

Assessment Practices in Constructivist Paradigm at the Higher Secondary level in Kerala

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Abstract

The purpose of the study is to bring out innovative practices in assessment at the Higher Secondary Level. This study is aimed at developing the principles of assessment that suits the needs of the students of higher secondary classes and identifying the learning-teaching processes, the method of assessment (both formative and summative) and the procedure for recording the assessment results from the point of view of a specific context. A survey method was conducted by using the tools such as questionnaire, interview schedule and Focus Group Discussion points. The population consists of teachers, students and principals of higher secondary schools of Kerala. The sample consists of 50 teachers of commerce, 500 students of commerce and 10 principals of higher secondary schools. Observations regarding the study are that the commerce teachers themselves experimented in real classrooms on selected themes in business studies subject in selected schools. The relationship of learning outcomes, assessment task and assessment criteria were clearly established. The findings of the study proved that the principles of assessment developed to suit the needs of higher secondary students in Kerala context is very appropriate and the methods of assessment and its recording are effective and practicable at the higher secondary level according to critical pedagogy and constructivist approach.

Introduction

The aim of education has to be in tune with the needs of the society. In the 21st century society needs creative

people who take part actively in the production process.

Education at the higher secondary level is very important as it is the

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terminal stage of school education. Education at this stage is diversified so as to form a foundation for those who opt for higher studies and those who opt for employment. The quality of education depends largely upon the quality of instruction provided in the classrooms. Learning should relate to realities and should facilitate application of knowledge in a given context when situation demands. So there should be a shift from 'content' to 'processes' of learning. This calls for a drastic shift from teacher-centred approach to learner-centred approach.

Need and significance of the study

Kerala has initiated curriculum reform at school level based on constructivist paradigm during 1997. The activity based, process oriented and learner-centred approach to learning has been followed in Kerala. But at the higher secondary level the curriculum has not been changed according to this approach. Only pedagogy has been changed emphasising on the constructivist approach. As part of introducing grading in 2005, Continuous and Comprehensive Evaluation was introduced at the higher secondary classes. But only partial effect was attained due to the reason that the curriculum has not been changed according to this approach. As part of CCE, continuous evaluation (CE) and term end evaluation (TE) are carried out and CE is added with TE for calculating the grade of the individual subjects. Still the strategies and evaluation carried out in higher secondary classes has to be improved a lot to attain

perfection. NCF 2005 proposed a shift in the approach to learning focusing on constructivist approach which believes that a child should construct his/her own knowledge. Based on NCF 2005, Kerala Curriculum Framework 2007 was formulated emphasising critical pedagogy and constructivist approach to learning in a more scientific manner. According to this approach, curriculum and assessment are organised around the idea that a person in the habit of looking for answers to the following five questions, when presented with a novel situation will use his/her mind well (Apple and Beane, 1995).

1. How do you know what you know? (Evidence)
2. From whose point of view is this being presented? (Perspective)
3. How is this event or work connected to others? (Connection)
4. What if things were different? (Supposition)
5. Why is this important? (Relevance)

Learning according to this approach should relate to the child's experiences of life which are directly linked to the problem faced by the society. The classrooms should provide spaces for authentic dialogues among students and between teacher and students. Learning demands development of higher order thinking skills and life skills.

Assessment has to play a significant role in driving students' learning appropriately (Knight, 1995). Learning is a continuous process and evaluation should be an integral part of this process. Assessment through diverse experience ensures an all round development of students and help the teacher to make

a comprehensive assessment of the various skills of the students.

The purposes of assessment are:

1. to assist student learning by providing appropriate feedback on performance
2. to measure students' achievement objectively against the learning outcomes of the units
3. to provide a reliable and consistent basis for the recommendation of an appropriate grade
4. to assist teachers in evaluating the effectiveness of their teaching

The curriculum revision according to KCF 2007 has reached Class X in 2010. Kerala has initiated curriculum reforms this year at higher secondary level according to NCF 2005 and KCF 2007. At this point of time, a study was conducted in selected schools to trace out the practicability of adopting this approach to learning, various learning strategies and assessment in commerce classes to the fullest spirit.

Objectives of the study

1. To identify the challenges of assessment at the higher secondary level
2. To develop the principles of assessment that suits the needs of the students of higher secondary classes.
3. To list out the learning-teaching processes, the method of assessment (both formative and summative) and the procedure for recording the assessment results from the point of view of a specific context
4. To trace out the difficulties faced while implementing CCE in real classrooms.

