

# **A Minor Research Project**

**Topic On: “A Comparative study on academic achievement between open and distant learning and traditional on campus student at post graduate level in Guwahati city.”**

*Submitted to*

Krishna Kanta Handique State Open University  
Rani, Patgaon  
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**By**

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Shikhamoni Das

## **Certificate**

This is to certify that Mrs Shikhamoni Das assistant Professor of Charaibahi College has completed a minor research project on the topic “A Comparative study on academic achievement between open and distant learning and traditional on campus student at post graduate level in Guwahati city.” This is an independent work and does not constitute part of any material submitted for any research degree or diploma here or elsewhere.

Project Coordinator

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## **Chapter ---1**

### **Introduction**

#### **1.1 Academic Achievement**

The term 'Academic Achievement' is said to be the coinage of the great Greek philosopher Plato. According to him, "Academic achievement means the attainment level, at which a student functions in his or her school task through a regular curriculum in a fixed place to which he named as the academy." Achievement indicates how much knowledge and skills an individual has obtained in various school subjects (Mohanty 1988). Academic achievement plays a prominent role among school going children. Academic achievement is one of the most important goals of education. It is the outcomes of education the extent to which a student teacher or institution has achieved their educational goals.

Academic achievement can be defined as excellence in all academic disciplines, in class as well as extracurricular skills, punctuality, assertiveness, arts, culture and the like. Academic achievement is something you do or achieve at school, college or university in a class, in a laboratory, library or fieldwork. It does not include sport or music. An academic achievement, such as graduating, 1st in one's class, is sometimes a purely quantitative matter, which having the findings of lengthy, comprehensive research published by a recognized journal is also a notable academic achievement. Being named head/chairman of a particular department at a university is both a professional and an academic achievement.

The world is becoming more and more competitive. The desire for high level for academic achievement puts a lot of pressure on teachers and schools, including the educational system in general and on students in particular. Parents desire that their children climb the ladder of performance to as high a level of achievement as possible, which puts a lot of pressure on

students. The whole system of education revolves around the academic achievement of the students. Thus, to maximize the achievement within a given set of conditions has become the realistic goal of every education. In educational institutions, success is measured by academic performance, or how well a student meets standards set out by local government and the institution itself. As career competition grows even fiercer in the working world, the importance of students doing well in school has caught the attention of parents, legislators and government education departments alike. It is generally agreed that one of the main objectives of education is to realize the potential of every individual child, however, there are children of all ability levels who for various reasons, fail to reach their full-development and do not attain the scholastic level expected from the majority of their contemporaries. It has been observed that among children of exceptionally high intellectual ability many not only fail to reach the academic level of which they are capable but quite often their school performance is consistently lower than that of their average ability peers. This brings us to the terms academic under achievement, over achievement, dropouts.

The term refers to the degree or level of success attained in some specific tasks, especially scholastic performance. Assessment of academic achievement is largely confined to the evaluation in terms of information, knowledge and understanding. Academic achievement has become an index of a student's future in this highly competitive world. In general, achievement refers to the scholastic or academic achievement of the student at the end of an educational programme. In spite of having similar educational facilities, environment, aspiration and even intelligence, academic achievement of students differs from one another. The research findings hold that the cause of such difference is not only of intellectual incompetency but

because of different other emotional causes like stress and incapability to tackle different emotional situation, due to which they were not able to adjust with the academic environment.

Goods (1959) refer academic achievement as ‘the knowledge attained or skill developed in the school subject usually designed by test scores or marks assigned by the teacher.’ The result of different researchers indicate that emotions, being the most significant and influential component of personality plays a significant role in one’s performance. Therefore the study of academic achievement has assumed a lot of significance in the modern educational system. Teachers’ personality, attitude, expectations, behaviors have a profound impact on students’ academic achievement. Teachers require specific skills and knowledge in order to facilitate the academic, cognitive and affective development of students. According to Jersild et. al. (1978) the best liked teachers are warm, friendly and emotionally involved with their students, while the least liked are sarcastic, strict and dull.

Academic achievement is the outcome of education the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important procedural knowledge such as skills or declarative knowledge such as facts.

According to Thakur, T (1947) Academic achievement is that how for the schools how been able to help the students to keep up their level of achievement throughout their school carrier and how for the school have been able to help the student to develop their intellectual capacity as revisable by their ability and aptitude.

Verma (1996) noted that high anxiety and high ability students did poorly on math and general science. Academic achievement refers to the total marks secured by the student in different school subject in the annual ix and x Examinations in the academic year (2009-2010) found that study habits were

positively related to achievement in tenth grade examination in Delhi (N=1000), good study habits are positively related to achievement.

## **1.2 Socio- economic Status and Academic Achievement:**

Academic performance is affected by a number of factors including admission points, social economic status and school background. Geiser and Santelices (2007), Acato (2006), and Swart (1999) all argue that admission points which are a reflection of the previous performance influence future. According to Graetz (1995), one's educational success depends very strongly on social economic status of the parents. Considine and Zappala (2002) argue that families where the parents are advantaged socially, educationally and economically foster a high level of achievement in their children. The researcher agrees with Considine and Zappala (2002) because students from high social backgrounds are well exposed to scholastic materials which aid their intelligence. Sentamu (2003), Kwesiga (2002) and Portes and Macleod (1996) as cited in Considine and Zappala (2002) all argue that the type of school a child attends influences academic achievement. According to Minnesota measures (2007), a report on higher education performance, which was produced by the University of Minnesota, the most reliable predictor of student success in college is the academic preparation of students in high school.

Social Economic Status (SES) according to Considine and Zappala (2002) is a person's overall social position to which attainments in both the social and economic domain contribute. They add that social economic status is determined by an individual's achievements in, education, employment, occupational status and income. In this study social economic status (SES) was characterized by family income, parental education and parental occupation. Graetz (1995) argues that children from high social economic status families perform much better at school compared to children from low SES families.

Socio economic status continues to be one of the important determinants of educational achievement. It is also a fact that in the area of psychological performances, Sociological Advancements and cultural development, the role of Socio-economic status is an effective one. Socioeconomic status, cultural context and Academic ore, they are the three most prominent factors that impact an individual's growth and development. Each separate component is very closely linked in our everyday lives; touching and molding who we become.

Socioeconomic status (SES), also referred to as social class, plays a major role in human growth and development. SES is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic or social position in relation to others. SES can influence a person's education level, quality of health care, diet, place of residence; even stress levels. Culture is a system of beliefs, values, languages, and behaviours, and human-made aspects of the physical environment, that varies from one group to another. These variations can have powerful effects on adolescent development.

