CHAPTER-I
INTRODUCTION

1.0 DISTANCE EDUCATION: HISTORICAL PERSPECTIVE

India can take pride in the accomplishment of the past six decades of independence. It has created research institutions, expanded the role of colleges and universities, built the enviable Indian Institutes of Technology and has enhanced accessibility to schools and colleges for the general masses. Indian Government has provided greater academic opportunity for succeeding generations by increasing the availability of free and compulsory education at elementary level and has also subsidized higher technical education. Wide efforts by the government of India for extending the facilities in higher education like free ships, scholarships, establishment of mobile institutions, tribal hostels and women hostels, reservation / relaxation of merit percentage for admission even in professional and non-professional courses for the disadvantaged population groups of our society i.e. SC/ST/OBC our system of education is producing a large chunk of unemployable. As a result, Indian education system has made only 74.04 percent of our population literate in India. It is frustrating that out of 74.04 percent of literate population there are 48.7 million graduates. Whereas, the percentage of graduates, post-graduates and doctorates in the rural sector is 7.2 percent. In others words, it indicates that wide infrastructure and huge expenditure on conventional system of education could not attract majority of our population to schools and colleges. Therefore, indicating the need for alternative system of education.

Distance Education being an alternative system of education is rapidly developing mode of learning. Open/Distance System of Education is considered important system of education both in the developed and developing nations. Distance education system applies new techniques of learning and pedagogical models of study. Presently, distance education system is playing an important role in dissemination of knowledge through non-formal mode by organizing
learning activity outside the structure of the formal education i.e., consciously aimed at meeting specific learning needs. Similarly, distance education is a method of indirect instruction, implying geographical and emotional separation of the teacher and taught.

1.1 DEVELOPMENT OF DISTANCE EDUCATION IN INDIA

Distance education hails its origin to mid 19th Century in Europe and the United States. An Englishman, Isaac Pitman who began teaching shorthand by correspondence in England in 1840. Students were instructed to copy short passages of the bible and return them for grading via the new penny Post system. The invention of educational radio in 1920 and the invention of television in 1940 created important new forms of communication to facilitate the distance education learners.

Distance Education has played an important role in imparting education for millions of Indian people for many decades. The first pilot project on correspondence education was introduced in Delhi University in 1962 and introduced distance education programmes in the form of correspondence courses. The development of distance education in India can be traced back in three stages:

a) Pre-take-off stage (1962-1970): This stage is referred as the germination stage. Ministry of Education, Govt. of India appointed an expert committee for alternative education with an objective to work out a relevant scheme of correspondence education for our countrymen. The expert committee suggested that University of Delhi to undertake a pilot project of correspondence education. Shortly after the report of the expert committee on education, Delhi University made a modest beginning by establishing Department of Correspondence Course in 1968 which was followed by the Punjabi University, Patiala, Meerut and Mysore Universities, in establishing Department of Correspondence Education 1969.

During take-off stage in the history of development of distance education many universities established correspondence courses institutes which provided a major thrust to distance education. Besides, a number of institutes also started postgraduate courses and some diploma/certificate courses.

c) **Drive for Maturity Stage:** Distance education in the country got a big push during the seventies, when more and more universities took distance education as an alternative mode of education. The State Open Universities came into existence in response to social needs for designing innovative educational structures, which could overcome the limitations of the conventional system of education. The Govt. of Andhra Pradesh made the momentous decision to establish Andhra Pradesh Open University in 1982, presently Known as Dr. B.R. Ambedkar Open University at Hyderabad. Latter, a strong demand was made in various quarters about the need of establishment of an Apex Open University, which could coordinate the work of all Directorates in the country. As a result, in 1985, the Government of India established the Indira Gandhi National Open University (IGNOU) at New Delhi. Indira Gandhi National Open University (IGNOU) was established. The University (IGNOU) presently has many Study Centres spread all over the country and the subjects like science, engineering, management courses, computers, health and nutrition are offered for study. The students are expected to undergo a compulsory
course of practical. Very few Directorates/Institutes have developed Science Programmes through distance education e.g. Annamalai has developed its own laboratories in regular colleges/University Departments for this purpose.

During eighties a Joint Committee of University Grant Commission (UGC) and Distance Education Council (DEC) was appointed for planned transformation of the Correspondence Course Institutions (CCLs). Unfortunately, the plight of distance education institutions in the country could not emerge as an independent sub system within the system of conventional system of education because of the problems viz.

i) Promotion policies.
ii) Appointments
iii) Staff development.
iv) Inadequate training and research programmes in distance education.

It is widely believed that distance education system comprises of many sub systems like material, service, schools and faculties, administration and other divisions with specific functions to each subsystem; among the various subsystems support service system assures greater significance.

In brief, India has one National Open University (IGNOU), 13 State Open Universities and more than 106 Directorates/Institutes of Distance Education/Department of Correspondence Education Courses attached to the regular universities in the country. All these institutions of distance/open learning offer widest range of programmes viz. from certificate to research degree level in subject areas as diverse as possible from science, technology, health care management, liberal arts and commerce. Over the years the distance education has emerged as a democratizing force. For instance, enrolment in distance education during 1975-76 accounted for 0.60 lakhs and 15.80 lakhs in 1999-2000. The share of distance education, which was only 2.35 percent of the total
enrolment in higher education in 1975-76, improved to 19 percent by 2004, 21 percent in 2006 and 23% in 2010. The enrolment of non conventional learners in Open Universities and Correspondence Institutes in India shows that Open Universities account for 37 percent and all the correspondence courses institutions 63%in 2010, this clearly shows that the Correspondence Courses Institutes (CCI's) in the country enroll more students than the combined enrolment strength of all the Open Universities in India.

