

Bridging the Educational Divide: Distance Education as a Strategy for Universalizing Secondary Education in India

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Abstract— Despite significant strides in universalizing elementary education, secondary education in India continues to face persistent bottlenecks regarding access, equity, and retention. Traditional brick-and-mortar schooling is frequently hindered by physical infrastructure deficits, socio-economic marginalization, and entrenched opportunity costs. This theoretical article investigates Open and Distance Learning (ODL) system as a vital, cost-effective strategy to bridge the educational divide and achieve the objectives of universal secondary education. By critically analyzing government frameworks such as the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and the National Education Policy (NEP), and commission and committees reports on open and distance education this study evaluates how digital platforms and flexible learning pathways can be leveraged to reach remote, rural, and disadvantaged populations. The paper explores both the potential and the challenges of distance education-including the digital divide and the need for high-quality self-learning materials. Ultimately, the article posits that integrating distance education into the formal schooling ecosystem is not merely an alternative, but an essential systemic mechanism to democratize secondary education and realize true educational inclusivity in India.

Index Terms— Distance Education, Education Divide, Educational Equity. Universalization of Secondary Education, Open and Distance Learning.

I. INTRODUCTION

Distance education acts as a catalyst for institutional innovation. It is an effective system of education that takes education to the doorsteps of economically and geographically disadvantaged groups of students. Rana (1994) has mentioned that, among the few innovations in the field of education, distance education ranks very high. Distance education has come into the educational scene as one of the most potent strategies for fulfilling the demand of mass

education as well as individualizing it. Bates (2000) remarked that, Distance education can be regarded as a ‘paradigm shift’ in education. It is a system de-emphasizes teaching but emphasizes learning and makes the learner truly autonomous. Due to these reasons, distance education is very much necessary as a viable alternative to conventional system of education over the world. In this regard, NCERT (2007) mentioned that, ‘Distance education and open learning is a new system in the revolution of education with a potential to bring about a major revolution in instruction and training using multimedia technology so as to take educational opportunities to places and people hitherto un-reached surpassing social, economic and geographical barriers for attaining the objectives of relevance, equity and excellence’. Furthermore, Maggio (2001) stated that, in Distance education there is the potential for increased access to more experts and students from diverse geographical, social, cultural, economic, and experiential backgrounds.

Ko and Rossen (2001) have mentioned that, distance education is especially advantageous because it makes learning accessible to students all day, giving them immense control over their own learning schedules. Within this new educational paradigm, virtual classrooms provide students with an environment that allows them to access information conveniently. Moore and Kearsley (1996) remarked that, Distance education or distance learning is a mode of delivering education and instruction, often on an individual basis, to students who are not physically present in a traditional setting such as a classroom. It aims to provide instruction in places and times that are convenient for learners rather than teachers or teaching institutions. Distance learning provides access to learning when the source of information and the learners are separated by time and distance, or by both.

Peters (2007) viewed that, distance education in terms of a division of labour and it allows a large number of students to participate in their study simultaneously, regardless of their place of residence and occupation. According to Holmberg (2007), distance education is based on dialogue- be it real (through written interaction, such as letter or email, or telephone) or simulated (through course materials adopting a conversational style). These two complementary forms of dialogue lend themselves to an institutional approach. Holmberg also explained that, Distance education is based on deep learning and as an individual activity. Learning is guided and supported by non-contiguous means based on pre-produced courses. The development of courses may apply large-scale methods and may also be carried out for small groups of students. Subject-matter presentation and mediated interaction are the two constituent components of distance education, for which a supporting organization is responsible. Holmberg suggests that 'feelings of empathy and personal relations between learner and teacher support motivation for learning and tend to improve the results of learning'.