Owens (1999) in her study exploring beliefs about academic achievement studied the relationship between parent and guardian educational attainment to academic achievement and concluded that the educational attainment of parent or guardian does have a relationship with academic achievement of their children, she argued that the higher the parent or guardian's educational achievement, the higher the academic achievement similar to what King & Bellow (1989) had said. Sentamu (2003) argued that rural families and urban families where both parents were illiterate or had inadequate education do not seem to consider home study for their children a priority and that illiterate families will not foster a study culture in their children since the parents themselves did not attend school or the education they received was inadequate to

create this awareness in them. These differences in home literacy activities are likely to be reflected in school achievement.

According to the literature cited it can be seen that social economic status is related to academic performance, whether one studies social economic status as a whole or with distinct dimensions, there is considerable support to hypothesize that parents' social economic status affects academic performance of students. (Jeynes 2002; Eamon 2005; Greatz 1995; Considine & Zappala 2002; Hansen & Mastekaasa 2003) Students who come from low social economic backgrounds earn lower examination scores compared to their counter parts from high social economic backgrounds (Eamon 2005).

Joshi, Shobhana V., 1997; showed that the poor economic condition of the parents in rural areas was the prime reason of female educational backwardness. Parents in rural areas were negligent and against the female education. Fetler (1999) The California state high schools, Poverty had a strong relationship to Achievement at the school level.

The Socio-economic status and its relationship to student Achievement is more complex that Coleman's (1966) report first intimated. First of all, the relationship can be explored on various unit levels, from that of nations and states, districts, and schools, and on to classes and individual students. At the national level, Chall (1996) analyzed a combination of National Assessment of Educational Progress (NAEP) reading results, Scholastic Aptitude Test scores over time.

Patel (1997) has found that socio-economic level of parents had a large impact on the achievement on the lower socio-economic level.

Harkreader and Weathersby (1998) found its influence much less than economic factors, whereas Bankston and Caldas (1998) concluded that minority status was more highly related to achievement than was socio-economic status.

Ameerjan (1984, 1987) also found that the tribal students of B.Sc. (Agriculture) showed significantly lower academic achievement than the non-tribal and their educational aspiration was lower than other students. He further found that the caste sub-culture and socio-economic level affect the general mental ability and verbal ability.

The conflicts between parental needs and expectations and those of adolescents also may manifest as overt parent-adolescent conflicts. Differences in the nature, level, and correlates of parent-adolescent conflicts across the different cultures that have been studied (e.g., Chen et al., 1998; Greenberger & Chen, 1996; Yau & Smetana, 1996) study examines the attitudes of high school boys towards life and humanity in relation to socio-economic status.

The superior school achievement: the cultural value of education, cultural beliefs in the positive outcomes of hard work, high parental expectations and standards, dynamic classroom instruction, and more time devoted to academic work in and outside of school (e.g., Stevenson, Chen, & Lee, 1993). Distance learning is now being offered as a method of degree obtainment by many two-year and four-year higher education institutions (Waits & Lewis, 2003). The technologies incorporated into the distance learning environment have made it possible for students to attend higher education institutions that were in the past prohibited, due to relocation constraints. However, there are many differences between distance learning and traditional on-campus learning. Therefore, it is important that researchers conduct comparison

studies to determine if the quality of distance learning programs is equivalent to the quality of traditional on-campus programs.

Students' educational outcome and academic success is greatly influenced by the type of school which they attend. The school one attends is the institutional environment that sets the parameters of a students' learning experience. Depending on the environment, a school can either open or close the doors that lead to academic achievement. According to Considine and Zappala (2002) the type of school a child attends influences educational outcomes.

### **1.3 Open and distance learning**

Open and distance learning has been in operation for over one hundred years in more developed regions, but usually only for one or two generations in developing regions. Today, it is one of the most rapidly growing fields of education and training. Open and distance learning has long been understood to be learning where the learner and teacher are separated by time space and/or distance. Since its beginnings in the 1800's as print materials distributed via a postal service, open and distance learning has evolved over this time period with the introduction of radio and television broadcasts, then cassette and video tapes and, more recently, CD Roms, podcasts and vodcasts and synchronous technologies have continued to expand the reach and type of materials and learning activities presented to students. Open and distance learning is now mainstreamed in a new learning landscape created by the availability of technologies supporting flexible, accessible and increasingly personalized education. While originally conceptualized for the learner who may be unable to attend a traditional learning setting (for numerous reasons) or for the 'second chance' learner, today open and distance learning is viewed as an option amongst the many now on offer for those who need flexibility in where, when and how they study

## 1.4 Distance Learning in Higher Education

Distant Education has become a recognized method for delivering educational content in institutions of higher education. According to Allen and Seaman (2007), improving students' access to higher education has been cited as a major reason for offering Distant Education courses and Programme. Distance Education involves a student-centered approach in which the instructor takes the role of the facilitator and students engage in peer learning. Distance Education has emerged as a tool for widening access to higher education for personnel in employment and those who could not be accommodated in the conventional modes of education process.

Carrière and Harvey (2001) defined distance learning as an educational environment where the teacher and learner are separated in space and/or time. Distance learning is not a pedagogical phenomenon of recent origin. Its roots can be traced back to the 19th century. Sumner (2000) characterized the growth of distance learning into three generations. The first generation was correspondence study. The first recognized correspondence course in shorthand was offered in England in 1840. Later in the 19th century, correspondence courses were offered in the modern languages and in courses in preparation for university entrance. At the end of the century, correspondence courses were instituted at universities in Canada, America, and in other European countries. The second wave of distance learning, the multimedia distance education, incorporated broadcast media and cassettes along with print material. The growth of the multimedia stage was attributed to the Open University of the United Kingdom. The Open University began in 1969 and used the above mentioned media to lift distance learning to a new level. Even though new technologies were being used, by the end of the 1980s, print material was still the main media used in distance teaching (Sumner, 2000). The third generation

of distance learning was identified by Sumner (2000) as the computer: mediated distance education. Technology incorporated into the computer: mediated generation included the internet and the World Wide Web (Sumner, 2000). Courses were created using synchronous and/or asynchronous technologies (Stewart & Wright, 2004). Video conferencing (Miller & King, 2003), audio conferencing, electronic mail, videotapes, audiotapes, and print materials were also incorporated (Sheppard & Mackintosh, 1998). Swisher and Mandich (2002), stated that various types of media can be incorporated into these distance environments to meet the educational objectives of the course. Educational technologies have advanced at a rapid pace and distance learning, via only printed material through correspondence courses may well be a thing of the past.