Methodology

Survey method was conducted by using the tools such as questionnaire, interview schedule and Focus Group Discussion points. The sample consists of 50 teachers of commerce, 500 higher secondary students of commerce and 10 principals of higher secondary schools.

Tools and techniques used for the study

1. Questionnaire
2. Interview with the principal
3. Focus Group Discussion with higher secondary teachers
4. Focus Group Discussion with parents and students of selected schools

Observations

1. During vacation training given to teachers, the concept of critical pedagogy and constructivist approach were dealt with in various sessions. An exercise on the organisation of curriculum of commerce subjects through an analysis of social issues existing in students' locality and the pedagogic issues from the students' real life experiences and identification of slots where this approach can be used in full spirit were done.
2. The commerce teachers themselves experimented in real classrooms on selected themes in business studies subject in selected schools
3. The relationship of learning outcomes, assessment task and assessment criteria were clearly established
4. Spontaneous learning took place among students according to this approach

Conclusions based on objectives

1. Challenges of Assessment at the Higher Secondary Level

1. The demand of the 21st century is that the people should be innovative, creative, critical in thinking and should have problem solving skills
2. Knowledge, skills and attitude are essential for a career, so it has to be looked into the provision of opportunity to the learners to enhance them and to the assessment as to whether these components are assessed
3. Development of multiple skills is the need of the hour and so the curriculum should provide space for the development of the generic part of the subject and the customised part to suit specific contexts. Assessment regarding these aspects by the concerned experts has to be done
4. It is essential to assess all the domains of the taxonomy such as cognitive, psychomotor and affective domains
5. A scientific system of grading is demanded in this century, which removes the minute discriminations among the learners and this helps to make assessment on criterion basis and to offer chances to the learners to their optimum development
6. Construction of knowledge through collaborative learning, co-operative learning, inquiry based learning and community based learning is expected from learners' part. So the challenge of assessment from

'product based' to 'both product and process based' assessment is there

7. Assessment made by the teacher alone is to be replaced with the assessment by peers, students themselves and the teachers together
8. Before giving the assessment task, the assessment tools and the assessment criteria have to be discussed and finalised with the learners so that a clear transparent assessment can be done and this is the demand of this century

II. Principles of Assessment

It is recognised that high quality assessment practices are the important elements of the student experiences and that the outcomes of assessment influences students' lives. Here lies the responsibility for ensuring the quality and reliability of assessment very seriously. The following are the principles followed for making an assessment at higher secondary classes.

1. *Assessment should be reliable*
Reliability refers to the need for assessment to be accurate and repeatable. This requires clear and consistent processes for the grading and recording.
2. *Assessment should be valid*
Validity ensures that assessment tasks and associated criteria should effectively measure student attainment of the intended learning outcomes.
3. *Information about assessment should be explicit and accessible*

Clear, accurate, consistent and timely information on assessment tasks and procedures should be made available to students

4. *Assessment should be inclusive and equitable*

Inclusive and equitable assessment ensures that tasks and procedures do not disadvantage any group or individual

5. *Assessment should address the aims and outcomes of the subject/ discipline based on its nature*

Assessment tasks primarily reflect the nature of the discipline or subject and also ensure that students have the opportunity to develop a range of generic skills and capabilities

6. *The amount of assessed work required should be manageable*

The scheduling of activities and the amount of assessed work required provide a reliable and valid profile of achievement without overloading teachers or students

7. *Formative and summative assessment should be included in each term*

Formative and summative assessment should be incorporated in each term to ensure that the purposes of assessment are adequately assessed.

8. *Feedback should be an integral part of the assessment process*

Students are entitled to feedback on all formative and summative assessment tasks. The nature, extent and timing of feedback for

each assessment task should be clear to students in advance

9. *A variety of assessment types should be included in a subject*

Variety in assessment promotes effective learning and allows a range of intended learning outcomes to be appropriately assessed. Varied assessment tasks support a range of approaches to learning.