Analysis of enrolment pattern indicates that of the total enrolment in distance education male learner accounted about 59 percent and those female learners accounted about 41 percent. Further analysis of the enrolment of the distance learners indicates that around 12 to 15 Directorates accounted for more than 80 percent of the total enrolment of distance education students with over 10,000 students on the rolls (a couple of it even crossing one lakh strength) which are termed as Viable Directorates and the remaining Directorates with lesser absorption were termed as non viable institutions as reported by the proceedings of the Vice- Chancellor Conference report, Hyderabad 1989-90 and Allahabad 2010. According to the report 2010 the objectives of the distance education are:

1. To provide an alternative method of education to enable a large number of persons with necessary aptitude to acquire further knowledge and improve their professional competence i.e. the students who, whatever the reasons had to discontinue their formal education and those who look upon education as a lifetime activity and may either like to refresh their knowledge in the existing discipline or to acquire knowledge in a new area.

2. To provide lifetime education to the youth, house wives, agriculture and industrial workers and professions to continue the education of their choice at the place suited to them.

3. It help to elevate promote and enrich the knowledge of the individuals.

4. Education is local (at home) but recognition is global.
Students can spend their time effectively for studies without affecting the normal life.

Easy time management to fulfill family social and work obligations.

Distance learning builds self discipline and self confidence naturally.

Builds an enduring personality which can face challenges independently.

Exposure and Experience of Technology in Education, e-learning, satellite education etc.

Multiple qualifications can be obtained simultaneously.

Due to continuous increase in population and scarcity of infrastructure, financial and personal resources distance education to help million of students to fulfill their educational aspiration.

Getting education through distance learning is economical and less time consuming.

1.2 FIFTH GENERATION DISTANCE EDUCATION

The next few years will encompass the significant impact of broadband, wireless, smart cars, smart fridges, streaming media, voice reorganization and the inevitable growth of new internet applications. In the present context, change is the only constant.

How might institutions of higher education respond to such a dynamic external environment? The need for institutions to not only do things differently, but to do different things was encapsulated by Dolence and Norris (1995), who argued that to survive the transition from the Industrial to the Information Age organizations would need to change from rigid, formula driven entities to organizations that were “fast, flexible and fluid” – adjectives not physically used to describe the salient features of the Universities! Given the predilection of educational Institutions in general, and universities in particular, to either wait and see do nothing for the moment, or to add something new to an already overcrowded programme of activities, it could well be that institutions of higher educations could become a threatened species. This is a somewhat surprising consideration, since universities are overflowing with clever, innovative students.
and staff, yet as organizations, universities are often considered to be primarily moribund. The traditional inertia of long – established institutions is reflected in the well known cliché, “Trying to change a university is like trying to move a graveyard – it is extremely complex, and you don’t get much internal support!”

If the internet is changing everything, will the internet also have the power to change universities? May be No. Organizational development requires proactive human intervention. It sometimes benefits from the implementation of explicit change management strategies.

Further as a Schlender (2000) recently pointed out, the internet has already “reached a stage that isn’t so much about vision and proprietary innovation as about execution and competition” (p.90). This emphasis on execution and competition is a particular challenge to the typically slowly evolving institutions of higher education, which need to find the means to “e-evolve” rather more rapidly in the Internet Age. Indeed, many universities are still struggling to come to terms with the imminent challenges posed by competition for online students through the emergence of the global lifelong earning economy. Universities with a significant role in distance education, however, are different: have they always been, and will always be, in the vanguard of innovation and institutional change.

For many years, universities with a significant commitment to distance and open education institutions have been at the forefront of adopting new technologies to increase access to education and training opportunities. Distance education operations have evolved through the following four generations:

1. Correspondence Model based on print technology.
2. Multi-media Model based on print, audio and video technologies.
3. Tele-learning Model based on applications of telecommunications technologies to provide opportunities for synchronous communication.
4. Flexible learning Model based online delivery via internet. Although many universities are just beginning to implement fourth generation distance education initiatives.
5. The fifth generation of distance education is essentially a derivation of the fourth generation, which aims to capitalize on the features of the Internet and the Web. To place the fifth generation Intelligent Flexible Learning Model into a meaningful conceptual framework, it is first worth reviving briefly certain features of the previous four generations of the distance education.

Some of the characteristics of the various models of distance education that are relevant to the quality of teaching and learning (Taylor, 1995) are summarized in Table 1.1, along with an indicator of institutional variable costs (Taylor, Kemp and Burgess, 1993).

### TABLE 1.1 MODELS OF DISTANCE EDUCATION

<table>
<thead>
<tr>
<th>Models of Distance Education and Associated Delivery Technologies</th>
<th>Characteristics of Delivery Technologies</th>
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<tr>
<td></td>
<td>Flexibility</td>
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<td></td>
<td>Time</td>
</tr>
<tr>
<td>First Generation: The Corresponding Model</td>
<td></td>
</tr>
<tr>
<td>- Print</td>
<td>Yes</td>
</tr>
<tr>
<td>Second Generation: The Multi-media Model</td>
<td></td>
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<tr>
<td>- Print</td>
<td>Yes</td>
</tr>
<tr>
<td>- Audiotape</td>
<td>Yes</td>
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<td>- Videotape</td>
<td>Yes</td>
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<tr>
<td>- Computer based learning (eg CML/CAL/IMM)</td>
<td>Yes</td>
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<tr>
<td>- Interactive video (disk and tape)</td>
<td>Yes</td>
</tr>
<tr>
<td>Third Generation: The Tele-learning Model</td>
<td></td>
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<tr>
<td>- Audio teleconferencing</td>
<td>No</td>
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<tr>
<td>- Video conferencing</td>
<td>No</td>
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<tr>
<td>- Audio graphic Communication</td>
<td>No</td>
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<tr>
<td>- Broadcast TV/Radio and Audio teleconferencing</td>
<td>No</td>
</tr>
<tr>
<td>Fourth Generation: The Flexible Learning Model</td>
<td></td>
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<tr>
<td>- Interactive Multimedia (IM/MM) online.</td>
<td>Yes</td>
</tr>
<tr>
<td>- Internet based access to</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### WWW resources
- Computer mediated communication | Yes | Yes | Yes | Yes | Yes | No