Distance learning in higher education is in its infancy and the current and future capability of this medium as a replacement for traditional classroom education has yet to be determined. Researchers have found that there are many issues that must be addressed before distance learning can be successful. These issues are, problems with technology (Andrusyszyn, Soeren, Laschinger, Goldenberg, & DiCenso, 1999; Crowley et al., 1999), feelings of isolation (Rodger & Brown, 2000; Swisher & Mandich, 2002), ineffective communication (Ali, Hodson-Carlton, & Ryan, 2004), lack of face-to-face interactions (Rovai & Barnum, 2003), not enough technology support (Lee, 2002), and faculty time commitment (Ryan, Hodson-Carlton, & Ali, 2004).

Another concern of researchers is distance learning students' academic performance. Researchers have attempted to determine if there are any student characteristics that may influence academic success (Cheung & Kan, 2002; Alstete & Beutell, 2004). Researchers have also compared course grades (Collins & Pascarella, 2003), retention rates (Naidr, Adla, Janda,

Feberová, and Hladíková, 2004), and certification scores (Crowley, 1999; Freeman, 1995), of distance learning students to their traditional on-campus counterparts. Studies have been performed on distance learning students in general education courses, professional courses, and healthcare courses.

Age, gender, entrance examination results, and previous academic achievement are some of the characteristics that have been studied to determine what type of students perform best in the distance learning environment. Some researchers have found that women performed better in a distance learning environment when compared to men (Cheung & Kan, 2002; Alstete & Beutell, 2004), while other researchers found that there was no relationship between gender and academic performance (Barakzai & Fraser, 2005). Cheung and Kan (2002) found no relationship between student age and academic performance. In contrast, Alstete and Beutell (2004) found a significant positive relationship between students' ages and grades received in online courses offered in a Masters in Business Administration program.

The relationship between previous academic performance and distance learning academic performance has also been studied by researchers. Alsete and Beutell (2004) found a significant positive relationship between undergraduate GPA and grades received in online courses. Bearden, Robinson, and Deis (2002) also found that students with lower GPAs did not perform as well as traditional on-campus students with the same GPA in a dental hygiene nutrition course.

There is abundant research comparing the academic performance of distance learning students to the academic performance of students who received their education in the traditional on-campus environment. Bernard et al. (2004) stated that this type of comparative research has continued to increase even though there are prominent voices within the field that

have stated that there has been enough comparative research on distance learning. However, Bernard et al. stated that comparative research is useful because distance learning is growing at a phenomenal rate. Consequently, colleges and universities are competing for the worldwide market that this type of technology has created. Bernard et al. (2004) stated that researchers needed to design studies that administrators and policymakers can use to determine whether distance learning can be a successful alternative for traditional on-campus education.

### **1.5 Education and human Resource**

Education is the most potent mechanism for the development of Human Resource. It enhances, enriches and improves all the aspects of human resources. The institutions of today are expected to impart quality education to develop competent and capable individuals who can sustain in the competitive dynamic environment of tomorrow. The role of higher education in the development of human resources for national development can never be disputed. Higher education can produce high level professionals, technical and managerial personnel, generates new knowledge through research and impart such knowledge leading to development of human resources. However, higher education institution in India in general and in Assam in particular, has not been able to perform its optimum role in the direction of Human Resource Development. In this regard the emergence of Open and Distant Learning (ODL) system is playing a great role.

Since independence, there has been significant progress in human resource development in India as reflected in broad indicators viz. improvements registered in educational attainments, health coverage and in provision of basic social infrastructure. Human resource development in India is at present characterized by a good deal of imbalance at all kinds in terms of region, gender and levels of education. There are disparities in the secondary and higher levels of education as well as the level of educational attainment of different population. For reducing

these disparities, use of modern communication technology has been emphasized and distant education has been adopted using a variety of means and methods including videoconferencing and computer based learning. Distant education has created the possibility of and has the potential to provide large-scale multi-media education for the development of human resources.

### **1.6 Open and Distant Learning Education (ODL) in India**

After Independence, central and state governments of India have given importance to education sector for achieving the developmental goal. Various committees and commissions were set up by the Government of India to look into the problems of educational reforms. One of the recommendations of these committees was special focus on educational development in north-east states of the country. Assam has one of the most widespread networks of higher educational institutions in the north-eastern region of India. The Government of Assam introduced education polices to create a center of attention for aspiring students all across the state. There have been some important developments in the field of higher education in Assam. The establishment of two central universities, one Indian Institute of Technology (IIT) is the right steps taken by the government for providing higher education to the young population in the state. At present, Assam state has six universities (2 Central and 4 States), two institutes of national importance and several reputed professional institutions. In addition to this, there are several colleges and institutions like, science and commerce (337), engineering, technology and architecture (7), medical (7), teacher training (40), and other colleges (153) for degree programmes and 13 polytechnic institutions. The state has recently made strides in setting up several high standard institutions to provide education in all professional areas. Despite this development in higher education sector in the state, the Gross Enrollment Ratio (GER) in higher

education (18-23 years) of the state was lower (8.3%) in comparison to national level (13.8%) during 2009. The GER of male (10.7%) and female (5.7%) in higher education of the state was also lower in comparison to national level male (16.1%) and female (11.3%) (MHRD, 2011). We cannot achieve higher enrolment ratio without adopting the cost effective higher education system in the state. To meet this challenge, State Government of Assam has set up an Open University named as The Krishna Kanta Handiqui State Open University (KKHSOU) in Guwahati, Assam.

With the establishment of the B.R. Ambedkar State Open University in 1982 and the IGNOU in 1985, distance education has emerged as a distinct educational system. In order to meet with the demands of globalization for sustainable development, the government of India has established the Indira Gandhi National Open University (IGNOU) by an Act of parliament in 1985 at national level. It is a pioneer in ODL in India and is among the prime educational institutions in the country. Open and distance Education has now attained a pride of place in the world. Indeed, this mode of learning is today accepted not only as an alternative to formal education but also as an efficient, cost effective process enabling huge student numbers to acquire degrees, diplomas and certificates in several areas of knowledge. In fact, government in all around the world and in the developing countries in particular today have accepted ODL as a legitimate means of meeting educational goals.

### **1.7 Open and Distant Learning Education (ODL) in Assam**

To meet the challenges of higher education, State Government of Assam has set up an Open University named as The Krishna Kanta Handiqui State Open University (KKHSOU) in Guwahati, Assam. Krishna Kanta Handique State Open University (KKHSOU), Assam was established in the year 2005 which plays an important role in development of human resource.

The very purpose of establishment of the University is to promote education to reach the unreached through the open and distant learning system and motto of the university is 'Education Beyond Barriers' of age, academic background and geographical boundaries and the university started offering programmes since January 2008. The university has also started Bachelor Preparatory Programme(BPP) for those students who could not pursue higher education for various reason but have the zeal to fulfill their hidden desire of acquiring higher education. Besides university have started programmes like B.A, B.Com, BCA BBA, MA and Ph.D. KKHSOU also plays an important role by making its courses socially relevant and useful for learners. As an open and distant learning institution, this university has some more flexibilities than a conventional university in the teaching-learning process. It also offers in serving Teacher Training programme, D.El.Ed from 2012 in order to train the untrained teacher of the state.