Oblinger (2000) stated that, distance mode of education has been increasing dramatically in recent years for its flexible nature of delivery system and openness to admit students from diverse background. Its flexible scheduling structure lessens the effects of the many time-constraints imposed by personal responsibilities and commitments. Devolving some activities off-site alleviates institutional capacity constraints arising from the traditional demand on institutional buildings and infrastructure. Distance education provides a broader method of communication within the realm of education through modern scientific tools and technologies and creates opportunities for learning as many as possible for the students. Modern distance technologies have evolved to include Web 2.0 technologies that support collaborative learning, social networking and virtual worlds. Jonassen (1999) mentioned that, modern distance technologies are emphasizing on media, communication and personalization, which are making their way into a new socio-constructive paradigm for instruction. Distance education via-internet has become an acceptable option in rural schools because of improvements in the necessary infrastructure, affordability of technology and near

universal connectivity (Hobbs, 2004; Jimerson, 2006; Malecki, 2003). Most of the high schools in rural areas of USA are now using distance education. Hannum, Irvin, Banks and Farmer (2009) reported that, 69.8 percent of rural districts are using distance education course most often in the form of online courses. Over 84.5 percent of rural schools had used distance education, and the majority indicated a need for additional distance education course to meet their curriculum requirements. A recent report in the USA on distance education also indicated that the proportion of rural districts with students taking online courses is nearly twice that of urban and suburban districts (Setzer and Lewis, 2005). Present-day online communication in distance education system allows students to associate with accredited schools and programs throughout the world that are out of reach for in-person learning. By having the opportunity to be involved in global institutions via distance education, a diverse array of thought is presented to students through communication with their classmates. This is beneficial because students have the opportunity to combine new opinions with their own, and develop a solid foundation for learning.

Distance education has been a more cost-effective form of learning, and can sometimes save a significant amount of money as opposed to traditional education. Distance education enables companies and corporations to train more people, more often with reduced travel costs. In addition, when distance education systems are already in place, adding new students may not increase cost at all. Yixian (1992) observes that most students in Hong Kong study solely in distance mode for the purpose of obtaining a degree and, consequently, to improve their chances in the labour market.

It is clear from the above discussions that Distance education places a particular focus on the students and their learning in an innovative and effective manner. Ramanujam (2002) stated that, the phenomenal growth of distance education and open learning system all over the world has drastically changed the educational scenario everywhere today. The conventional notions about teaching learning are being replaced very fast by new ideas and strategies. Since the concept of education as investment is also steadily gaining ground, even the poorest countries are slowly turning their attention to the educational needs of their respective populations in order to survive and develop.

In this direction distance education acts as a viable strategy to achieve the national goals quickly and at low costs.

II. OBJECTIVES

The paper has the following objectives:

- i. To define the role of distance education for quantitative expansion and qualitative improvement of secondary education.
- ii. To evaluate the distance education perspective and intervention styles for achieving and promoting universalization of secondary education in India.

III. METHODOLOGY

This study used a structured framework combining analytical and conceptual research methodologies. This methodological approach helps to evaluate policy shifts, assess systemic impacts, and map pedagogical effectiveness without requiring primary field surveys. Secondary sources of data are collected from different literary sources like government documents, commissions and committee's reports, research articles from journals, books and analyzed. Critical literature review & conceptual analysis is done for defining the role of distance education in quantitative expansion (e.g., Gross Enrollment Ratios) and qualitative improvement at the secondary level. Further for policy & structural evaluation the Context, Input, Process, and Product (CIPP) framework is used for objectively evaluating the distance education perspective and intervention styles for universalization of secondary education.

IV. DEFINING THE ROLE OF DISTANCE EDUCATION FOR QUANTITATIVE EXPANSION AND QUALITATIVE IMPROVEMENT OF EDUCATION AT SCHOOL/SECONDARY SCHOOL LEVEL

Distance learning in the 21st century plays a vital role in quantitative expansion and qualitative improvement of education in every corner of the world. Role of distance education is very much crucial in improving quality and increasing access in the provision of primary, secondary, adult, teacher, and university education. In many developing countries of the world, young and adolescent people are held back due to the

lack of opportunities to pursue education especially the secondary education. Mulkeen et al. (2005) have stated that, now developing countries need to turn their attention for expanding and improving secondary education to take advantage of its transformational nature. But it is considered that secondary education is little costly than the primary education. Anzalone (1995) mentioned that, unit costs of expanding secondary education are considerably higher than those of primary education. It is difficult to expand conventional system of secondary schooling with limited budgets/money. There is the need of an alternative mode of secondary education to expand educational opportunities at lower unit costs than those of convention schools. Moore and Tait (2002) stated that, a developing country has to find new methods that will dramatically improve both its children's schooling and its continuing education system. In this regard distance education can play an effective role in proving secondary education. Figueredo and Anzalone (2003) found that, distance education is an attractive option primarily because it avoids many of the variable's costs of conventional education. The proportion of variable to fixed costs tends to be higher in conventional education than in distance education. But distance education at secondary level needs proper planning for its expansion and improvement.