### Fifth Generation: The Intelligent Flexible Learning Model
- Interactive Multimedia (IMM) online | Yes | Yes | Yes | Yes | Yes | Yes
- Internet based access to WWW resources | Yes | Yes | Yes | Yes | Yes | Yes
- Computer mediated communication, using automated response system | Yes | Yes | Yes | Yes | Yes | Yes
- Campus portal access to institutional processes and resources | Yes | Yes | Yes | Yes | Yes | Yes

Fifth generation distance education has the potential to decrease significantly the costs associated with providing access to institutional process and online tuition. Through the development and implementation of automated courseware production systems, the fifth generation of distance education has the potential to deliver a quantum leap in economize of scale and associated cost – effectiveness. Further, effective implementation of fifth generation distance education technology is likely not only to transform distance education, but also to transform the experience of on campus students.

### 1.3 THE EMERGING E-UNIVERSITY: A CASE STUDY

Consistent with Schendler's (2000) proposed emphasis on execution and competition, the fifth generation model will not be presented solely as a set of abstract principles, but will be illustrated by an overview of the e-University Project, which has been planned thoroughly and is now in the early phases of implementation at the University of Southern Queensland (USQ). It is worth mentioning that USQ was the joint winner of the Good Universities Guide's Australian University of the year 2000 – 2001 for criteria focused on developing the e-University. The award, presented by the Prime Minister at Parliament House in Canberra, focused on the preparation of students of both under
graduate and post graduate courses and the University as a whole for the emerging 'e-word', with the following specific areas considered.

**Area 1:** Opportunities for students to access information and communications technologies.

**Area 2:** Tools for life as a student: the routine use of information and communications technology in administrative dealings with students.

**Area 3:** Tools for learning: using information and communications technologies in core educational processes.

**Area 4:** Opportunities for students to learn about information and communications technologies and their implications in the student's area (s) of specialization.

**Area 5:** The introductions of courses / specializations in aspects of the e-ward.

**Area 6:** Thinking through the use and implications of information and communications technologies in strategic planning and resource allocation.

1.4. **DEVELOPMENT OF DISTANCE EDUCATION IN JAMMU AND KASHMIR**

Jammu & Kashmir being hilly state has wider scope for Open and Distance Education. The state has the challenge of low literacy rate, lakhs of unreached people. Adoption of open learning through distance mode seems to be inevitable choice for its development.

The Correspondence Courses Institute was introduced on 17 December 1975 in Jammu University, and on 27 July 1996 the nomenclature of institute was changed to Directorate of Distance Education in confirmatory with the guidelines of University Grants Commission. The University of Kashmir was established in 1948 and it has one of the foremost centres of learning in the country.

Distance Education in the state can be broadly classified into following categories:

1) School Education.

2) Technical and Vocational Education.

3) Adult and Continuing Education and,

4) Higher Education.
1) **SCHOOL EDUCATION**

The profile of education in Jammu and Kashmir State does not provide a very encouraging picture. The literacy rate in the State is around 36% and at the same time the gap between literacy among males and females is quite wide. According to report only 36% of the age group 6 – 12 is found in the school and the rest are engaged in child labour, farm boys, cattle boys, automobile workers, etc. National Open Schools play an important role in providing all necessary Technical and professional guidance, but the initiative has to come from the state Government.

2) **TECHNICAL AND VOCATIONAL EDUCATION**

The State of Jammu and Kashmir calls for establishing linkage with private and public sector undertakings and industries to make distance education respond to the market economy of the state. The State of Jammu and Kashmir has the following factors which contributes significantly to the state economy and has great potential for employment generation namely:

Tourism, Horticulture, Handicrafts, Dairy Farming, Food processing - preservation Industry. The growth and development of distance education in Jammu and Kashmir State can take care for the further promotion of state economy by starting the courses in:

i) **Tourism**: The State of Jammu and Kashmir is known for its scenic beauty attracting large number of tourists the world over. The tourism sector plays an important role in boosting the economic of the state. In fact, tourism is one of the major sectors which have great potential in strengthening the economic position of the state. Effective business in the tourism sector by involving large number of manpower is engaged in the form of houseboat owners, tourist guides, tourist escorts, event managers, hotel managers, transporters etc. can boost the economy of the state. In order to train and equip the manpower of the state in tourism the distance education in the state can play effective role by organizing number of vocational programmes. The distance education institutions may
conduct social survey to identify the needs of the number of programmes to be started at the certificate, diploma, advanced diploma, and bachelor’s degree levels. For instance the state of Jammu and Kashmir has wide scope for introducing certificate programme in tourism studies which can prove most effective for those persons directly involved in tourism industry such as house boats, tourist guides, tourist escorts and hotel management etc.

(ii) **Horticulture:** The horticulture is the most important sector contributing to the state economy. A large number of people in the state of Jammu and Kashmir are directly or in directly associated with the horticulture particularly the fruit Industry. The avenues available for in the state for diversification of horticultural activities may include the processing, packing, storage, promotion, marketing of fruit products etc. The development of distance education in the state can develop Certificate, Diploma and Bachelor Degree programmes in order to carter to the needs of the people of the State to promote horticulture.

(iii) **Commercial vegetables and Nursery production:** The distance education in the state of Jammu and Kashmir in collaboration with the State Agriculture University can develop short and long term certificate and diploma courses to train the farmers and the youth to develop competencies to cultivate vegetables, using farming techniques for personal and commercial use.