### **1.8 Open and Distant Learning and human Resource Development**

The Open and Distance Learning (ODL) play a significant role in our education system as it covers a large number of people for imparting education. Distance learning provides access to learning when the source of information and the learners are separated by time and distance or both. ODL is considered to be a significant system for Human resource development in an age of advanced learning. The ODL system is the only corridor through which those sections of population, who were once deprived from the purview of higher education in conventional system for one reason or other, can pursue life-long learning in a flexible and cost-effective mode. Distance Education offers an opportunity for the people those who dropped out from schools colleges on economic compulsion and now engaging themselves in trade, business, women who got married early and discontinued their education in schools and colleges, who work in offices and industries without completing degrees, diplomas required for their

professions, those persons including housewives who simply could not carry in their studies in the conventional system in time and now desire to pursue education, who wants to broaden ones knowledge no matter the person is retired or going to be retired from job or is the working force of the state. This working population can utilize the distance mode in acquiring skill and needed education which in other way help in their promotion and option for new job opportunities. Another very benefit of open and distance learning is that it has flexibility in curriculum, which can be molded and shaped according to the need of the society. A debayo (2007) defined open and distance learning as the type of education that place outside the conventional school system; it is imparted without necessarily having personal interaction with students and learner.

### **1.9 Statement of the Problem**

Education has to be considered in relation to its global economic, social and cultural context. Increasing populations; development of more knowledge-based, service-oriented and increasingly globalised economies; the resultant changes in the organization of work and the structure of skills/competencies needed; rising mobility of people, programmes and institutions across borders and the requirement in a fast-paced world to retrain regularly and continuously refresh knowledge are some of the factors placing increasing and ever more diversified demands on the education sector in the networked society. Virtually all countries worldwide are facing the challenge of expanding access in all its forms, improving quality and ensuring equity, especially in higher education. Declining public funding in many national contexts and often inadequate financial and administrative capacity to respond to the growing demand have already sometimes pushed educational development outside the public education sector, for example, to private education and training organizations and employers. Increasingly, online education in many global jurisdictions is not purely the domain of the public education

sector. The pressure of these demands has also led to a growth in the number of single mode open universities that have emerged to absorb large numbers of new learners, as well as a general trend of traditional universities to start offering their programmes through distance education.

In an era of decreasing state funding for higher education and increasing demand for enrolments, particularly in developing countries, it is hardly surprising that there is growing interest in the use of online and distance learning, especially at the higher education level, to extend access and increase flexible learning opportunities. The rapid development of ICT has been a driving force behind the major changes in the world economy and the emergence of more open, knowledge-intensive, interdependent and internationalized societies. Advances in ICT continue to create new challenges and opportunities for the design and delivery of higher education and reinforce the trend towards greater online delivery of education. Most higher education providers now deliver at least part of their courses online to support traditional teaching (referred to as dual mode, hybrid or blended learning amongst others).

Distance education has become a recognized method for delivering educational content in institutions of higher education. The academic performance of distance learning students is a concern for many faculty, administrators, professional organizations, and accreditation agencies of distance learning courses and programs. For this reason, researchers have compared the academic performance of open and distance learning students to their traditional on-campus counterparts. Researchers have also attempted to determine what student characteristics influence student academic performance. Researchers have performed meta-analyses on the research data available and have concluded that there is great variation in the types of studies performed and the outcomes of these studies. However, as a whole, the researchers have found that the academic performance of distance learning students is

comparable to that of traditional students. Distance learning for the acquisition of course credits is now a common event in higher learning.

In addition, many programs, including healthcare education programs, are now offering their entire curriculums via distance learning. Researchers have performed studies that compare distance learning students to their traditional counterparts however; very few studies have compared the academic performance and student characteristics of students who have obtained their entire degree through distance learning to those that have obtained their degree in the traditional setting. In addition, there has been very little research performed that compared certification or licensing scores from external agencies of distance learning students to their on-campus counterparts. Consequently, there is little known about how distance learning students function as first-time practitioners when compared to those that obtained their degree in face-to-face campus settings.

Open and distance education is an alternative means of offering various educational programmes at different levels of education. KKHSOU of Assam has made significant contribution in the field of distance education and it plays a crucial role in the economic development of the state by meeting human as per its needs. Distance education can cater to the requirement of those who are on the job. Their knowledge can be updated through continuing education programme and continuing education can improve work efficiency and productivity and thereby contribute to economic growth.

In addition to the positive and negative issues, there is also the concern of student academic success in the distance learning environment. The purpose of this study is to determine to what extent open and distance learning students and traditional on-campus students differed in academic achievement. Therefore it is titled as –“A Comparative study on academic

achievement between open and distant learning and traditional on campus student at post graduate level in Guwahati city.”

### **1.10 Research Questions**

The researcher intended to answer the following research question: What are the differences in academic performance between the two groups of students open and distance learning students versus traditional on-campus students? The researcher used the following sub questions to answer the main research question:

1. To what extent do the two groups, open and distance learning students and traditional on-campus students; differ by the background factors of gender and age?
2. To what extent do the two groups, open and distance learning students and traditional on-campus students, differ by academic performance?

### **1.11 Objectives of the study**

Following are the objectives of the study

1. To study the factors effect on academic performance on the two groups, open and distant learning student and traditional on-campus student.
2. To study the difference of academic performance on the two groups, open and distant learning student and traditional on-campus student.

### **1.12 Limitation of the study**

Study has been delimited only the post graduate student of arts stream. It is covered the performance of the student of Education department of last three years i.e. (2011-2012), (2012-2013), (2013-2014). On the other groups, primary and secondary data has been collected

from the student of the various study center of open and distant learning of Krishna Kanta Handique State Open University of Gauhati University.

### **1.13 Operational Terms**

**Academic Achievement:** “Academic achievement is that how for the schools how been able to help the students to keep up their level of achievement throughout their school carrier and how for the school have been able to help the student to develop their intellectual capacity as revisable by their ability and aptitude.” (Thakur, T.1947)

**Open and Distance Learning (ODL):** “Such systems are designed to offer opportunities for part-time study, for learning at a distance and for innovations in the curriculum. They are intended to allow access to wider sections of adult population, to enable students to compensate for lost opportunities in the past or to acquire new skills and qualification for the future. Open learning systems aim to redress social or educational inequality and to offer opportunities not provided by conventional colleges or universities.”