Moore and Tait (2002) have given emphasis on the greater use of open and distance learning, whether in the form of print-based distance learning courses, interactive radio, computer-based learning or web-based learning. These methods offer more education for the same unit of resource, easier access and higher quality than the education obtained by traditional methods in countries with poorly financed education systems. Distance education system has emerged all over the world to cater to the growing demands for education, including professional education, to provide opportunities at a cheaper cost, and meet the continuing education requirements of professionals.

In the past decade several policy measures and initiatives for quality improvement have been implemented. It has been realized that the mere provision of school facilities does not necessarily lead to the expected level of learning. Therefore, in the past decade the focus has been shifted to improving quality of education along with quantitative expansion. For providing quality secondary education through distance mode, it will be necessary to develop norms

for distance learning centres. While there should be core set of national norms, these norms have to be further elaborated and developed with locale specificity in each state, district and blocks in consultation with the states.

Research indicates that distance education can be as effective as traditional face-to-face instruction in achieving positive learning results. Unfortunately, the quality of many distance education programs in developing countries is disappointingly low: students do not receive adequate support, curricula, methodology and materials are deficient, and programs are managed by unqualified staff and lack political commitment. These weaknesses typically result in high dropout rates and low levels of student achievement, making distance education a second-rate option in the public's perception (Moore and Kearsley, 1996).

Many distance students choose to follow a course without necessarily planning to submit all the assignments or take the examination. Shale (1982) found that, half the students enrolled in Athabasca University in 1978 and 1979 fell into this category. Paul (1990) measured the persistence-rates of the students and found that, the proportion of students who take another course after successfully completing the first one indicates that a significant proportion of undergraduate students (70 to 80 percent) went on to study a course in the next academic year. However, a number of students drop out for a year, and then resume their study. Studies by Woodley and Parlett (1983) revealed that dropout in distance education is a multi-causal phenomenon.

Distance education can be very effective in delivering quality education to young adult and adult learners. Murphy and Zhiri (1992) mentioned that, students enrolled in distance education programs often come from disadvantaged groups, performed poorly in primary school, or have been out of school for several years. In other words, on average, distance education students are academically weaker than their counterparts in conventional schools, yet they are required to learn in a manner that is much more demanding, required self-discipline to study individually and to understand the lesson materials on their own. Moore and Kearsley, (1996) stated that, young students do not have a clear understanding of their educational goals and therefore, are poorly motivated to follow the disciplined path of self-study.

Most students have little experience with self-study and do not realize that they must take responsibility for their own learning without first being prompted by an instructor. Moore and Kearsley (1996) suggested that, every distance education program should provide an orientation session where students learn how the system works and what is expected from them. Distance programs in secondary education also require frequent and structured face-to-face student support and supervision. Student-facilitator ratios must be kept sufficiently low so as to permit adequate attention to individual students' needs. The effectiveness of many distance education programs is hindered when teachers and facilitators, unfamiliar with the goals and techniques of distance education, resort to rote teaching methods. To be effective, teachers and facilitators must be trained in participatory methodologies as well as techniques for motivating independent learners. Lastly, the core curriculum of distance education programs should be identical to that of conventional secondary schools.

V. DISTANCE EDUCATION PERSPECTIVE FOR ACHIEVING UNIVERSALIZATION OF SECONDARY EDUCATION

Despite massive investment, constitutional guarantee, and importance on equality of opportunity, education could not reach the poor and the disadvantaged. Social disparity, regional imbalances and economic backwardness continued to hamper the growth and progress of education (Sujatha, 2002). Lack of access, poverty and unemployment proved to be major obstacles in achieving educational goals. These problems have high impact on the access, equity and quality of school education. Low quality schooling and no schooling are the causes of unrest and unemployment in our society.