(iv) **Handicraft:** Handicraft is also one of the important sectors of Jammu and Kashmir State’s economy. A large number of people all over the state are involved in the handicraft sector. The distance education in the State of Jammu and Kashmir can contribute a lot in disseminating knowledge and skills by organizing certificate and diploma courses through open and distance mode to encourage the use of scientific tools and technology in the production of handicrafts, marketing personal can be developed for those who are actively engaged in the handicraft production such as carpet, weaving, paper mechanic, wood carving and other cottage industry products.
(3) ADULTS AND CONTINUING EDUCATION

Adult and continuing is another area that did not receive adequate attention as a component of higher education in state. Continuing education through distance education is an important emerging Area. It assumes special significance for J&K State because of its far-flung areas and its flexibility to address diverse learning style and preferences. Its main aims to provide education to female population.

(4) HIGHER EDUCATION

The higher education through conventional system remained mostly confined to specific defined area of intervention. The increasing demand for higher education on the one hand and the limited output capacity of the conventional system on the other hand didn’t allow much scope for innovation.

The conventional system of higher education may concentrate its efforts in such areas which needs vigorous face to face class room interaction, practice, learning other merging areas to distance mode of education.

a) DIRECTORATE OF DISTANCE EDUCATION UNIVERSITY OF JAMMU

The Directorate of Distance Education in the University of Jammu needs to set up one study centre at every District headquarter in Jammu Division to provide the enrolled student of the Directorate for the following:

I) POST-GRADUATE PROGRAMMES

1. M.Ed.
2. M.Com.
6. B.Ed.
7. M.A. Sociology.
8. L.L.B Academic.
10. Certificate course in 6 months under through Hindi medium.
11. Certificate course in English (6 month's) improvement.

II) UNDER-GRADUATE PROGRAMME

The Directorate of Distance Education in the University of Jammu has Under-Graduate Programme of three years in the following streams namely:
1. Arts Stream
2. Commerce Stream

There are only Arts and Commerce Streams.

b) CENTRE OF DISTANCE EDUCATION KASHMIR UNIVERSITY

Centre of Distance Education, located in Kashmir University also has network of study centers located at district headquarters. Presently the university centres has well-equipped study centre at Srinagar, Jammu, Anantnag, Baramulla, Kupwara, Pulwama, Leh and Kargil.

I) POST GRADUATE COURSES
2. M.A. Economics
3. M.A. Urdu
4. M.Com
5. M.A. English
6) B.Ed.
7) M.Ed.
8) L.L.B. Academic

II) UNDER-GRADUATE PROGRAMME

The Centre for Distance Education Kashmir University has Under-Graduate Programme of three years in the following streams namely Arts Stream, Commerce Stream.

There are only Arts and Commerce Streams. The Science stream is not there. Much has been said but no serious effort has been made to identify the
key role players of illiteracy i.e. disadvantaged groups in the country in general and J&K in particular. Disadvantaged groups have cropped up because of geographical inaccessibility, communication inaccessibility, lack of transport facilities, lack of resources, lack of employment opportunities, underemployment, seasonal employment, rural and urban background and gender bias. Minorities, such as SC/ST/OBC and other disadvantaged population groups even among the super castes, industrialists / workers / landlords, the landless workers, the rich and the poor are all detrimental for healthy growth and development of a society. Distance education institutions in the State of J&K have been working to promote education in the country. Large number of courses have been introduced in the non-conventional institutions i.e., Distance Education Institution. The quality of these courses being organized is open / distance education institutions is the main concern of DDE / CCI. The scenario of development of open / distance education in India is fast changing. As a result, it has been noticed that rate of growth of distance education learners in the country is continuously increasing by 20% annually. In view of the increase in the number of distance learners enrolled in our institutions is imperative to evaluate the programmes organized by non-conventional system of education i.e., Distance Education Institutions.

1.5 RETHINKING DISTANCE LEARNING ACTIVITIES: A COMPARISON OF TRANSACTIONAL DISTANCE THEORY AND ACTIVITY THEORY (MODERN DE THEORY)

For over 30 years Moore’s transactional distance (TD) theory has helped to identify and distinguish distance education as an academic discipline and has provided a broad pedagogical framework for studies of distance learning activities. TD has missed the social characteristics of distance learners that are so important in today’s practice.

From the late 20th century, distance education has entered into its post modern development phase (Saba, 2007) and has shifted from a structural paradigm to a transactional paradigm (Garrison, 2000). particularly after the
occurrence of social software (blog, wiki, twitter, My Space, You Tube, Social book marking, etc.) and the rapid development of modern distance theory.

We compare TD with a social science theory. Cultural-historical activity theory, because (CHAT) is focus on social aspects of human activity whereas, TD has missed the social characteristics of distance learners.

TRANSACTIONAL DISTANCE THEORY

TD theory has been recognized by the field as a seminal concept that provides a broad framework for distance pedagogy. The idea of TD was first introduced into field in the early 1970’s by Moore (1972), and has been widely used to guide practice and research since then. The term ‘transaction’ was derived from John Dewey, further developed by Boyd and Apps, and recontextualized by Moore to the distance education field.

The transaction that we call distance education is the interplay between the people who are teachers and learners, in environments that have special characteristics of being separate from one another. It is the Physical distance that leads to a communication gap, a psychological space of potential misunderstandings between the instructors and learners that has to be bridged by special teaching techniques; this is the ‘Transactional Distance’ (Moore and Kearsley, 2005, p.224).