**Traditional system of education:** It indicates the formal learning situation.

**Post graduate level:** The educational level after completing under graduate level.

## Chapter---2

### Review of Related Literature

The present study examines the learner characteristics in the success of the system, taking into account variables like socio economic status, study habits and attitude towards distance learning in relation to their academic achievement. It is therefore useful to examine the works so far conducted in this area by established scholars and experts. An attempt has been made in this chapter to review the related literature of both foreign and Indian studies pertaining to the area of research undertaken.

A review of literature related to this study covered four sections of the investigations (a). Study related to Socio economic status (b) Study related to Attitude towards distance education (c).Study related to Academic Achievement

Mehta Neelima (2011) A study of factors governing access and equity in open distance learning programmes: with special reference to distance mode institutes (DEIs) of dual mode universities in Western Maharashtra. Ph.D Thesis.

Objectives: The objectives of the Study were 1. To explore the causes of how far the Distance Education has actually made education accessible. 2. To identify the factors governing access. 3. To assess the degree of inequality, causes of inequality.4. To suggest the remedial measures for promoting inclusiveness

Proceedings: The population of the study was distance learners form dual mode universities in Western Maharashtra. The sample of the study comprised of 1020 students from four Open Universities namely University of Mumbai Tilak Maharashtra Vidyapeeth S.N.D.T. University, Shivaji University. Simple random sampling technique was used for the study.

Questionnaire was implemented to collect the data. The study was limited to a few personal variables like gender, religion, caste, educational qualification, geographical distance, medium of instruction, and socio-economic background of the distance learner.

Findings: The findings revealed that The Open Distance Learning System (ODL) has emerged as a vibrant and dynamic component of higher education infrastructure in the country. It provides access to quality education; about 23.35% of the total population of learners in Higher Education was taken the advantage of Open Distance Learning System. The caste wise enrollment of learners in Western Maharashtra through distance mode showed positive result, about 23 percentages of students belonging to the scheduled caste and scheduled tribe categories. More than 50% of learners were unmarried. Most of the distance learners were employed; they had taken admission in Distance mode with the intention to get promotion and or for better job prospects. She concluded that there was large number of learners that had yet to be reached and providing access to them is a challenge before the system while ensuring equity poses definite challenge for ODL system.

Rao Vijayeshwari G. (2010) Socio Economic Impact on the Performance of Distance Learners (A case study of IDOL, University of Mumbai) International Research Journal. Objectives: To study socio-economic, cultural and educational background of the learners of IDE, University of Mumbai, Mumbai. 2. To analyze or relate how socio economic factors are affecting the performance of the distance learner 3. To analyze the relation between receipt and non receipt of course material is affecting the performance of the distance learner's year wise (1st and 2nd year). 4. To collect suggestions for improvement from students in distance education.

Proceedings: The Researcher followed the qualitative, descriptive and exploratory method. The final sample for the study consists of 260 (Arts & Commerce) 2nd and 3rd year distance learners of bachelor degree programme from the Institute of distance education, University of Mumbai comprising 2% of total population. A structured questionnaire was administered to the distance learners. The percentage obtained by the students in first and second year exams is used as the indicator of the academic performance for the analytical purpose (Socio economic status versus performance, course material received versus performance).

Wong Dominic (2008) Online Distance Learning provides Additional Learning Opportunities and improves the Socioeconomic Status of Working Adults in Malaysia  
 Objectives: to examine how ODL expands learning opportunities and ultimately improves working adults' socioeconomic status.2. To study how well ODL suits the lifestyles of busy working adults. 3 To study how ODL may improve the socioeconomic status of working adult learners. Proceedings: Interviews were used in the research methodology to elicit information. The researcher conducted the structured interview. Those completed their studies through ODL were recruited as respondents. Interview questions were derived from a literature review on how ODL may enhance their socioeconomic status. Five interviewees were selected for the study.

Findings: Findings showed that ODL provided additional credentials and knowledge to the working adult learners to advance their careers, and that through career advancement, the working adults obtained better jobs and better pay. Some respondents got promoted to a higher job position and thus a higher social status. ODL improved the socioeconomic status of working adults in Malaysia.

Rao S Raja (2004) Administration of Student support services in distance education: A case study of Dr. B.R. Ambedkar Open University, Ph.D Thesis University of Hyderabad

Objectives: The objectives of the study were a) To study the evolution of distance education in India b) To highlight the importance of distance education in general and student support services in particular c) To study social background of students of open university d) To identify important component of student support services e) to classify the components of student support services f) to collect and analyze the perception of the respondent on identified components of student support services g) to study the level of satisfaction of respondents on identified components of student support services h) To critically evaluate the administration and delivery of student support services based on the perception of the respondents.

Proceedings: The research study was conducted by taking Dr. B.R Ambedkar University as the case study. Purposive sampling technique was used for collection of data. Two districts were selected for collection of data namely Hyderabad and Mahababoonaagar. The sample size of the respondent was 343. The questionnaire, interview and observation were used as tools.

Findings: The findings of the study revealed that, Dr. B.R. Ambedkar University was catering to the educational needs of younger age groups who were below 35 years of age and belong to lower income groups with lower parental educational backgrounds. The study was found that irrespective of gender, social status, programme of study a majority of students were aware of the information support , they had positively reacted with their level of satisfaction, want guidance in course selection, carrier and job opportunities and were aware of personal contact programmes and they needed them to understand difficult concepts to clarify doubts. Majority of the respondent consider the language used in self instructional material was good and not difficult. It was found that evaluated assignments not returned to the respondents.

Nyondo Andrew Chola (2001) Socio-economic factors affecting distance learning in Papua New Guinea. Objectives: To find out socio economic factors affecting the distance students learning. Proceedings: The questionnaire carried out by Nyondo and Koigiri (1998) were used for the study. The questionnaire included items which assessed the quality and effectiveness of student support services

Findings: In this article the author found that there were various reasons why students drop out of their courses. The main factors affecting the provision of distance education to the majority of the student population that drops out of the formal system were students' ability to afford their fees, home environment, community attitude to education and other social factors. Some reasons involve socioeconomic factors which were beyond the control of the university. There had no corresponding expansion at the tertiary level. It indicated that they were going to be getting a larger proportion than before dropping out of the formal system. He concluded that a cheaper way of eliminating this problem would be an investment in distance education.

Saxena, Anurag, (2000) Tthe Distance Learner - A Sketch from India, ICDE Asia Souvenir, IGNOU New Delhi 2000. Objectives: The objective of the study was to gather information about IGNOU's learners, their ideas about the programmes, the experience and their status after the programme. Proceedings: The study covered seven programmes of IGNOU from various disciplines.

