment AS Learning .................................................................................................... 7

Assessment OF Learning ................................................................................................... 7

Assessment strategies .......................................................................................................... 7

Key concepts ....................................................................................................................... 8

   Reliability ...................................................................................................................... 8

   Validity .......................................................................................................................... 8

   Fairness ........................................................................................................................ 8

   Authenticity ................................................................................................................... 8

   Affective and Psychomotor Taxonomy ........................................................................... 8

Applying theories, principles and models of assessment to practise ................................... 8

Conclusion .......................................................................................................................... 9

Bibliography ....................................................................................................................... 10

References ........................................................................................................................... 10
Assignment 502 Theories, principles and models in education and training.

Task C Research activity

In order to broaden your knowledge of assessment, research, then analyse theories, principles and models of assessment and explain ways in which they can be applied when assessing learning.

Consider how you wish to evidence this activity; it may be appropriate to use a report, presentation, essay, table or multi model.

Introduction

This research project will analyse the theories, principles and models of assessment. The models analysed include

It will then go on to analyse the fundamental principles of assessment and explain ways in which they can be applied when assessing learning.

The function of an assessment

As Wilson noted, the function of an assessment is to help the teacher ‘to know when a concept is understood and therefore means you can move on to the next topic, or if you need to re-teach a topic’ (Wilson, 2009) page 112. Wilson also noted that assessment is an integral component of teaching and lesson plans.’ (Wilson, 2009) p 120.

Who benefits from an assessment?

The figure below illustrates the learning journey. The stakeholders who benefit from an assessment are:

- The learners
- the tutor
- the course team
- employers
- higher education
- college management
Models of assessment

Competency model

Competency can be described as knowledge, skills and abilities which are used in a certain profession. Competence is shown by being able to demonstrate the required skills. Competency model of assessment is based on competencies and is generally used to distinguish top performers from average performers. Learners have to achieve a certain level of functional skills in order to carry out their job. Assessing people using their knowledge and skills in an on the job situation is the key to competency assessment. Competency model of assessment can be described as a self-driven process in which learning occurs on the job. The learning builds on existing knowledge and prior learning. New skills are directly relevant to the learners in their future roles. Learning also takes place at the learner’s own pace.
Non-competency model

Competency and noncompetency model can be compared to being ‘street smart’ and ‘book smart’. Whilst competency model of assessment can be useful, noncompetency model is required.

Linking learning theory and assessment

Learning requires the active participation of the learners. Learners learn at different rates. Learning is both an individual and collaborative process. Learning is most effective when students reflect on the process of learning and set goals for improvement. Kolb’s Cycle of Experiential Learning is illustrated below.

Kolb’s Cycle of Experiential Learning

Two major theories of the way students learn are:

- Neil Fleming’s VAK (visual/auditory/kinaesthetic) model
- Howard Gardiner’s theory of Multiple Intelligences
Black and William

Professors Paul Black and Dylan Wiliam of Kings College London spent four years studying and reviewing research into feedback which is closely linked to ‘formative assessment’. According to Black and William, the most significant learning outcomes occur when teachers and learners work address learning needs collaboratively. Assessment should be used for the purpose of development feedback where learners understand what is required of them in order to improve their performance. This will also enable learners to take ownership of their own learning. (Black, 1998)

Further summary of Black and Wiliam’s research can be found under the heading ‘medals and missions’.

Types of assessments

Assessment is defined as: ‘checking that learning has occurred.’ (Wilson, 2009)p 112.

Initial Assessment

This identifies a learner’s starting points. Initial assessment will determine the learner’s level. This allows the selection of the right learning programme. This is one of the
tools used to decide whether a learner’s English and maths skills are appropriate for the level of course they wish to study. This snapshot also helps in deciding which diagnostic assessment level is appropriate.

Diagnostic Assessment
This enables a detailed personal profile to be built which provides the basis for an individual learning plan. Together with other assessment tasks, this allows the English / Maths lecturer to make a decision about the level of FS the learner should enter.

Group Profile
In some cases a tutor can use BKSB group profile. BKSB provides a group profile to help SMART differentiated teaching.

Feedback or a formative assessment
Providing opportunities for individual meaningful feedback is one of the most effective ways of improving learner achievement and motivation. Formative assessment is an estimate of achievement used to help in the learning process e.g. coursework tutorials or action plans. Formative assessments allow the teacher to monitor the learner’s progress, set challenging tasks, and build on or extend learning for all learners. A learner also needs to understand how to improve as a result of frequent, detailed and accurate feedback from teachers.