According to Moore (1983, 2007: Moore Kearsley, 1996), TD is determined by three factors and three variables. The three factors are teacher, learner and means of communication. The absence of any of one would lead to an absence of TD because ‘there can be no educational transaction’ (Moore and Kearsley, 1996, p.200). The degree of TD depends on three variables: dialogue, structure and learner autonomy. Dialogue describes the exchange of words, actions and ideas between teachers and learners, the nature and extent of which are determined by the educational philosophy of institutions, by the characteristics of individuals involved in the interaction, by the content or subject matter and by environment factors. A very important factor that affects dialogue is the means of communication. Structure is a measure of the extent to which a
course's elements, such as learning objectives, content themes, presentation strategies, and evaluation activities, change to meet the specific needs of individual learners. High measure of structure indicates that a course is rigid and cannot easily adopt to each learner. On the continuum of dialogue (D) and structure (S), Moore (1983) classified four categories of programs (-D-S, -D+S, +D+S, +D-S) that indicate the presence and absence of dialogue and structure in educational systems. Moore also hypothesized the relationship between dialogue, structure and TD. As dialogue increases, transactional distance decreases. As structure increases, transactional distance also increases, (Moore, 2007, p.9H). Learner's autonomy is the theory's third variable. Literally, learner autonomy means a learner's control over learning, activities and processes. Great TD requires high learner autonomy. There is need to reappraise the TD theory and its propositions in today's global socialization context because social-cultural aspects of distance learner is a major theme of today's academic life.

**ACTIVITY THEORY**

The cultural-historical theory of activity was initiated by a group of Russian Psychologists in the 1920s and 1930s, determined to turn the spirit of the Feuerback theses into a new approach to understand transforming human life. According to Vygotsky, psychology in the 1920s was dominated by two unsatisfactory orientations psychoanalysis and behaviorism. Vygotsky and his colleagues A.R. Luria and A.N. Leont'ev's formulated a completely new theoretical concept to transcend the situation: the concept of artifact mediated, Object-Oriented action, (Vygotsky, 1978). A human individual never reacts directly (or merely with reflects) to environment. The relationship between human agent and objects of environment is mediated by cultural means, tools and signs. Human action has tripartite structure.

CHAT has experienced three generations. The first generation centre around Vygotsky, created the idea of meditation. In the early work of the cultural-historical school, mediation by other human beings and social relations was not theoretically integrated into the triangular model action (Figure 1 below). Such
integration required a breakthrough into the concept of activity by distinguishing between collective activity and individual action.

Figure 1: (A) Vygotsky’s model of mediated action and (B) its common reformulation

Alexei Leont’ev reconstructed the emergence of division of labour as a fundamental historical process.

The second generation of activity theory derived its inspiration largely from Leont’ev’s work. In his famous example of “primeval collective hunt” Leont’ev (1981, p. 210-213) explicated the crucial difference between an individual action and a collective activity. The distinction between activity, action and operation became the basis of Leont’ev’s three-level model of activity. The upper level of collective activity is driven by an object-related motive; the middle level of individual (or group) action is driven by a conscious goal; and the bottom level of automatic operations is driven by the conditions and tools of the action at hand. However, Leont’ev never graphically expanded Vygotsky’s original model into a model of a collective activity system. Such a model is depicted in Figure 2 (Engeström, 1987, p. 78).

Figure 2: The structure of a human activity system
The activity system Model proposed by Engeström (1999) is used by researchers to map the explanatory factors that are discovered from activity, people and environment. The model shows the activity of subjects on an object, mediated through artifacts, interacting with a community, moderated by a set of rules and distributed by a division of labour. Each of these pieces of the activity system interacts with due others. This model is useful for bringing together a wide range of information about the factors that impact on the activity.

- In order to achieve our decided outcomes it is necessary to produce certain 'objects' which may include such things as knowledge, experiences and actual physical products. Some products may not be physical, e.g. processes or arrangements.

- The human activity is typical mediated by the tools used and artifacts that are considered in relation to the activities, e.g. policy documents, samples, recipes, facilities.

- The activity is also mediated by the community in which the activity is being carried out. The community may oppose or support the activity; it may facilitate or impede access to resources.

- In addition the community may support or impose rules on the subjects those persons, groups or organizations (that are undertaking the activity) or grant them discretion in their activities. There may also be 'rules' about the kind of products, knowledge and experiences that will be approved or acceptable, access to tools and artifacts and who is permitted to do which aspects of the activity.

- To the extent that it is engaged with the community the subject may share responsibility with community for the achievement of the object. This is likely to be realized through some form of division of labour.

DEVELOPMENT OF THE SYSTEM FROM AN ACTIVITY SYSTEM PERSPECTIVE INVOLVES

- Understanding the cultural and historic factors that have resulted in the present situation
- Clarifying the current 'disturbances' in the current form of the system — aspects that are poorly aligned, inadequate, in opposition.
- And then working to resolve these matters.

**LEVELS OF ACTIVITY**

Development of the activity itself from the subject's perspective is subject to movement between three levels of activity (Leontiev):
- Activity towards an objective carried out by a 'community'
- Action towards a particular goal and carried out by an individual or group
- Operation (largely automated for human or machine) dealing with a factor in the current conditions.

- The level of a particular activity depends less on the actual activity and more on the person or group undertaking it, e.g. applying for a position may be:
  - An activity for a first-time applicant and his family and friends
  - An action for an experienced applicant familiar with the industry and the selection processes likely to be used.
  - An operation for a skilled user of online job sites with a well developed CV.

**The third generation of activity** theory needs to develop conceptual tools to understand dialogue, multiple perspectives and voices, and networks of interacting activity systems. In this mode of research, the basic model is expanded to include minimally two interacting activity systems (Figure 3).

*Figure 3: Interacting Activity System*
COMPARISON OF TD THEORY AND ACTIVITY THEORY

MEDIATION: DEVICES VERSUS ARTIFACTS

The term 'mediation' is used in both theories; In TD the communication between teacher and learner must take place through physical devices. These physical devices mediate the interactions between teachers, students and contents. So the term 'mediation' in this context, the phrase 'Computer mediated Communication' is understood to mean that computers are the specific technology used to bridge the separation between learner and teacher. But language is not used as a 'device'; on the other hand 'mediation' in CHAT takes place through artifacts: tools and signs in all human activities. According to Engestrom, mediation by tools and signs 'breakdown the Cartesian walls that isolate the individual mind from the culture and society,' (1999, p.29). Within the system, the meaning of sign and use of tools are constructed as a culture develops overtime (Cole, 1999) and have an organizing effect on human thought (Vygatsky, 1978”). CHAT has done a better job and gives language great attention while discussing mediation as a human subject-related activity. We treat the role that artifacts (including language) play in distance teaching / learning process has a significant impact on our judgment of transactional distance. This difference between TD's view of device based mediation versus CHAT's view of artifact mediated communication is worth exploring further.

