

# Distance Education Technologies in Open and Distance Learning With Specific Reference to Teacher Education Programmes

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**Abstract** – Advanced education is of indispensable significance for the country, as it is an incredible asset to fabricate information based society of the 21st Century. India has set extraordinary accentuation on education, directly from antiquated occasions. Before, exceptionally progressed establishments, for example, Nalanda, Taxila and Vikramshila prospered here, which conferred education on a huge scope of subjects and were locales for open, dialogistic correspondence. Towards the bygone eras, education kept on being established in religion and the arrangement of instructing proceeded with minor varieties across the district. Under the British standard, education was elitist, obliging just the advantaged segments of society. In any case, the pilgrim rule likewise was the start of the foundation of the college framework in India, with establishments of higher adapting methodically filling in number, so that by 1923, there were 23 Universities across India. After autonomy in 1947, the Government of India established the frameworks of a supported program of advanced education with the setting up of the University Grants Commission (UGC) in 1953. Under the Constitution, duty regarding education is divided among the Central and State Governments

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## INTRODUCTION

Mental premise of education accentuates that the student is focal point of educational cycle. Education is for the student and student isn't for education. Brain science has set up the way that a student creates through different stages, as for non-formal education framework educational program ought to be outlined keeping the age level of the student. The individual contrasts are in the premium, drive, urges, requirements, limits and capacities among the student. Allow us to see the different components influencing the educational plan development which are extremely fundamental for educational program development.

### Singular Differences in the Learner and the Curriculum

While the division of educational program encounters by age and by expansive periods is of generous assistance in educational plan arranging, it is lacking according to the perspective of the individual contrasts among people. In the advancement of youngsters it is ordinarily discovered that arrangements for example the request for occasions is genuinely steady from one kid to another. Accordingly, a youngster holds up his head before he

strolls before he runs. In any case, the rate at which every youngster learns is consistently unique. Subsequently no two people can be same even the indistinguishable twins. The beat and timings old enough rate of the occasions in a grouping fluctuates incredibly in youngsters. Thusly the educational program ought to be adaptable to meet the individual contrasts viably and permit everyone to learn and create along his/her common way and progress at own speed. For this the educational plan ought to contain different imaginative exercises like workshop show, examination, projects and valuable creating experience.

### Knowledge and Curriculum

Scholarly or mental advancement is of basic worry to the school, as improvement of information and comprehension comprises the main targets of school-educational program. The idea of knowledge and the elements impacting its improvement have been a most loved's space of exploration interest among analyst. Contrasts in scholarly limit have been concentrated most in relationship to the capacity of kids to benefit by encounters in school. The application is best found in a portion of the cutting edge educational plan

projects which have endeavored to introduce the essential thoughts of the various controls in the considered structures kids and continuously extend their comprehension of them by empowering them to utilize then in dynamically. As in each field of information viewpoint has developed with time and examination the consequences of the use of knowledge tests in the developing time frame are normally depicted in the particulars of mental age. Accordingly a psychological age of ten years implies that the youngster performs like normal ten years kid with ordered age of ten. The IQ (I.Q.) is the proportion of mental age (M.A) and ordered age (C.A.). In this way the educational program ought to be as per the ordinary normal knowledge.

### The Learning Process and Curriculum

The issue of how person learns has been a most loved issue of clinicians since the beginning of brain research and has delivered different sorts of answer. The initial fifty century has been described by a fast spread of trial thoughts. Such examinations have had a healthy impact on unchecked hypothesis. Regularly the impact has been exhibit that what a few group knew for sureness was truly in the space of possibility and that they had been deluded by some uncontrolled factor in the circumstance like an agent test of the populace. From numerous points of view research associated with the educational program has accomplished more to clean up the brush of misguided judgments than it has added to new or beginning disclosures. Such explanation, be that as it may, has frequently given a surer and more exact information on which to construct. The itemized analyzes frequently have a restricted scope of pertinence. The various hypotheses of learning bring about various curricular ramifications. The educational plan exuding from the psychological order hypothesis will in general be a day and a half in goals and unitary in scope, and the parts of grouping of substance and coherence of learning encounters are probably going to be overlooked.