The incessant growth of these problems led to serious rethinking, and emphasis was placed on the Universalization of education, on the one hand, and the establishment of an alternative, open and distance learning system on the other. Sujatha (2002) mentioned that, open and distance education system has much more relevance at the secondary and higher education level than at primary level. Moreover, it must be noted that India has a very poor secondary education infrastructure. Since educational opportunity cannot be denied just because of a poor

secondary school infrastructure, planners have been forced to look for alternatives. As a result, the National Policy on Education (1986) and the Programme of Action (1992) have emphasized the open learning system, and suggested its wider expansion and establishment. The Central Advisory Board of Education set up a committee under the chairmanship of Mr. N. Janardan Reddy in 1991, the Committee states that:

‘Considering the resource constraints, the open learning system has an important role in the Universalization of educational opportunities. The flexibility and innovativeness of the open learning system are particularly suited to the diverse requirements of the pluralist clientele. While reducing the pressure on the formal system, it offers facilities for continuing education to those who had to move out of formal system, it offers facilities for continuing education to those who had joined the vocational stream. It, thus, both broadens the access to education, and helps the dropouts to get back to the mainstream. We are, therefore, of the view that open learning be given utmost encouragement’.

Presently open and distance education is an international movement that is spreading fast. The international concern to provide education to all has given a significant impetus to open schools. The E-9 Summit of nine high population countries in Decemeber 1993 in New Delhi categorically resolved to launch a joint initiative on distance education in order to reach the marginalized and so far unreached groups. It is also called on international agencies to extent professional and financial support. The E-9 Summit brought recognition to national efforts that use open schools to provide education to all.

In this context CABE Committee (2005) recommended to design, create and establish alternative educational provisions for such prospective learners. It also recommended for expanding open school network in every State through regional languages and enhancing quality of open schooling through a variety of measures, particularly the counselling and tutorial services. For this, Committee suggested for taking full advantage of the videoconferencing facilities as a compliment to counselling and tutorial services through Educational Satellite (EDUSAT), all the secondary and senior secondary schools that serve as study centres must be equipped with satellite interactive technology

facilities. Also, Direct to Home (DTH) delivery of education through cable network should be explored. The open school network when fully developed should be able to cater to at least 15 percent students in secondary education. Committee urged that, open schooling should receive full state support to ensure high quality education and non-exploitation of students.

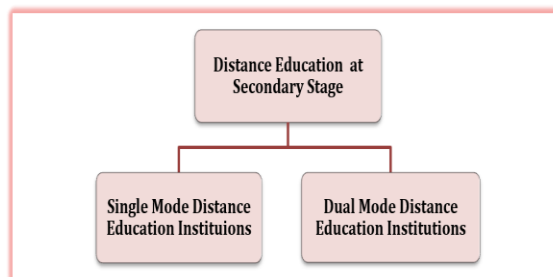
VI. INTERVENTION STYLES OF DISTANCE EDUCATION FOR THE PROMOTION OF SECONDARY EDUCATION

There are mainly two prominent styles/modes of distance education institutions that are used in delivering secondary education in the country. They are Single Mode Distance Education Institutions and Dual Mode Distance Education Institutions. The brief descriptions of these two styles/modes of distance education institutions are given here:

Single Mode Distance Education Institutions: Single Mode Distance Education Institutions at secondary stage are those institutions which provide secondary education only through distance mode. Example of Single Mode Distance Education Institutions at secondary stage are-National Institute of Open Schooling (NIOS) in national level and State Open Schools (SOSs) in State levels.

Dual Mode Distance Education Institutions: Dual Mode Distance Education Institutions at secondary stage are those institutions which provide secondary education facilities both through regular/conventional/formal classroom mode and distance mode. Examples of Dual Mode Distance Education Institutions at secondary stage are-different correspondence/distance education sections in conventional schools/school boards.