PARTICIPATION: INTERACTION VERSUS ACTIVITY

TD focuses on interactions between participants who are separated by distance. In CHAT, the focus is on the mediated nature of all aspects of human activity. Moore (1989) identified three basic types of interaction: Student-Teacher, Student-Student, and Student-Content. Fig 2 is adapted from Anderson and Garrison (1998), but also includes an interpretation of the learner-interface and learner-environment interactions proposed by Hillman et al. (1994), respectively. Figure 4, signifies an interaction between parts of the distance education system. This signifies the interaction between Student-Student, Teacher-Teacher and Content-Content interactions.
Figure 4: Shows the interaction between student, teacher, content, and interface.

Since this model is specific to distance education, there is no specific teacher-environment interaction because the environment in this model is the student's environment. Certainly the teacher has an environment of his or her own, but that environment is distinguishable, if not separate, for the environment of the student.

Modes of interaction in distance education adapted from Anderson and Garrison (1998), Hillman et al. (1990) and Burnham & Walden (1997). Full range of human activity is explained by CHAT Model.

Figure No 5 (Professional Learning as an Activity)
This Model shows the activity of subject on object mediated by Artifacts: tools & signs taking into account the historical aspect i.e. division of effort and cultural aspects i.e. community and moderated by a set of rules.

In CHAT Model, the rules the students follow, the division of labour, the students involved, the community the students line in are the factors that formulate individual differences. The individual differences are absent in interaction Model. CHAT Model is especially true in distance education, where students are more likely to be living within different national cultures and have different societal institutions, which Tolman states are carriers for 'information required by individuals for functioning in society (1999, p.72). TD’s view of an isolated individual versus CHAT’s view of a communal individual.

In short in TD, the term 'mediation' is used to represent the communications mediated by physical devices but language is not counted as a 'device'. In CHAT, however mediation has broader scope, and language has gained great consideration as an important social 'device' labeled as an artifact with in any human activity system. While interaction topology is a critical spotlight of the TD theory, CHAT’s tool-mediated and sign-mediated nature of all aspects of human interactions makes more sense with regard to the concept of social learning interactions. Structure, dialogue and autonomy are the three major constructs of the TD theory – are contradictory and complementary, in contrast to CHAT’s view of a communal individual, TD isolates learner from their multi-society contexts.

1.6 NEED OF THE STUDY

Open System of Education is gaining momentum because of its practical implications. The Open/Distance Education System enables the learner to constantly updating the education and skills without disturbing the normal routine of day to day life. In view of the pressing needs of the society and growing needs of each profession, distance education will be the future mode of education. In order to make the distance education system to succeed and progress, we need
to study the needs of the learners and the needs of the distance education system too.

The distance education today has been accepted and recognized mode of education for relevant training to meet out the emerging demands of our society. The application of information and communication technology is also changing the future of distance education. For a developing country like India with its given demographic and economic conditions, the non-formal education may be better suited for many of its societal aims such as literacy for all and universal primary education. Alternative strategies of education i.e. non-formal system need to be strengthening further so that they may help in acceleration democratization and modernization of education in India.

The system of distance education has the potential to fulfill the enormous responsibility of universalization and democratization of education, as it holds the promise of checking the falling standards at reasonable costs, making the optimum use of media and technology and providing education relevant to the needs of the country and its people.

The major objectives of distance education in India are:

a) To provide an alternative cost-effective non-formal channel for higher education.

b) To supplement the conventional university system and to reduce the pressure on it.

c) To provide a second chance at education for those who have to discontinue their formal education or could not join regular colleges owing to pecuniary or other circumstances.

d) To democratize higher education by providing access to large segments of the population in particular the disadvantaged groups such as those living in remote and rural areas, including working people, women and other adults who wish to acquire and upgrade their knowledge and skills through studies in various fields.
e) To strengthen and diversify the degree, certificate and diploma courses related to the needs of employment and necessary for building the economy of the country on the basis of its national and human resources.

f) To provide a means for continuing and life-long education for enriching the lives of the people.

g) To provide an innovative system of university education which is both flexible and open in terms of methods and pace of learning, combination of courses, eligibility for enrolment, age of entry, conduct of examination and operation of the programmes with a view to promoting learning and encouraging excellence in new fields of knowledge.

The need of study in the field of Distance Education is to analyse the programme of DDE, University of Jammu and CDE, Kashmir University. In this regard it is imperative to know the structural and functional practices of both the distance education institutions with respect:

(a) To know how DDE / CCE are designed, development and are deliver academic programmes to distance learners.

(b) Further need for conducting this study is to define in actual senses who are distance learners or remote users.

(c) To get information about the needs of the distance learners with respect to:

(i) Concerning the admission procedure.

(ii) Development and production of course material.

(iii) Dispatch of course material

(iv) Conduct of personal contact programme

(v) Provide student’s support services like: Study Centre, Library facilities, etc.

1. THE ADMISSION PROCEDURE

There should be the provision of sending prospectus and forms through post. The distant learners should be aware of fee structure and the total schedule
of the course. The information about the course should be available on the Internet. This will help him to choose a particular course and avoid wastage.

2. **THE COURSE MATERIAL**

Printed course material for the student is the back bone of any distance education programme. In distance education the course material is teacher in print not only enhances the student learning but also determine academic credibility of distance education. The course material helps the individual learners in the study he does on his own. The course materials produced on large scale are supplied with great financial advantage to large number of students scattered geographically. Mostly the course material fails to arouse interest and sustain motivation of the distance learners. There is an urgent need for fuller utilization of internal and external production facilities of the course material for distance education course.