Findings: The findings of the study indicated that there were more number of females enrolled in ODE, they live in smaller houses with 2-3 children and 4-5 family members, most students belonged to lower or lower middle income group, are employed in the public sector and

want only the printed text material to study. Most of them feel that IGNOU should be an evening university. Students want to pursue higher education from IGNOU but want new programmes like Environment and Traditional wisdom of India.

Halder Ujjwal Kumar (2012) A Study on Distance Learners' Attitude towards Distance Education. Objectives: to assess the distance learners' attitude towards distance education on the basis of gender (male & female), locality (urban & rural) marital status (married & unmarried), and employment status (employed & unemployed). Proceedings: The sample for the study consisted of 210 distance learners studying in Bachelor Degree Programme (BDP) of Netaji Subhas Open University (NSOU) from three Study centres in West Bengal. An Attitude Scale (Likert type Scale) designed by Dr. Mukhopadhyaya was administered to measure the Distance Learners' Attitude towards Distance Education. 'T' test was used to find out the significance difference between the variables.

Findings: The data revealed that 1. There was no significant difference between the mean performances in the attitude questionnaire of distance male learners and distance female learners. 2. There was no significant difference between the mean performances in the attitude of urban distance learners and rural distance learners. 3. There was no significant difference between the mean performance in the attitude of employed distance learners and unemployed distance learners.

Gogoi, Manashee & Hazarika, Mukut (2009) Awareness and Attitude of the College Students Towards Open and Distance Learning

Objectives: 1. To find out the level of awareness of the college students (male and female and rural and urban) towards ODL. 2. To find out the level of attitude of college students (male and female and rural and urban) towards ODL.

Proceedings: The population of the study comprises of all the college students studying at first degree level in the colleges under Dibrugarh University. The purposive incidental sampling

technique had been used in selecting the sample of the study. The sample comprises of 144 male and 116 female college students drawn from six colleges under Dibrugarh University. A Likert-type Attitude scale consisting of 22 items developed by the researchers was used in the study.

Findings: The study had revealed that the level of awareness and attitude of the college students towards ODL system was not very high. Besides, there exists significant differences between male and female; and rural and urban students as far as their awareness and attitude towards ODL system was concerned. The authors concluded that the students were aware about the merits and accessibility of the ODL system and form a healthy attitude towards it; it will not be possible to attain equity and access of the higher education, which is the need of the hour

Gujjar Aijaz Ahmed (2007) "A Study of Students Attitude towards Distance Teacher Education Program in Pakistan" Turkish online journal of Distance Education

Objectives: (a) To describe the distance teacher education programme (B.Ed) in Pakistan. (b) To evaluate the student's attitudes about Distance Teacher Education programme (B.Ed) in Pakistan. (c) To identify the problems of students' of Distance Teacher Education Programme (BEd) in Pakistan.

Proceedings: The population of the study consisted of the 2710 students of B.Ed Programme semester autumn 2004 to autumn 2005 students of final semester studying at Allama Iqbal Open University of Pakistan. The 300 students from Sahiwal region was considered as sample of the study. A questionnaire on five-point (Likert) scale was developed with one open ended question at the end of the questionnaire.

Findings: It was found that Distance learners have favorable attitude towards distance education. 1. Majority of the students agreed that the components of B.Ed. programme led towards teaching skills, and the Introduction of new teaching techniques was highly appreciated, the delivery of material was in time, the contents of the courses were in a logical sequence, the printing quality of material was good and satisfactory, the material was according to the needs of the distance learners and the distribution of marks of assignment and final examination was justifiable, assignments were marked objectively and they were not returned in time. 2. TV programme were helpful for conceptual and theoretical learning and duration of TV programmes was adequate and there is a need of TV programmes for each course. 3. Students indicated that students learnt professional skills from the workshop, the resource persons, tutors were well prepared for the workshop and were punctual and division of marks of different aspects of workshop was appropriate and the teaching practice enhanced the degree of confidence in trainees and the duration of teaching practice was not suitable.

Koul Pity (2004) A Study of Effectiveness of Distance Education Programme in Nursing, Ph.D Thesis, Jamia Millia Islamia Univeristy

Objectives: To study the profile of learners, to identify whether target group is adequately covered. ii) To assess the effectiveness of self-instructional course material by learners, counselors and programme in charges. iii) To examine the effectiveness of instructional process in relation to, Audio and Video support Counseling sessions and practical contact sessions Counselors and clinical supervisors Teleconferencing sessions Assignments and Evaluation iv) To assess performance of learners in terms of knowledge and skills as expressed by learners and

programme in charges. v) To identify the problems faced by learners while undergoing the programme.

Proceedings: Structured questionnaires were canvassed to 534 distance learners, 136 counselors/clinical supervisors and 17 programme in-charges of IGNOU's B.Sc. Nursing Programme across the various parts of the country, out of which 201 distance learners, 85 Academic Counselors/Clinical Supervisors and 13 Programme In-charges responded. Random sampling technique was adopted to select the learners; purposive sampling to select the counselors/ clinical supervisors and total enumeration of the sample was used to select the programme in-charges.

Findings: Major findings of the study indicated that the course material was found to be highly effective by learners, counselors and programme in charges. Audio-video sessions were found to be effective in terms of quality of content presentation and helped the learners to revise the lesson. However, audio-video facilities were not accessible to majority of the respondents. Counseling sessions and practical contact sessions were found to be relevant, useful and effective and helped the learners to acquire skills relevant to work situation. The numbers of counseling session and practical contact sessions were found to be inadequate in all specialty areas. Teleconferencing sessions were informative, satisfactory, and useful and helped the learners to clarify the unit and clear their doubts. Technical quality and presentation need to be improved and the sessions more interactive and accessible. Assignments were helped the learners to understand the text and prepare for the examination. Tutor comments written only on a few assignments were positive and constructive. There was great delay in receipt of evaluated assignments. Some of the students stated that they received back the evaluated assignments

and/or grades after the Term End examination. Learners desired more individualized feedback on their assessment and more interesting study guides and readings for reference. The Term End examination question papers were found to be of good quality. The situation about the incomplete grade cards and delayed result was a cause of serious concern for the learners, counselors and programme in-charges. There was a significant increase in knowledge, skills and attitudes of learners after undergoing the B.Sc. Nursing programme as expressed by learners and programme in-charges.

