REPORT OF PROJECT PILOT STUDY IN SPECIAL EDUCATION ACADEMIC PROGRAMME

I. Introduction

1. Tertiary education after secondary schooling and intermediate transition is a higher realm of education that expects learners to not just to accrue knowledge, acquire skills or absorb values, but enter into a self-stimulated and motivated, progressive process of learning to learn, and appropriating the learning for useful purposes. And e-learning (OECD, 2005; Keller, & Cernerud, 2002) endeavours to use information and communication technology to broaden the scope and advance the range of purpose in higher education. Moodle is a all-inclusive open source learning management system that provides a versatile platform for enrolling, instructing, evaluating learners, as well as in accumulating and analysing data related to the learning process (Costello, 2013; Jordan, 2013). With AIISH, a pioneering and proactive institute in the field of communication disorders adopts several e-learning ventures to enhance the quality and quantity of human resources generated. In this context, it became essential to explore and evolve the probabilities and prospects involved in adopting moodle as means of blended learning in the human resource programmes at AIISH.
2. As a preliminary measure of the ARF project to development a custom-made e-learning platform for use in the human resource development programmes at the institute, a pilot study on trial basis was undertaken. This trial effort focused on two major HRD disciplines at the institute–speech and hearing, and special education, and at two key levels of higher education– under graduate and post-graduate.
3. This report concerns the trial instruction over Moodle platform carried out in the discipline of special education for the hard-core theory course on 'Introduction of Cerebral Palsy, Locomotor and Multiple Disabilities' imparted in the first semester of the B.Ed.Spl.Ed. (HI) programme.

II. Objectives

1. Carry out a trial instruction with Moodle, in order to –
   i. Identify viable means for effective transaction knowledge to students.
   ii. Ascertain objective, ail-safe methods for carrying out evaluation.
   iii. Discern channels for extended learning activities
   iv. Recognise technical hitches and procedural snags in using Moodle for instruction and trouble-shooting possibilities.
   v. Devise a an workable prototype for blended(synchronous and asynchronous) instruction.

III. Participants

1. Participants were selected through purposive sampling to include 13 students of first-year B.Ed.Spl.Ed. (HI) students in the first semester of the programme.
2. All student-participants including 11 females and 2 males were young adults in the age range of 20 to 35 years.
3. All 13 came with a minimum prior qualification of graduation, and six of them graduated in science subjects while seven in humanities.

IV. Tools and Materials

1. Three major means were employed for data collection
   i. Pre and post intervention of performance scores of the students in the form of component one and component two marks of the credit-based system.
   ii. Proforma for collecting student feedback on the Moodle experience of learning, which in turn involved –
      a. A 20-item questionnaire drawing information –
         - About the facilitation of effective instructional transaction and augmentation (5 items), active student-engagement (2 items), efficient evaluation (2 items), extended learning resources (3 items), learning networks (2 items), student convenience (4 items), as well as prerequisites to employ Moodle (2 items).
         - Through items drew binary responses of 'yes' or 'no'.
         - In case of 12 statements related to the positive attributes of Moodle the 'yes' responses were awarded a score of '1' while the 'no' responses were awarded a score of '0'. Whereas in eight other statements dealing with the adverse outcomes of the experience the scoring was vice-versa.
      b. The second part of the questionnaire comprised of three open-ended queries to draw qualitative feedback from the participants – on the merits, demerits and recommendations for further improvements.
2. Instructional materials prepared for blended instruction in the course of investigation included –
   i. The first unit of lesson presented through Moodle was in the form of illustrated web-page content with annexed assessment, hyperlink to further learning resources and ongoing, objective assessment as well as descriptive assignments for embedding the learning.
   ii. The second unit of presentation took form of a slide show, again accompanied with assessment, resource and extended assignments.
   iii. These materials were intended to provide supplementary learning exposure besides conventional classroom teaching.

V. Research Design and Process

1. A simple pre and post-test experimental research design had been adopted for the investigation.

i. A pure or true experimental design with a control group had not been attempted as the experiment involved real time instruction. Because denying the control group of students from a constructive learning experience through Moodle platform may not be ethically reasonable.
ii. Instead a factorial design where the exposed to conventional learning in the first part of the semester in component-one and then with the assistance of Moodle learning management system in the second part of component-two with comparable instructional content and learning tasks.
iii. The effect of the independent variable of Moodle learning experience on the dependent outcomes of learning performance and student disposition were investigated by comparing the learning outcomes in the component-one and two.

2. The pilot study undertook the following course:
   i. Choice of the special educational theory course for experimentation.
   ii. Preparation of learning content.
   iii. Laying out the scheme and schedule and ongoing evaluation of learning outcomes.
   iv. Drafting proforma for recording learning outcomes as well as student feedback.
   v. Implementation two units of the course in the first-half of the semester for eight weeks in the conventional mode without Moodle interface.
   vi. Consequent execution further two units in the second-half of the semester for another eight weeks with the assistance of Moodle interface.
   vii. Compilation and analysis of data to decide influence on teacher-student dispositions and learning outcomes.

VI. Data Analysis and Results

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VII. References:

OECD (2005). *E-learning in tertiary education*. Available at http://www.cumex.org. (Accessed 27 /02/ 2014).

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