

Technology Enabled Student Support System in the Teacher Education Programmes –An Evaluation

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NEED FOR THE STUDY

The founding fathers of distance education have come up with different definitions. Peters (1973) defined distance education as a method of imparting knowledge, skills and attitudes, which are rationalized by the application of division of labour and organizational principles as well as by the extensive use of technical media, specially, for the purpose of reproducing high quality teaching material which makes it possible to, instruct great numbers of students in the same time wherever they live. It is simply an industrialised form of teaching and learning. Dohmen (1977) described distance education as a systematically organized form of self-study in which students' counselling, presentation of learning materials and securing and supervising of students' success are carried out by a team of teachers each of whom has responsibilities. In the opinion of Holmberg (1981), distance education refers to that kind of education which covers the various forms of study at all levels which are not under continuous and immediate supervision of tutors present with their students in lecture rooms on the same premises, but which nevertheless, benefits from the planning, guidance, and tuition of a tutorial organization UNESCO (2000) submitted that distance education is any educational process in which all or most of the teaching is conducted by someone

removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium, either electronic or print. By implication, in distance education the normal or principal means of communication is through technology. The Commonwealth of Learning (COL) (1999), however argued that there is no one definition of open and distance learning. Rather, there are many approaches to defining the term. Most definitions however, pay attention to the following characteristics (COL, 1999; Keegan, 1986):

- Separation of teacher and learner in time or place, or in both time and place;
- Institutional accreditation; that is, learning is accredited or certified by some institution or agency. This type of learning is distinct from learning through your own effort without the official recognition of a learning institution;
- Use of mixed-media courseware, including print, radio, and television broadcasts, video and audio cassettes, computer-based learning, and telecommunications. Courseware tends to be pre-tested and validated before use;
- Two-way communication allows learners and tutors to interact as distinguished from the passive receipt of broadcast signals. Communication can be synchronous or asynchronous;
- Possibility of face-to-face meetings for tutorials, learner–learner interaction, library study, and laboratory or practice sessions; and
- Use of industrialized processes; that is, in large-scale open and distance learning operations, labour is divided and tasks are assigned to various staff who works together in course development teams.

Developing and validating innovative and efficient ICT based Student –Support systems and services in areas of Open and Distance Learning/Education is required for the development of upcoming learners in general and Open and Distance learners in specific. Today, one of the biggest challenges to the successful learning through ICT is the lack of relevant materials in an electronic forms and the lack of using the e-recourses to adopt for their study and e-interactions to make their study effective. In Open and Distance Learning, only the print medium is provided within the restricted counseling classes and other activities within the scheduled time of the course. Due to the age, distance travelled, long gap in attending classroom, different disciplines of their subject, different level of pupils, etc., the open and distance learning B.Ed. student-teachers are in

need of technology enabled student support services in order to ensure the optimum learning experience in open and distance mode. Hence, the study is focused to know the level of perception of ODL student-teachers on Information and Communication Technology Enabled Learning Support System (ICT-ELSS) and their attitude towards the technologies used in distance education or distance learning purpose.

Hence, the investigator took effort to study their level of opinion through the opinionnaire. Questionnaire, Rating Scale and Opinionnaire are not alone enough to reach exact findings of the study. Hence, the investigator has undergone her study with interview guides, site visit and observation and documentary analysis for the qualitative observation and inquiry. Hence, this study made an attempt to give solution in adopting and applying the technologies for their study further effectively and further tending to provide suggestions to improve the process of ODL teacher-education programme by incorporating all the technologies available productively.

OBJECTIVES OF THE STUDY

i. Macro-Level Study

1. To study the level of perception of ODL student-teachers on Information and Communication Technology Enabled Learning Support System (ICT-ELSS) in the selected Universities of Tamilnadu state.
2. To determine whether the ODL student-teachers' level of perception on Information and Communication Technology Enabled Learning Support System (ICT-ELSS) is related to following variables:

i. Personal variables:

- Gender
- Age
- Residential Background

ii. Academic variables:

- Medium Studied
- Types of School Studied
- U.G. Discipline
- Educational Qualification
- Diploma in Teacher Education
- Teaching Experience

iii. Institutional variables:

- Working Locale
 - Types of working School
 - Type of working Institution
3. To offer suggestions and recommendations on the basis of the findings for the improvement in integration of Information and Communication Technology and its Learning Support System in Open and Distance Learning.

RESEARCH QUESTIONS

1. To what extent do the student-teachers of ODL in the selected Universities of Tamilnadu state have perception on Information and Communication Technology Enabled Learning Support System?
2. Is the student-teachers' level of perception on Information and Communication Technology Enabled Learning Support System related to the following variables?
 - i. Personal variables:**
 - Gender
 - Age
 - Residential Background
 - ii. Academic variables**
 - Medium studied
 - Types of School Studied
 - U.G. Discipline
 - Educational Qualification
 - Diploma in teacher Education
 - Teaching Experience
 - iii. Institutional variables**
 - Working Locale
 - Types of working School
3. What measures can be made by the policy makers and educational administrators to improve the level of application of Information and Communication Technology Enabled Learning Support System in Teacher Education Programme in general ODL Teacher-Education Programme in particular in the state of Tamilnadu?

METHODOLOGY

Descriptive Survey method has been adopted for the present study. Descriptive research is used to describe characteristics of a population phenomenon being studied. Survey research is often used to assess thoughts, opinions, and feelings of the population.