VII. MODES OF DISTANCE EDUCATION AT SECONDARY STAGE



Mukhopadhyay (1994) mentioned that, distance education was first introduced to complement conventional education, i.e. radio and television complemented learning in conventional schools in such countries as Nicaragua, China, Japan and Korea. In India, educational radio in the late 1940s and television in the early 1960s were used to support conventional education. Eventually the scheme of correspondence education was included in the third five-year plan (1961-1966). An expert committee under the chairmanship of Dr. D.S. Kothari was appointed in 1960 to workout in details. The committee recommended correspondence courses in some selected universities, believing that they would reduce the pressure of student numbers, as well as reduce capital costs and possibly even the recurrent cost. Correspondence education at the school level emerged in 1964 and 1965. Dewal (1994) stated that, the period from 1968 to 1988 was marked by developments in correspondence education, independent and part-time education, alternate education and educational technology. Correspondence education is providing the student the facility to study at his or her own space. But it has also some limiting features. It adopted the same study scheme, syllabus and examination system as the conventional schools. The only difference is that correspondence students are studying at a distance where the conventional students are receiving face-to-face instruction.

The idea of starting open school surfaced in 1974 with the NCERT working group recommendation to set up an open school for students of 14 years age and older, including adults. Dewal (1994) mentioned that, the concept of open school at secondary level was a big and bold departure from, and a considerable advance over, the concept of correspondence education. The aim was to liberate the system from its ingrained orthodoxy. Mukhopadyay (1994) stated that, open schools emerged from concern about how to provide a minimum level of education to all. He stated four distinctive features of its emergence:

- ✓ Reaching out with education to the disadvantaged population groups in dispersed location where conventional schools are not viable;
- ✓ Providing a choice to students (and their parents) for what they want to learn;

- ✓ Providing a safety net to school drop-outs so they do not lapse into illiteracy; and
- ✓ Providing education to those who cannot attend conventional schools for a variety of social and economic reasons, as well as to those who missed out and are now 'over age'.

Open school is seen as a mechanism to give early school leavers (students who leave the school due to financial constraints, family circumstances, rigidities in school system etc.) a second chance and to re-absorb them into the school system. Open schools for secondary education have tremendous possibilities and their full potential is yet to be explored. Mukhopadhyay (1994) stated that, open schools are now opening new vistas for the neo-literates-both adults and school dropouts, because of their flexibility and responsiveness to learning. For developing countries Open schools may emerge as a significant alternative to the conventional system for providing secondary education.

While open schools are the single mode distance education institutions at school/secondary school stage, the distance education sections/centres in the conventional schools/school boards are the dual mode distance education institutions at the school/secondary school stage. Now large numbers of conventional schools as well as conventional school boards have opened their centre/section of distance education in order to include large number of educationally deprived sections of students into school education stream.

VIII. FINDINGS AND CONCLUDING REMARKS

Irrespective of several recommendations and expansion of educational facilities in secondary schooling in India, all the adolescence and youth in the concerned age group will not be able to take advantage of formal schooling in stipulated hours of the day that often coincide with the productive labour required in the rural areas for agriculture and in urban areas for a variety of income generating activities particularly for the lower middle-class and poor families. Distance education can be considered as a significant strategy/means for achieving Universalization of Secondary Education. It can provide secondary levels of education to the millions of disadvantaged learners and school dropouts. Due to its flexibility in time management and openness nature, distance education

can reach to large sections of youth and adolescents in our country. Hence, it is suggested that in the context of making Universalization of Secondary Education successful, the existing roles and functions of NIOS should be sustained as well as steps should be taken to widen the scope and functions of NIOS as well as State Open Schools (SOSs) relating to Universalization of Secondary Education. It is indicated that the apex body of distance education of the country is Distance Education Bureau (DEB); and the DEB co-ordinates and maintains standard of ODL system at the level of higher education in the country. Hardly programmed of school education is run and controlled by DEB. It is suggested that for achieving Universalization of Secondary Education, DEB should also pay attention. DEB should extend its scope and functions to regulate distance education at school level for achieving Universalization of Secondary Education on a mission mode.

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