3. **DISPATCH OF INFORMATION & MATERIAL**

Dispatch of required timely information & course material enhances interactivity in between the distance education institution and the distance learners. To identify the requirement of the distance learners suitable communication and its dispatch is to be maintained. If we analyze the present dispatch system of distance education in India, one would safely conclude that the biggest weakness of distribution system lies in its failure to meet the requirement of the individual students with respect to their study need. Difficulty in timely dispatch is because of management problem and there are organizational strategies to tackle this problem. The study material should be dispatched with in the stipulated period of time to the right address to ensure that the material have been reached to the students.

4. **ASSIGNMENT SYSTEM**

Holmbery (1958), is of view that assignments help in the distance learner in teaching by the following ways:
a) To support student motivation & make contact with an encouraging tutor or counselor.
b) To support & facilitate student learning by having comments, explanations & suggestions.
c) To assess the progress of students.

In practice the assignment act a feedback device to support the learner. The process of assigning assignment for the student of a course involves not only the correction of assignment & send them back to student but include tutor comments. Unfortunately, the process is not being followed effectively by tutors because insufficient time allotted to them which is very less and more involvement of labour.

5. PERSONAL CONTACT PROGRAMME

Face to face teaching a course for specified days /hours to orient the students of a course is known as personal contact programme in distance education. Sessions have often proved to be very useful and successful as supplementary materials. (Holenberg, 1988). The term PCP in the Indian context denoted the collection of distance learners and representatives of the supporting organization at a particular predefined place for specified period of time.

AIMS OF PCP

The major purpose of conducting PCP can be described as:

i) Formally teach the content to student.
ii) To conduct sessions to remove the difficulties of students.
iii) To use PCP as platform to remove learners isolation.
iv) To provide individualized tutoring & counseling to student.

PURPOSE SERVED BY PCP

i) Learning, reading is supplemented by teaching.
ii) Students academic problems are removed.
iii) Rapport with tutors & distance teaching system is established.
iv) Students are encouraged to put their problems & ideas.
VALUE OF PCP

Though it serves the purpose of removing the problems but do not necessarily serve to reduce all academic problems since more concentration is given only on lecture. In order to make it more beneficial from the point of view of the learner, more time should be allotted for face-to-face interaction rather than lecture. PCP has also been proved to be having optimum value to supplement the distance learners and provide enough time for discussion.

6. THE STUDY CENTRE SUPPORT SYSTEM

In addition to the PCP and assignment and support service distance learner still needs further help which can be supplemented through study centres. Generally study centres are being set up where there is good concentration of the learners and equipped with following materials:

a) A mini library consisting of relevant books, reference material etc.
b) Adequate facilities for sitting, reading and writing work. Staffed by a team of full or part time counselors.
c) Unfortunately, study centers have failed to act as platforms for removing learner's isolation and provide library and other media facilities at the time when they are really in need.

PRE-ENROLMENT GUIDANCE COUNSELING SERVICES

Provisions of academic pre-study counseling before selection of course should be made. Much initial counseling may be almost therapeutic as students will need attitude clarification in most cases before they need course counseling. They would avoid wastage as subsequent 'dropouts is a major problem in distance education.

7. EVALUATION SYSTEM

Evaluation system plays an important role in determining learners to assess their mental calibre. There are two types of evaluation viz. formative and summative evaluation. Formative refers to time to time evaluation whereas
summative evaluation refers to the evaluation at the end of the course to award the marks/ rank. Evaluation is important for following reasons:

i) To monitor one’s performance and with a view of improving it.

ii) To satisfy oneself to achieve self aims and objectives.

iii) To adopt the practice of getting internally written materials evaluated externally and vice-versa.

Though all the distance education system have committed to serve the learners with the best quality materials, disparity exists among conventional institutions regarding the educational standard, when the criterion of uniformity is in testing and assuring, there can’t be a cause for decline in the quality of distance education.

The difficulties in efficient management of various components of distance education system inspired the present investigator to decide to study the problems of distance learners at under graduate and post graduate levels of Directorate of Distance Education, University of Jammu and Centre of Distance Education, Kashmir University.

Since, Directorates of Distance Education Correspondence Institutes works on dual mode of education organizing distance education programmes. DDE/CCE because of their dependence on the parent university with regard to the curriculum, methodology of teaching, examination pattern etc has to face certain problems in facilitating distance education. The system of distance education in the state of Jammu and Kashmir is gaining popularity. The state has one DDE in Jammu University and one CDE in Kashmir University. The intake of the two Directorates in the state of J&K (viz. Centre for Distance Education, Kashmir University, Srinagar and Directorate of Distance Education, University of Jammu, Jammu) is increasing gradually every year, which reflects the increase in the demand for distance education courses. Keeping in view, the gradual increase in enrolment in number of distance learners in the State of J & K, (enrolment of 15,800 in DDE, Jammu and 12,300 in CDE, Srinagar) need was
felt to study the various distance education programmes run by DDE, Jammu University and CDE, Kashmir University through distance education mode.

1.7 STATEMENT OF THE PROBLEM

“A Comparative Study of Distance Education Programmes of Jammu and Kashmir Universities”

1.8 Objectives of the Study

Present study has the following objectives:

1. To study and compare the admission procedures of distance education programmes of Jammu & Kashmir Universities.

2. To study and appraise the objectives of distance education programmes of Jammu & Kashmir Universities.

3. To study and compare the fee structure of distance education programmes of Jammu & Kashmir Universities.

4. To study and compare the curriculum frame work of Under Graduate/Post Graduate Programmes of distance education programmes of Jammu & Kashmir Universities.