Farah (2002) A comparative study of teaching competencies of the teachers trained through the formal system of education and those through the distance education system  
Ph..d thesis, Jamia Millia Islamia University

Objectives: The specific objectives of the study were: 1) To study the relationship between the presage, process and product variables of teaching competencies of the teachers trained through the formal education system. 2) To study the relationship between the presage, process and product variables of the teaching competencies of the teachers trained through the distance education system. 3) Comparison of presage variable of knowledge of the teachers trained through the two different modes. 4) Comparison of the presage variable of attitude of the teachers trained through the two different modes. 5) Comparison of the process variable of skills of the teachers trained through the two different modes. 6) Comparison of the product variable of pupil liking towards the teachers trained through the two different modes

Proceedings: The sample of the study consisted of randomly selected 70 teachers trained through the formal system and other randomly selected 70 teachers trained through distance system of teacher preparation. In order to compare the Presage-Presage, process-

process, product-product variables of the teaching competencies of the teachers trained of the teaching competencies of the teachers trained through the two modes, t-test was used.

Findings: The findings of the study were. 1) A significant relationship between the skills of the teachers and pupils liking. 2) No significant relationship found between the knowledge and the attitude of the teachers trained through the distance mode. 3) A significant relationship between the attitude and skills of the teachers. 4) A significant relationship between the attitude of the teachers and pupils liking 5) there was a significant difference in the knowledge of the teachers trained through the formal education system and those trained through the distance education system. 6) There was a significant difference in the attitude of the teachers trained through the formal education system and those trained through the distance education system. 7) There was no significant difference in the skills used by the teachers trained through the formal education system and those trained through the distance education system. 8) There was no significant difference in the pupils' liking for the teachers trained through formal education system and those trained through the distance education system.

Singh Bhoodev and Chaturvedi H.C (1996) "Intelligence and Attitude of Off campus and On campus students towards education" Indian journal of open learning Vol.5, No.1

Objectives: to compare the intelligence and attitude of off campus and on campus students towards education .Proceedings: The sample of the study consisted of 1000 (500 off campus and 500 on campus) students randomly selected from among those studying in the undergraduate and Post-graduate classes of Allahabad and Faizabad regions. The sample of off campus students include the students who were enrolled for Indira Gandhi National Open University's Degree and Diploma courses and the students who joined correspondence courses at

under-graduate and post-graduate levels of that area. The sample of on campus students includes the regular students of degree and post-graduate classes of the selected regions. The tools used for the study were Ravens' Progressive Matrices developed by Raven (1987). Attitude towards Education Scale developed by Chopra (1982)

Findings: The findings revealed that the off campus students had a better attitude to education in comparison to the on campus students. Off campus students of rural culture scored higher on intelligence test than their urban counterparts. Significant differences were also found between off campus and on campus students with respect to intelligence and attitude towards education when both the variables were considered together. Learners' curiosity to increase their qualifications develops in them a positive attitude towards education. The distance learners, it was found, that they were very much interested to increase their qualifications and knowledge. The second most important thing observed by the investigators was that only in those studying through distance education the seeds of attitude towards education, curiosity to learn, study habits etc., were alive.

Das Mamta (1992) Approaches to learning and academic performance of students in traditional and open universities. A comparative study. Ph.D Edu. Jawaharlal Nehru Univ.

Objectives: (a) To identify the relationships among learner, content and context characteristics and approaches to learning of students in open and traditional universities, and to find out the predictability of such approaches, and (b) to identify relationships among learner, content and context characteristics and academic performance of students in open and traditional universities and to find out the predictability of such approaches to learning and of academic performance of students in open and traditional universities.

Proceedings: The sample for the study comprised students undergoing a course in Diploma in Management studies in one Open University (IGNOU) and two traditional universities. The tools used were (a) a shortened version of an internal external control scale (b) a modified version of approaches to studying inventory and a student perceptions scale. An ex-post facto research design was adopted in the conduct of the study.

The findings: The major findings include students in Open University significantly differ from students in traditional university in terms of learner, content and context characteristics. Learner, content and context characteristics significantly correlate with approach to learning and academic performance of students both in traditional and open universities. Academic performance which slightly correlates with approaches to learning could reliably predicted by using learner, content, content characteristics and approaches to learning of both in open and traditional universities as predictors.

In addition to the positive and negative issues listed above, there is also the concern of student academic success in the distance learning environment. The purpose of this study was to determine to what extent distance learning students and traditional on-campus students differed in academic achievement in ODL system in Krishna Kanta Handique State Open University. A comparison between the two groups of students, distance learning and traditional on campus students, was also performed to determine how the groups differed on background characteristics and previous academic performance. The objective of this chapter is to present an overview of the recent research that has occurred in distance learning. The areas that have been addressed in this chapter are the background characteristics and previous academic performance of distance learning students' related to academic success. Characteristics

and Previous Academic Performance Students' background characteristics have been studied by researchers as predictors for academic success.

Gender has been considered a student characteristic that may have an impact on academic achievement in the distance learning environment. Cheung and Kan (2002) discovered that gender was significantly correlated to student academic achievement in the distance learning environment. The authors were not sure why women outperformed men, but hypothesized that it could have been because the women put more effort in to the course than the men did. In addition, the authors noted that the course studied was a business communication class and women typically perform better than men in these types of courses as opposed to math and science courses where men traditionally outperform women. Alstete and Beutell (2004) studied gender in relation to academic achievement in distance undergraduate and graduate business management courses. Interestingly, they found that gender was related differently to academic success in undergraduate and graduate courses. The researchers found that women in the undergraduate courses were more active participants than men in the distance courses through the use of discussion board postings; however, there was no relationship between gender and overall course performance at this level. Women also participated more than men in discussion board activities at the graduate level; however, at this level, Alstete and Beutell (2004) did discover that gender was significantly related to overall course performance, because women outperformed their male counterparts in the distance learning courses studied. Brown and Liedholm (2002) found conflicting relationships between gender and academic performance in three learning environments; traditional live courses, hybrid courses, and virtual courses. The researchers determined that females performed significantly worse than men in the live environment. In the hybrid and virtual course environments, they found the relationship between

the female variable and academic performance to be slightly negative however, the relationship was not significant. Gender has also been studied as a predictor of academic performance in healthcare education. Barakzai and Fraser (2005) studied the relationship between gender and academic performance in 290 students enrolled in advanced healthcare practitioner courses at three universities. The researchers determined that women as a group scored higher than the men did, however, they found no statistically significant difference between men and women and academic performance.

The demographic characteristics of higher education institutions have changed greatly over the past 20 years. In 2001, 18-22 year-old students that lived on-campus and attended school full-time accounted for only 16% of the total college student enrollment. In the 1980s and 1990s, there was a large influx of students over the age of 25 who were female, and who were working and going to school part-time (Levine, 2001). Due to the large age ranges of students attending higher education, many researchers have focused their research on how age and academic performance are related. Cheung and Kan (2002) found that there was no relationship between age and student performance in distance learning courses. They postulated that this could be due to the fact that most of the students in their study were working adults and more mature than the traditional college student.