TOOLS EMPLOYED FOR THE STUDY

1. Information Communication Technology Enabled Learning Support System (ICT-ELSS) Questionnaire for ODL Student-teachers with Information Schedule
2. Information Communication Technology Enabled Learning Support System (ICT-ELSS) Opinionnaire for ODL Teacher-Educators with Information Schedule
3. Interview Guides
4. Site Visit and Observation
5. Documentary Analysis

SOURCES OF DATA

In this study, primary data were collected from the ODL student-teachers and teacher educators of ODL student-teachers using the questionnaire, rating scale and opinionnaire.

SAMPLE OF THE STUDY

There are 695 ODL Student-Teachers studying in Open and Conventional Universities in the State of Tamilnadu (Bharathidasan University, Tanjore Tamil University, Tamilnadu Open University, Indira Gandhi Open University-Madurai Region Centre, and Madurai Kamaraj University) were taken by using Cluster Sampling Technique and their respective 72 Teacher-Educators who are handling instructional class were taken by using Cluster Sampling Technique.

STATISTICS TECHNIQUES USED FOR THIS STUDY

- i. Descriptive Analysis**
- ii. Inferential Analysis**

- Chi-Square Test

iii. Correlation Analysis

- Pearson's product moment correlation

MAJOR FINDINGS OF THE STUDY

Based on the results drawn from the analysis, the following are the major findings of the study:

- i. Comparing the level of perception of ODL student-teacher (B.Ed.) on Information and Communication Technology Enabled Learning Support System (ICT-ELSS), there is only 10% of them are having high level perception. More than 15% of the selected samples are having low level perception.
- ii. Level of perception of ODL student-teachers on ICT-ELSS is found to be significantly related to the following variables:
 - Age
 - Residential Background
 - U.G. Discipline
 - Teaching Experience
 - Working Locale
 - Type of Working School
- iii. Level of perception of ODL student-teachers on ICT-ELSS is found to be significantly *not* related to the following variables:
 - Gender
 - Medium Studied
 - Type of School Studied
 - Educational Qualification
 - Qualification in Diploma in Teacher Education

- iv. In the case of correlation between the perception on ICT-ELSS and attitude towards Distance Education Technologies of ODL student-teachers, there is a significant relationship between the perception on ICT-ELSS and attitude towards Distance Education Technologies of student-teacher of the study.
- v. There is a significant relationship between the perception on ICT-ELSS and attitude towards Distance Education Technologies of ODL student-teachers for the following variables:
- Male ODL student-teachers
 - Female ODL student-teachers
 - ODL student-teachers of below 35 years old
 - ODL student-teachers with Rural Residential Background
 - ODL student-teachers studied in Tamil Medium
 - ODL student-teachers studied in State Board type School
 - ODL student-teachers studied in Matriculation type Schools
 - ODL student-teachers with Science U.G. Discipline
 - ODL student-teachers with U.G. qualification
 - ODL student-teachers with P.G. qualification
 - ODL student-teachers with Diploma in Teacher Education
 - ODL student-teachers without Diploma in Teacher Education
 - ODL student-teachers with 2-10 years Teaching Experience
 - ODL student-teachers with above 15 years Teaching Experience
 - ODL student-teachers working in Rural Locale
 - ODL student-teachers working in Government Schools
- vi. There is *no* significant relationship between the perception on ICT-ELSS and attitude towards Distance Education Technologies of ODL student-teachers for the following variables:
- ODL student-teachers of 35 and above 35 years old
 - ODL student-teachers with Urban Residential Background

- ODL student-teachers studied in English Medium
 - ODL student-teachers with Arts U.G. Discipline
 - ODL student-teachers M.Phil., qualification
 - ODL student-teachers with 11-15 years Teaching Experience
 - ODL student-teachers working in Urban Locale
 - ODL student-teachers working in Private Schools
- vii. Comparing the level of perception of teacher-educators of ODL on Information and Communication Technology Enabled Learning Support System (ICT-ELSS), there is only 19% of them are having high level perception. More than 10% of the selected samples are having low level perception.
- viii. Level of perception of teacher-educators of ODL on ICT-ELSS is found to be significantly related to the following variables:
- Residential Background
 - Qualification in Educational Technology
- ix. Level of perception of teacher-educators of ODL on ICT-ELSS is found to be significantly *not* related to the following variables:
- Gender
 - Handling of Subjects
 - Teaching Experience
 - Working Locale
 - Type of Working Institutions
- x. Interview Guides helped in explaining the availability of resources are given to the teacher-educators of the ODL student-teachers and how much they are being exposed with available technologies in the study centers. Also, the further requirements are also shown that there should be more concentration on techno-pedagogy rather than the oral delivery of the content prescribed for their study.

- xi. In Site Visit and Observation, there is an appropriate man and material resources are being provided to the ODL student-teachers at appropriate level.
- xii. Documentary analysis helped in explaining the numbers of study-materials are being delivered to the ODL student-teachers and they are well structured units to their level of expectations. But, due to the time constraints, it is taught in essence and it is not elaborately taught to the students as in the case of conventional mode students.

CONCLUSION

This investigation has sought to explore the role of Information and Communication Technologies and Information and Communication Enabled Learning Support System in ODL programmes with specific reference to Teacher Education programme in the state of Tamilnadu. The study has brought to light evidence for the urgent need in the application of all available technologies so as to make the Open and Distance Learning system effective and efficient .