The behaviorist hypothesis with its accentuation on redundancy, support and molding is probably going to bring about educational plan, based on learning material orchestrated as projects and instructed through instructing machines. The field hypothesis, then again prompts an association of educational program content, that anxieties setting, connections and coordinated agreement and to an educational program intended to serve numerous targets addressing a more extensive scope of learning. The impact of this hypothesis can be found in present day educational program projects in the various subjects where stress is on instinctive impression of connections. School educational plan ought to, consequently accommodate assortments of learning and educational program setting ought to be chosen with this end see.

### OBJECTIVES

1. To contemplate the degree of impression of ODL understudy instructors on Information and Communication Technology Enabled Learning Support System (ICT-ELSS) in the chose Universities of Tamil Nadu State.
2. To decide if the ODL understudy educators' degree of discernment on Information and Communication Technology Enabled Learning Support System (ICT-ELSS) is identified with following factors.

### REVIEW OF RELATED LITERATURE

**Trisha Nishimura, (2014)** made an examination on, "Successful Professional Development of Teachers: A Guide to Actualizing Inclusive Schooling". This investigation gives an establishment to future exploration and spaces of additional assessment. Follow up research studies ought to incorporate a longitudinal investigation of comprehensive training. Two months of concentrated mediation is a brief timeframe range to change educator mentalities. Albeit this investigation endeavored to give various intercessions redid to the requirements of every educator, the two months didn't take into consideration more profound reflection or broadened practice of the comprehensive methodologies instructed. A longitudinal report across a school year (September to June) from pre-post test would furnish instructors with freedoms to reflect and direct companion training. A longitudinal report would give time to instructors to help and issue settle cooperatively with one another with regards to their study halls. A companion instructing module would take into consideration instructors to refine their procedures and to help each other in supporting comprehensive practices and give time to guarantee real conduct change. The way toward carrying out change is troublesome when the way of life of a framework is profoundly established in qualities and presumptions that are opposing to the new vision (Fullan, 2007; Tye, 1987). Not all instructors accept that understudies with disabilities ought to be taught inside the overall education homeroom and there has been a long history of isolated tutoring for understudies with handicaps in the province of California, in the same way as other different spots in the United States.

**Khor and Ean Teng, (2014)** made an examination on, "An Analysis of ODL Student Perception and Adoption Behavior Using the Technology Acceptance Model". This examination presents an observational investigation pointing on exploring ODL understudies' insight and appropriation of SCORM Compliant Learning Object (SCLO). With the expanding utilization of SCLO as of late,

a superior arrangement and execution of successful instructional assets is important to meet the different requirements of ODL understudies and improve their learning execution. The possible utilization of significant partners decides the achievement of a framework. The framework is pointless in the event that it isn't utilized in the normal manner by the potential clients despite the fact that it is a decent framework. Consequently, the point of this exploration is to analyze if ODL understudies will at last utilize SCLO for their learning. The examination utilized TAM as a premise to explore the relationship of outside and inward factors. A review instrument getting reactions on a progression of Likert-type questions was given to chosen ODL college understudies. The consequences of this investigation affirm that clients' insight has critical impact on the acknowledgment and reception of SCLO. The investigation gives a superior comprehension of understudies' conduct on SCLO and the acknowledgment model.

**Mariki, Belingtone Eliringia, (2014)** distributed a paper on, "Instructors' Experiences in Educational Multimedia Content Development: The Case of Tanzania's Institute of Adult Education". This paper is a scholastic perception of an Educational Multimedia Content advancement preparing program subsidized by the Commonwealth of Learning (COL) in Tanzania. This venture zeroed in on abilities improvement in script composing and in radio and video program advancement, pointed toward changing chosen subjects from text to sight and sound substance. A definitive goal was to empower better and simple comprehension of the exercises for Open and Distance Learning students. A gathering of 25 educators from the Tanzania's Institute of Adult Education took part in the preparation and advancement of the projects. In this paper the creator shares the new and energizing encounters of instructors on adding such abilities to their expert vocation, as the improvement of these projects. Creator's own cooperation and meetings with peers in the venture were utilized as strategies for information assortment.

A complete number of 13 recordings and 12 radio projects were created over the range of a half year. Five school subjects were covered, specifically: English, Mathematics, Biology, History and Geography. A portion of the difficulties experienced in building up the projects included: troubles in building up a video thought from the course books; filling in as a gathering on the web as a team with the preparation advisor in another country particularly in script advancement; remembering words (as entertainers playing in the creations) and saying it on camera; and time imperatives (working under tension). The creator prescribes to African countries and teachers in different pieces of the world to get to these interactive media learning programs online since they are OER, and to utilize them in their specific situation. The video and radio projects mirror

the Tanzanian setting somewhat, yet the greater part of the exercises are general for use by any country. The paper reasons that abilities advancement on mechanical developments among ODL instructors in both formal and non-formal education framework is fundamental towards achieving EFA objectives.

