Online Assessment of Students An experience of CIET Online course on Action Research in Educational Technology

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Abstract

The adoption of on-line assessment may help to manage large volumes of marking and assessment-related administration efficiently. The automation of routine online tasks may have the potential in the long-term to provide time and cost-efficient student assessment. The present evidence of Action Research course conducted at CIET advocate that on-line assessment can help significantly to the teachers.

Introduction

The purpose of this paper is to describe the process of assessment of students during online courses in Education. The Central Institute of Educational Technology (CIET), a constituent of NCERT has started an online course on Action Research in Educational Technology. The first course of the institute was launched in November 2010 and the second course was completed by 2012. The author of this paper was involved in the development of the course structure, self learning

material (modules) and also played the role of course teacher and administrator.

Presently, with the emphasis on Continuous and Comprehensive Evaluation (CCE), the assessment tasks have become diversified. The teachers need a range of skills of assessment and therefore, feel burdened to provide timely and informative feedback to the students on their progress.

The computer based online assessment is a natural outcome of the increasing use of information and communication technologies to enhance

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learning. There are growing expectations for flexible student assessment in education. ICT have certainly opened up significant possibilities for transforming the role and practice of assessment in education. The full possibilities are probably yet to be realised. However, online assessment through web based courses has opened the ways to review the students' progress more flexibly.

About the course

As we are aware that Action Research is a significant activity for the District Institute of Education and Training (DIET) and State Council of Educational Research and Training (SCERT). These institutes are also having educational technology as an important cell to perform the teaching learning activities more effectively.

However, working with teacher educators at many DIETs and also sharing experiences of other DIETs through interaction and research reports. It is revealed that they face problems in the implementation of various concepts/devices using educational technology during their training/classroom practices. Therefore, an online course was designed for teacher educators of DIETs and SCERTs of India. The purpose of this course was to provide teachers/ teacher educators with the knowledge and skills to integrate Action Research as a teaching and problem solving methodology.

The two credit course consists of five modules on Action Research and Educational Technology. These modules were (i) Understanding Action Research; (ii) Educational Technology; (iii) Educational Action Research Process: (iv) Data Collection and Interpretation (v) Report Writing. course announcement, application and registration of students are completely an online process. The duration of the course is seven week in which the first week is devoted for introduction among students and teachers. During this week the students also explore the features of online courses. The next five weeks are devoted for five modules one in each week. The content and assignment are available online for each module during their respective weeks. Students are expected to submit assignment(s) within the week. The last week is given for development of Action Research Proposal.

Assessment process

Actually the performances of the participants in this course were assessed through continuous and comprehensive evaluation process. Both the modes of interaction i.e. synchronous and asynchronous were utilised for assessment of the students. The following process was opted to assess the continuous performance of the participants.

Assessing through trial test

This test is not exactly to assess the performance in the content or subject area, but to assess the skills and potentials of trainees in the general operations of computer and internet and giving a practice to get ready for the entry behaviour test.

Assessing entry level behaviour through test

This test was designed in the form of pre-test exclusively as Multiple Choice Responses (MCR) in synchronous mode. There were 25 items related to the Action Research and Educational Technology. Two attempts were permitted and 30 minutes approx, were fixed for one attempt. Therefore, test was available for one hour's duration in synchronous mode.

Written Assignments

These assignments were mostly based on the modules given to the participants every week. These assignments were provided to the students through asynchronous mode. The participants also submitted the task in asynchronous mode. The comments were provided to the students on the submitted assignments as feedback.

Participation in synchronous interaction

The synchronous lectures of experts in the field of Action Research and Educational Technology were arranged for the participants and live interactions were held to assess their competencies in the subject. Two way question and answer session were conducted after content presentation of the experts.

Projects

The participants were requested to prepare the proposals of Action Research in Educational Technology and were asked to take the theme from the actual class room situation. The participants first submitted their topic and after approval they had submitted the proposals. They were also given the feedback by the coordinator. In some cases the revised plan of proposal was requested to submit. The teacher

trainees were expected to carryout this research in their DIETs and SCERTs.

Final assessment

The performance of the trainees was assessed with the help of end test (post test). This was designed as parallel to the entry level test (pre-test). This was also a synchronous test for the trainees. The performance of the trainees was assessed by comparing the entry level test with final test. The trainees' score were calculated through an automation process.

Table 1
Summary of N, df, Mean SD and "t" value

	N	df	Mean	sd	"t" value
Pre test	20		15.4	2.70	
Post test	20	19	20.8	4.86	4.67

^{*}Significant at .01 level

The above table shows that the calculated value of "t" is 4.67 which are highly significant at .01 level. In other words the achievement score of trainees in the post-test is higher than the pre-test. It further signifies that the students learned concepts of Action Research and Educational Technology through online course. In other words we can say that online assessment of trainees shows positive impact on their learning.

Some observations about the course (as coordinator and author of the course)

- It was observed that the teacher educators at the elementary level are enthusiastic to take part in online course initially.
- Teacher educators are reluctant to work with web based environment.

- Most of the trainees were hesitant to synchronous interaction with teachers and experts.
- Some trainees are very prompt in submitting their assignments, however, some do not take interest in the assignments.
- After the test or submission of the assignments the trainees are eager to know about their performance.

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Conclusion

It may be concluded on the basis of the above description that the participants'

assessment was done through online process using CCE. In other words the performance of the participants was assessed based on entry level test, assignments, discussions, interactions, project work and final test etc.

In a climate of increasing academic workloads, the adoption of on-line assessment may help to manage large volumes of marking and assessment-related administration efficiently. The automation of routine online tasks may have the potential in the long-term to provide time and cost-efficient student assessment. The present evidence of Action Research course conducted at CIET advocate that on-line assessment can help significantly to the teachers.

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