III. Learning-teaching processes, method of assessment and the recording of assessment results on the basis of a specified unit 'Marketing Management' in Business Studies subject

(a) Learning-teaching processes: the learning-teaching processes of this unit is organised around the social issue 'Consumerism' and the themes 'markets, its influence on marketers, consumers, manufacturers and the society. The strategies used for classroom transaction include:

1. Case studies
2. Community projects
3. Seminars
4. Debates
5. Conduct of social intervention programmes
6. Development of posters
7. Development of models
8. Conduct of exhibitions
9. Surveys
10. Market research
11. Assignments

(b) Method of Assessment and its Recording

1. The teacher prepared a comprehensive plan of teaching the

unit, which contains the learning outcomes in terms of concepts and process skills especially higher order thinking skills, and the slot for life skills. It also has a space for writing feedback and assessment of the learners. The teacher will write this column after each sub-unit is taught. Corresponding to this, the teacher keeps a diary in which one page is provided for each student and writes the progress of learning of the students. The teacher can do it properly because one teacher has to teach only in one or two classes having strength of 40-50 students.

2. The formative assessment consists of performance assessment and the portfolio assessment. The reflections of the students in the learning teaching process, the involvement of students in the group work, peer assessment, self assessment, and teacher assessment were considered for performance assessment and feedback will be given for students' progress of learning. The teacher notes down the feedback in his/her diary. It is done on the basis of the rubrics developed in consultation with the students, scoring guides and the test items used for classroom transaction. This is practicable as it is thoroughly understood by the teacher and the students. The portfolio assessment includes the assessment of the student's portfolio. A portfolio is a collection of products, a student developed as part of learning. Freedom is given to the learners to

select best two works in each term to be kept in the portfolio. Along that, teacher's reflections and student's reflections were also being kept. While going through the portfolio, the teacher asks some questions based on the work. At the end of each term, by considering the performance assessment and the portfolio assessment, the teacher assigns the score of formative assessment and records in the report. The recording of scores and grades of learners need to be done by the teachers only at the end of each term

3. The summative assessment is done by conducting a term end written test which measure higher order thinking skills. The test is designed keeping in view the weightage of content, objectives and the type of questions and a blueprint. This is constructed in accordance with Revised Bloom's Taxonomy developed by Anderson and Krathwohl (2001) which suits the constructivist paradigm. The score of the summative assessment is also recorded in the report.

Example of a question, testing the cognitive process skills such as 'analyse, evaluate and create' to be included in achievement test in the constructivist paradigm is given below:

- Q1. Ravi, along with his friends decided to manufacture a new brand of soft drinks. A good design of packaging is needed for promoting the product in the competitive market. In your views, design a package for the

- drink by considering the following aspects.
1. Protection and safety of the product
 2. Information aspect
 3. Promotion aspect
 4. Customer convenience aspect
 5. Environmental aspect
 6. Societal aspect
4. The ratio of summative assessment and formative assessment for the subject Business Studies is 80:20. For giving grade in the nine point scale for each subject both assessment scores are added and grades were given accordingly.
 5. Separate assessment tasks were not given for assessing life skills. The slot for the development of life skills is integrated with the scholastic part. But it is graded separately by following direct grading system. It gets cumulated for the whole period of higher secondary course.
 6. The effectiveness of CCE can be ensured by establishing the relationship between learning outcomes, assessment tasks and the assessment criteria.

IV. Difficulties faced while implementing CCE in real classrooms

1. The school system having fixed periods of one hour
2. Absentees on account of doing other jobs in case of students coming from poor social background
3. Negative attitude of teachers.
4. Inability of the teachers to act as co-learner, researcher, social integrator and facilitator
5. Absence of healthy rapport among the authorities, teachers and the students of the school
6. Lack of textbooks integrating content with pedagogy for all subjects
7. Non-utilisation of library and ICT facility available in schools

REFERENCES

- APPLE, W. MICHAEL, AND A. BEANE, JAMES. 1995. *Democratic Schools*. Association for Supervision and Curriculum development, Alexandria.
- AIRASIAN, PETER. 1994. *Classroom Assessment*. 2nd ed. Mcgraw-Hill, New York.
- ANDERSON, L.W., AND D.R. KRATHWOHL, ET AL. 2001. *A Taxonomy for Learning, Teaching and Assessing, A revision of bloom's Taxonomy of Educational Objectives*. David Mc Kay Company, New York.
- BROOKHART, S.M. 2007. *Expanding views about formative Assessment: A review of the literature* In: Mc Millan H.(Ed.), *Formative assessment classroom: Theory into practice*,43-62, New York: NY: Teachers College Press.
- KNIGHT, P. 1995. *Assessment for learning in higher education*. Kogan page: London.
- JOHNSON, D.W., AND R.T. JOHNSON. 2002. *Meaningful Assessment. A Manageable and Co-operative process*. Boston: Allyn and Bacon.