**Nyoni and Jabulani, (2014)** distributed an article on, "E-Readiness of Open and Distance Learning (ODL) Facilitators: Implications for Effective Mediation". This article is an account report of the discoveries from the investigation of multicultural facilitators' talks on their e-status in the utilization of data and correspondence advancements (ICTs) affordances in open and distance learning (ODL) intercession encounters. In the first place, the discoveries uncovered by subjective deconstructive talk investigation showed that most of ODL facilitators do not have those e-availability abilities that are basic in the powerful control of ICT affordances apparatuses in ODL intercession conditions. Besides, a few facilitators didn't completely comprehend what undergirds ODL andragogy, standards and practices.

**Ansie Minnaar, (2013)** made an investigation on, "Difficulties for Successful Planning of Open and Distance Learning (ODL): A Template Analysis". This layout investigation showed the primary difficulties for ODL, of what fire up expenses and costs, student profile, rivalry for understudies, and understudy support were the most significant. The new understudy base that experiences childhood in an innovation rich climate may challenge the use of innovation in advanced education and explicitly in ODL. This is a test to get scholastics to utilize innovation viably in ODL. Another test for ODL suppliers and scholastics could be the way that understudies who were dismissed at different foundations register at ODL organizations and are indeed the feeble understudies. The mix of exceptionally youthful powerless understudies, proficient improvement understudies, and customary understudies could challenge instructing and learning systems in ODL. In actuality there is rivalry among colleges as understudies are seen as buyers.

**John Mpofu (2013)** made an investigation on "The Impact of ICT in Learning through Distance Education Programs at Zimbabwe Open University (ZOU): Role of ICT in Learning through Distance Education Programs". In this investigation, the scientists introduced a portion of the difficulties confronting ICT use, reconciliation and dispersion and their effect on distance education instructing and learning. The specialists likewise saw that Zimbabwe is confronted with difficulties in the space of absence of financing, institutional issues, framework issues, and human resources issues. The other significant test confronting the establishment is inability to interface the ten areas through ICT. While the plans have been on the



table for various years, the way that ZOU doesn't have its own infra-structure in certain locales makes it hard for the organization to put resources into leased convenience. Perhaps, another more genuine test confronting distance education at this level is the requirement for the mix of new ICT information into scholarly courses and projects. This situation developed for the most part from the political disconnection that Zimbabwe experienced during the hour of financial plunge.

## METHODOLOGY

The current examination utilized Descriptive Method with Survey procedure engaged with subjective and quantitative investigation – the subjective graphic overview includes depicting in subtleties explicit circumstance utilizing research instruments, meeting and review and the quantitative one including mathematical and factual clarification which are gotten from the respondents through the individual information gathered from the example. John W. Best portrays "The Survey Method assembles information for a moderately enormous number of cases at a specific time. It isn't worried about qualities of people as people. It is worried about the summed up measurement that outcomes when information are disconnected from various individual cases. It is basically cross-sectional". "Unmistakable examinations are an important and rather ignored base from which conversation of development can continue.

Notwithstanding the way that they don't in themselves achieve progress of teaching and learning, the 'rich' depictions of learning experiences are a central part in building up a tasteful theory of language learning structure" (Leo Van Lier, 1990). "Illuminating assessment will target giving as exact a record as possible what current practice is; the methods by which understudies do acknowledge; how instructors do train; how homerooms do look like; at a particular second in a particular spot" (Brumsit and Mitchell, 1990). An edifying investigation portrays and interprets 'what is'. It stressed over conditions or relationship that exist, ends that are held, measures that are going on, impacts that are evident, or designs that are making. Drawing in investigation deals with the association between factors, testing theories and improvement of theory of norms or speculations that have comprehensive authenticity.