Another form of feedback is medals and missions.

Medals and missions
Professor John Hattie found that Feedback has more effect on achievement than any other factor. Geoff Petty in (htt3). Geoff Petty summarised medals and missions in his book Teaching Today. Petty summarised medals as information about what a student has done well. Missions are described as information about what the student needs to improve. Missions are also a required component for Ofsted inspections. Allowing learners to self-assess using assessment grids is an excellent way of implementing the medals and missions technique. The author uses this in her practice. This method can also be described as ‘developmental feedback’.

Mock exam
Functional skills learners must show evidence of having successfully achieved a pass mark in the appropriate mock exam before being entered for an actual exam.
**Summative assessment**
Summative assessment is used to sum up learners’ achievement at the end of the learning program. Summative assessments tend to be set by external awarding bodies. They may be however moderated internally.

One of the methods of assuring the above principles is standardisation. Wilson describes standardisation as a process which is aimed at ensuring all assessment decisions are equal. (Wilson, 2009) p120. Another method is verification or moderation. This is the Quality assurance process which aims to ensure that all assessments meet validity (relevant to what is being assessed), reliability (consistently marked) and sufficiency (covers everything) requirements. (Wilson 2009).

Assessments can also be grouped into three categories.

**Assessment FOR Learning**
Assessment for learning is formative assessment and informs learners and the teacher.

**Assessment AS Learning**
This assessment assesses the learners’ metacognition. This type of assessment can be associated with linking learning theory and assessment. Similarly to Kolb, John Dewey also noted that learners learn more from reflecting on their experiences than from the actual experiences. (Dewey, 1933). (Dewey, 1933)

**Assessment OF Learning**
This assessment refers to summative or final assessment.

**Assessment strategies**
Assessment strategies may include:

- question-and-answer teacher
- peer assessment
- written tests or exercises
- practical tasks
- questionnaires
- presentations
- demonstrations
- case studies
- individual, pair of group work
- role-play

Key concepts

Reliability
The reliability of an assessment refers to the extent to which it consistently measures what it is supposed to measure. The test is reliable if different assessors would award the same mark and the same mark would be given on different occasions. A reliable assessment also clearly discriminates between those learners who know the answers and those who do not.

Validity
Validity refers to whether the assessment measured what the teacher set out to measure. Valid assessments are linked to learning objectives.

Fairness
Fairness answers the following questions: Do the conditions under which the assessment takes place provide the learners with the opportunity to do their best? Has the teacher taken into account specific needs of the learners? (E.g. large print)

Authenticity
Assessment also needs to be sufficient and authentic. It must contain clearly expressed instructions to follow and cover a sensible amount of material.

Affective and Psychomotor Taxonomy
Other domains, apart from cognitive, commonly used as a reference in teaching are the Affective Taxonomy and the Psychomotor Taxonomy. The affective domain includes a focus on learners’ attitudes, values and dispositions. These outcomes are a little more difficult to measure; however, it is possible, and many disciplines are including these in their national standards.

Applying theories, principles and models of assessment to practise
The most important practise that a teacher should adopt following the analyses of assessment models is differentiation of assessment.
The assessment must cater to multiple learning styles and intelligences. A teacher must also give differentiated feedback. Differentiated assessment identifies learner’s needs and strengths. Differentiated instruction and assessment go hand in hand. One way of differentiating assessment can be differentiating by task. Learners may also be given more time to complete the assessment if they have been assessed as requiring additional learning support. The teacher may also adopt variable pacing, i.e. expanding assignments over longer periods. Some of the tasks that a teacher can set to differentiate assessment could include a verbal exam if the learner is dyslexic and finds writing the answers challenging.

The author also implements the research of Black and William by applying their theory to when assessing learners. The author endeavours to make the goals very clear when setting the task, followed by some concrete examples. Learners are first asked for self and peer assessment. They may be given an assessment grid to check against the assessment criteria. The author endeavours to create a collaborative environment as opposed to compare the learners to each other. The best practise is to let the learners compete against the task or with themselves, not against each other. The author also gives constructive feedback and gives all learners medals and missions. The work is then checked again, following the learners making the corrections.

Conclusion
This research project analysed various models of assessment and principles of assessment. It is imperative that a teacher does not discriminate against any learners with protected characteristic. This will result in effective differentiated instruction as well as assessment. Peer assessment and self-assessment is also a way of applying the theory of assessment to practice. Peer assessment encourages involvement as increases motivation of students. Self-assessment, on the other hand, encourages deep learning through understanding the set assessment criteria.
Bibliography

References