5. To study and compare the methods of instruction at Under Graduate/Post Graduate programmes of Directorate of Distance Education of Jammu & Centre of Distance Education of Kashmir Universities

6. To study and compare the pattern of Internal Assessment (Assignments/Class test) at Under Graduate/Post Graduate programmes of Directorate of Distance Education of Jammu & Centre of Distance Education of Kashmir Universities

7. To study and compare the students support services provided at Under Graduate/Post Graduate programmes of DDE of Jammu & CDE of Kashmir Universities

8. To study and compare the Evaluation pattern of DDE of Jammu University and Kashmir University at Under Graduate & Post Graduate level.
9. To study and compare the problems of Distance Learners at Under Graduate/Postgraduate programmes of DDE of Jammu & CDE of Kashmir Universities.

10. To study and compare pass percentage of the distance learners of DDE, University of Jammu and CDE, Kashmir University at UG and PG level.

1.9 HYPOTHESES

Directed to the objectives of the present study, following hypotheses have been formulated:

I) There exists no significant difference between the number of male and female distance learners in both the universities i.e. DDE, Jammu University and CDE, Kashmir University.

II) No significant differences exist between the number of employed and non-employed distance learners from DDE, Jammu University and CDE, Kashmir University.

III) There is no significant differences exist in pass percentage of distance learners enrolled with B.Ed. course of DDE, Jammu University and CDE, Kashmir University.

IV) A significant difference does not exist between the pass percentage of the distance learners enrolled with L.L.B. (Academic) course of DDE, Jammu University and CDE, Kashmir University.

V) No significant differences exist in pass percentage of M.Ed. course of DDE, Jammu University and CDE, Kashmir University.

VI) There exist no significant differences in pass percentage of distance learners enrolled with M.A (Urdu) course of DDE, Jammu University and CDE, Kashmir University.

VII) A significant difference does not exist in the pass percentage of distance learners enrolled with M.Com course of DDE, Jammu University and CDE, Kashmir University.
VIII) There is no significant difference exist in pass percentage of distance learners enrolled with M.A (English) course of DDE, Jammu University and CDE, Kashmir University.

1.10 LIMITATIONS

Distance education institutions are treated as mere appendages of universities. Bogged down by their down problems, very little time is devoted by the universities (Academic Councils and Executive Councils/Syndicates) to promote this technique of education.

The universities structure exhibits a kind of asymmetry with regard to distance education. Most educators believe that for a good and meaningful system of education, the operators of the system should pay dominant role in levels of decision making from its conception to its development in the context of distance education. Operator, the teachers and the non-academic staff of the Institutes/Directorates, are hardly associated with the process of decision making. The top university administrators make decisions without understanding the difficulties, problems, and feasible solutions pertaining to daily operations. This asymmetry destroys all initiative for devising innovations. It underlines the absence of autonomy in decision making surrounding the operation and development of distance education.

This lack of academic autonomy creates further problems. Since distance education institutions do not have their own independent faculty empowered to frame syllabi prescribe conditions of eligibility for different courses and innovate a system of evaluation relevant to distance educations. The distance education institutions have no option but to follow the syllabi of the conventional universities and adhere to the rigid framework of their eligibility and examination conditions.

Lack of financial autonomy is another serious impediment in the development of distance education. Many universities are promoting distance education in the belief that their institutions are a good source of generating surpluses which may then be used for other university infrastructures and programmes. Although the UGC’s directives impressed upon the universities to
use the resources generated through distance education institution only to promote facilities for distance students, this directive is not followed. Most of the programmes for developing distance education fail due to lack of financial support. This does not imply that there should be no limit on the financial autonomy of distance education institutions, but if it is decided that cost per student in distance education shall be one-third of the unit cost in conventional universities, then a provision should be made in the state budget or distance institutions.

Administrative autonomy is also not available to many distance education institutions regarding the recruitment of staff, the purchase of equipment, and the development of a separate set of norms consistent with the system of distance education in terms of leave, hour of work, and schedule of vocation. Excessive dependence on the formal system acts as a serious impediment to the proper functioning of distance education institutions. The real problem is that the traditional on-campus votaries of formal education still consider distance education to be a sub-standard second-best system. This attitude acts as a major hurdle to the growth of the distance education institutions in the conventional university set up.

Critics charge that distance education system is sub-standard. They even allege that reading material prepared by many directorates are comparable to cheap notes. Moreover, no worthwhile student services have been developing. These criticisms have an element of truth to them, but are largely based and impressionistic statements.

1.11 DELIMITATIONS OF THE STUDY

The study will confine only to 1000 distance learners of:
1. Under Graduate (UG) & Post Graduate (PG) Programmes of both the universities (i.e. Jammu & Kashmir University)
2. Certificate and Diploma courses will not be studied.
3. Technical courses will not be studied.
4. Psychological factors such as achievement and aptitude etc will not be studied.

1.12 OPERATIONAL DEFINITIONS OF THE TERMS USED.

The operational definitions of some terms used are stated below:

1. **Distance Education**: Distance education is the mode of study where learner can study without leaving his/her work/residential place.

2. **Distance Learner**: Distance learner is a student enrolled for course through distance education institutions.

3. **Distance Education Programme**: Distance education programme is one of the course listed in the list of academic courses organized by distance education institutions.

4. **Under Graduate Courses**: Under Graduate courses are the academic courses/activity organized by the distance education institutions at under graduate level.

5. **Post Graduate Courses**: Post Graduate courses are the academic activity organized by the distance education institutions at post graduate level.

6. **Professional Programme**: Professional Programme means courses organized by distance education institutions such as B.Ed., M.Ed., B.Lib, M.Lib, etc.

1.13 CHAPTERIZATION

After presenting the theoretical frame work for the present study in the first chapter the review of related literature is given in chapter-II. The chapter –III deals with method and procedure of study. The analysis and interpretation of data is submitted in chapter IV. Beside these, Summary and conclusions, bibliography and appendices are attached at the end of this research report.