Enlightening exploration additionally includes occasions that are as of now occurred and might be identified with current condition. The spellbinding exploration configuration imparts attributes to both subjective and trial research plans. It is like subjective examination since it manages normally happening wonders, utilizing information which are gathered direct. It varies from subjective examination in that it is deductive instead of heuristic and starts with research question. What's more, the elucidating

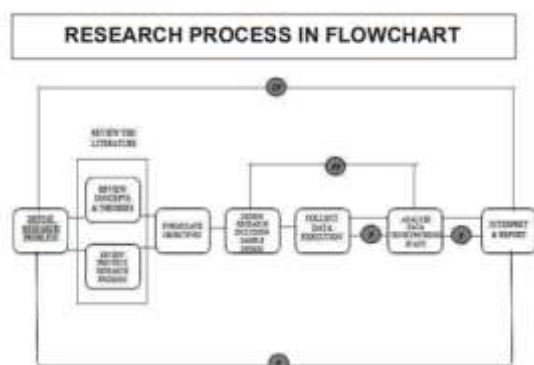
research is quantitative. An overview comes in various flavors, be it talking with individuals up close and personal or giving out polls to round out. Overviews are valuable since they don't take up to an observational investigation since analyst getting some information about themselves as opposed to going through weeks noticing them and J. B. Thomas, A. R. Marshal portrayed in International Dictionary of Education as "Review Research will be exploration or examination of an educational issue utilizing logical techniques for testing and painstakingly arranged strategies for addressing."

The current examination portrayed as 'Distance Education Technologies in Open and Distance Learning with explicit reference to Teacher Education Programs in the State of Tamil Nadu'. In this investigation, cross sectional exploration configuration have been embraced and this has three particular highlights: no time measurement, a dependence on existing contrasts instead of progress following intercession and gatherings are chosen dependent on leaving contrasts as opposed to arbitrary designation. The cross-sectional plan can just gauge contrasts between or from among an assortment or individuals of marvels as opposed to change. The number of inhabitants in this examination included understudy educators concentrating in Open and Distance Education B.Ed. course of various Universities and the instructor teachers who are taking care of class for Open and Distance Education mode B.Ed. considering understudy instructors in the province of Tamil Nadu.

## Uniqueness of the Research Design for Descriptive Research Studies

A distinct report is one in which data is gathered without changing the climate (i.e., nothing is controlled). Now and again these are alluded to as "correlational" or "observational" examines. Spellbinding investigations can include a one-time communication with gatherings of individuals (cross-sectional examination) or an examination may follow people over the long run (longitudinal investigation). Clear examinations are generally the best techniques for gathering data that will exhibit connections and portray the world as it exists. These sorts of studies are frequently done before a trial to understand what explicit things to control and remember for an analysis. Bickman and Rog (1998) propose that spellbinding investigations can respond to questions, for example, "what is" or "what was." It is confined to verifiable enrollment and that there is no mission for a clarification why the truth is showing itself along these lines. On a basic level, illustrative examination isn't targeting shaping theories or improvement of hypothesis. Engaging examination is tied in with portraying how the truth is. In such manner graphic examination varies from prescriptive exploration that is essentially worried about the inquiry how the

truth ought to be. Illustrative exploration is making inventories; prescriptive examination is regularizing.



Sampling of the Study Polit et al (2001:234) define a sample as “a proportion of a population”. Holloway and Wheeler (2002:128) assert that sample size does not influence the importance or quality of the study and note that there are no guidelines in determining sample size in qualitative research. Qualitative researchers do not normally know the number of people in the research beforehand; the sample may change in size and type during research. Sampling goes on until saturation has been achieved, namely no new information is generated (Holloway 1997:142). Among the population defined, there are 93 students-teachers from Tamil University, Tanjore, 199 student-teachers from Bharathidasan University, Tiruchirappalli, 102 student-teachers from Indira Gandhi Open University, 226 student-teachers from Madurai Kamaraj Universtiy, Madurai, 75 students from Tamil Nadu Open University of total sample 695 with their respective teacher educators (72) were taken by using Cluster Sampling technique for this study.

Technology in education should not be considered as a replacement for face-to-face instruction but rather as a support to “attain objectives that have not been attained efficiently otherwise: expanding access, promoting equality, improving the internal efficiency of educational systems, enhancing the quality of education, and preparing new and old generations for a technology-driven market place” (Haddad and Jurich, 2002, p.47). Distance education and ODL are currently important topics for educational planners, administrators, academics, and policymakers because of the growth of distance learning and technology-enhanced learning (Bishop & Spake, 2003; Levy, 2003; Pacey & Keough, 2003). According to Bishop and Spake (2003), policymakers are faced with an array of choices related to planning ODL, such as infrastructure, student support, support to academics for their changing role as distance educators, and costs, to name a few. To add to this, distance education delivery is faced with changes such as the movement from correspondence-type delivery to open access and technology-enhanced learning where technology is changing constantly (Bishop & Spake, 2003). Technology such as

Information and Communication Technology (ICT) is a potent force in driving economic, social, political and educational reformation. Countries, particularly developing countries cannot afford to stay passive to ICT if they are to compete and strive in the global economy. Education reform is occurring throughout the world and one of the tenets of the reform is the introduction and integration of ICT in the education system.

## CONCLUSION

The successful integration of any technology, thus ICT, into the classroom warrants careful planning and depends largely on how well policy makers understand and appreciate the dynamics of such integration. Integration of ICT in education has been a contentious issue. At one extreme, there are some who are not convinced that ICT will bring the pedagogical benefits that have been so much touted about (Cuban, 1986; McRobbie and Thomas, 1998; Oppenheimer, 1997; Peat and Franklin, 2003; Postman, 1990, 1993, 1995; Stoll, 1995, cited in Vestich, 1997). Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centered learning settings and often this creates some tensions for some teachers and students. But, with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important in general and in Open and Distance Education in particular and this importance will continue to grow and develop in the 21st century.

## REFERENCES

- [1] Abdul Gafoor, K, (2011), “Integrated Model of Teacher Preparation: An Alternate Representation”, paper presented on International Conference on ‘Learning Community for Global Education Reform’, in the date 18th November 2011
- [2] Ageel et. al. (2012), “Enhancing University Teachers’ Information and Communication Technology Usage by using a Virtual Learning Environment Course”, Proceeding of INTED Conference, Valencia, Spain, 5 th-7th March 2012
- [3] Akande Joshua OLUSOLA, (2011), “Globalization, Information and Communication Technologies and Open/Distance Learning in Nigeria: Trends, Issues and Solution”, Turkish Online Journal of Distance Education - TOJDE V12 N3 Article1, pp. 66-77 July 2011

- [4] Ansie Minnaar, (2013) "Challenges for Successful Planning of Open and Distance Learning (ODL): A Template Analysis ", The International Review of Research in Open and Distance Learning, V13, N3, pp. 81-108
- [5] Anwarul Islam & Nasirul Islam, (2008), "Effectiveness of Different Medium of Education to Imparting Knowledge at Bangladesh Open University", Turkish Online Journal of Distance Education-TOJDE, V9 N1 Article 2 P44-53, January 2008
- [6] Ashish Kumar Awadhiya and Gowthaman K (2014), "ICT Usage by Distance in Learners in India", Turkish Online Journal of Distance Education, V15, N3, Art18, P242-253
- [7] Ashok K Gabai & Sethy (2010), "Learners' Perception towards Information and Communication Technologies: A Case Study of Indira Gandhi National Open University". Indian Journal of Open Learning, 2010, 19(3), pp. 143-157 ISSN 0971-2690, Printed in India, © Indira Gandhi National Open University
- [8] Bhattacharjee D.S., (2011), "Teacher Education in Northeast India – Status, Weaknesses and Alternatives", US-China Education Review A6, pp. 879-884, A6 P879-884, 2011 (Online Submission)
- [9] Caleb Kangai, (2011), "Teacher Development through Open and Distance Learning: The Case for Zimbabwe" published in International Journal on New Trends in Education and their Implications (v2 iss4 article 13, Oct 2011).
- [10] Charity Akuadi Okonkwo, (2012), "A Needs Assessment of ODL Educators to Determine their Effective Use of Open Educational Resources", International Review of Research in Open and Distance Learning, V13 N4, pp. 293-312
- [11] Eileen Wood & Julie Mueller, (2005) "Teachers' Perceptions: Barriers and Supports to using Technology in the Classroom". Journal of Education, Communication & Information, Vol. 5, No. 2, July 2005
- [12] Elizabeth Murphy & Maria A Rodriguez-Manzanares, (2012), "Rapport in Distance Education", International Review of Research in Open and Distance Learning, V13 N1 P168-190 January 2012
- [13] Glenn Russell, (2007), "Globalization, Distance Education and Hegemonic Future", Turkish Online Journal of Distance Education- TOJDE, V8 N4 Article 1 P8-19 October 2007
- [14] Hilary Perraton, (2010), "Commonwealth of Learning: Teacher Education: the Role of Open and Distance Learning".

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