Alstete's and Beutell's (2004) research findings conflicted with those reported by Cheung and Kan (2002). Alstete and Beutell found that age was significantly related to academic performance. They also found that older students participated more in discussion board activities and that discussion board activities were positively and significantly related to final course grades. These researchers noted that younger students may not be ready to handle the independent learning that must occur in the distance learning environment and that this could be

a reason they do not perform as well as older students. The researchers also stated that older students have more work experience and that this could be an intimidating factor for the younger students which may inhibit them from becoming involved in discussion threads. Age as an academic performance indicator has also been researched in allied healthcare education. Bearden, Robinson, and Deis (2002) compared traditional and distance learning students' academic performance in a nutrition course in dental hygiene. The researchers found that there was no significant difference between the mean age of each group, traditional versus distance, and the academic performance measured by the final course grade for each group. In addition, they found no relationship between age and pre-course GPA, and age and National Board Dental Hygiene Examination (NBDHE) certification scores.

## CHAPTER - 3

### METHODOLOGY

#### 3.1 Methodology

The objective of this chapter is to outline the methods that were used to conduct this study. The sections included in this chapter are the introduction, research questions, the research design, population, sample, instrumentation, the data collection procedures, the data analysis procedures, and a summary.

The purpose of this study was to determine the differences in academic performance between distance learning students and traditional on-campus students in post graduate level. Differences between the two groups, distance learning and traditional on-campus, were also determined to discover how the groups differed on student background characteristics and previous academic performance.

Taking in to consideration of the merits of the survey, survey method is used for this study. The descriptive research or normative survey method has undoubtedly been the most popular and the most widely used research method in education. Survey research in education involves the collection of information from members of a group of students- teachers or other person associated with the educational process and the analysis of this information to illuminate important of educational process.

The starting point for a survey is a clear statement of the questions, which the survey is designed to answer. The finishing point is a set of results, which address these questions. There is a logical set of procedures, which is usually adopted in order to proceed from the questions to the result.

### **3.2 Purpose of Survey:**

The purposes of surveys fall in two main categories. First surveys may be used to obtain descriptive information about a target population. Occasionally the entire population may be including in the survey. More commonly a sample is selected and results obtain from the sample are generalized to the population. Examples include surveys to provide norms for standardized test. Second; a survey may be designed to examine relationships between various factors; typically seeking to explain differences between students; no some criterion in terms of a range of explanatory factors. Rosier (1980) understanding surveys of the second type are conceptual models, which the researcher wishes to test with the aim of improving understanding of the network of factors influencing educational process.

### **3.3 Survey Research Cycle:**

The methodology of survey research has now been well established under the influence of three main factors. First, the technology of sampling has research high level. The theoretical aspect of probability sampling have been extensively investigated; and the relationship between random samples and the target populations from which they have been taken may now be readily expressed quantitatively in terms of sampling errors (standard errors of sampling). Second, many technique develop for collecting valid and reliable information from survey respondents. Third, the availability of computers and sophisticate survey research computer program (have facilitated the analysis of this information). To analyze the range of components of a typical project is in terms of a survey research circle. A detail description of one version is given in Runcal and M. C. Grath (1972). Each stage has implications for latter stage.

Both in its planning and execution; a survey may be conducted more efficiently by reference to the logical demands of the circle, which are summarized.

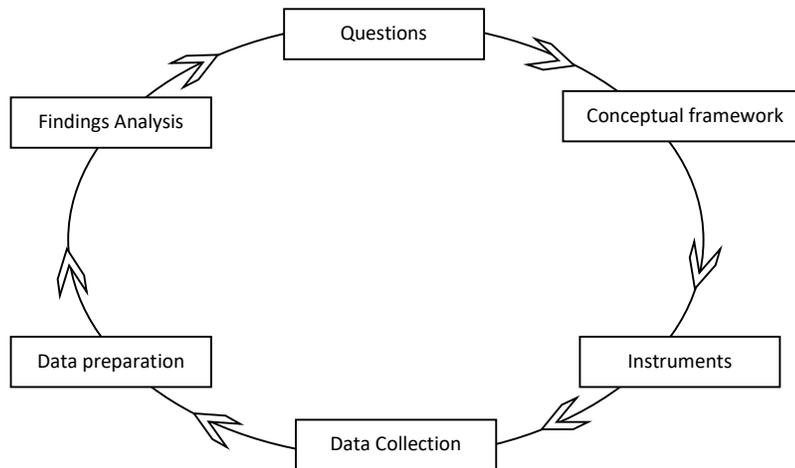


Figure-1: survey research cycle

### 3.4 Questions:

The starting point of a survey is the best on statement of the questions to be addressed by the investigation; set in the demography; social and administrative context in which the questions were identified.

### 3.5 Conceptual Framework:

The next stage of the circle; the factors or components include in the original questions should be defined more precisely in conceptual terms. Where an explanatory survey is being undertaken; the hypothesized relationships between concepts should be expressed in terms of a conceptual framework.

### **3.6 Instruments:**

The general term in instruments refers to the range of questionnaires, attitude scale and so on used for the collection of data in a survey. The instruments should be linked to the concept include in the conceptual framework. They should be selected or designed for the collection of data suitable for conservation in to variables for subsequent analysis.

### **3.7 Data Collection:**

The data collection stage of the research circle involves identifying the survey respondents and collecting the design information from them. In a survey information is collected from persons in their natural surroundings, for example from students in their normal classes.

### **3.8 Target Population:**

Prior to preparing plans for selecting respondents; it is necessary to define the target population carefully; in order to set the administrative limits for the survey as well as to specifically the population to which the results of the survey may be generalized. Where the students are to be the unit of sampling; a typical population may be initially defined as “all graduate students”.

### **3.9 Sampling Design:**

The selection of respondents from the target population is based on a sampling plan or design; except where information is to be collected from all members of the population. Most sampling plans assume random sampling; so that each member of the sampling is selected with a

known probability. It is than possible to use data derive from the sample itself to estimate statistical characteristics of the population.

### **3.10 Selection of Final Sample of the Present Study:**

Existing data were collected from two groups of students, those that have received their education through distance learning under KKHSOU and those that received their education through traditional on-campus learning, in post graduation at department of education Gauhati University. A convenience sample is described as a sample that is collected because it is easily accessible to the researcher and one that fits the purpose of the study (Gal, Gall, & Borg, 2003). The researcher used a convenience sample to collect data from both distance learning and traditional on-campus programs concurrently. The sample size was ascertained by determining the current year of the distance learning students. Secondary data have been collected from the concerned department and various study centers. A total number of 78 distance students and 44 traditional on-campus students were included in the study.

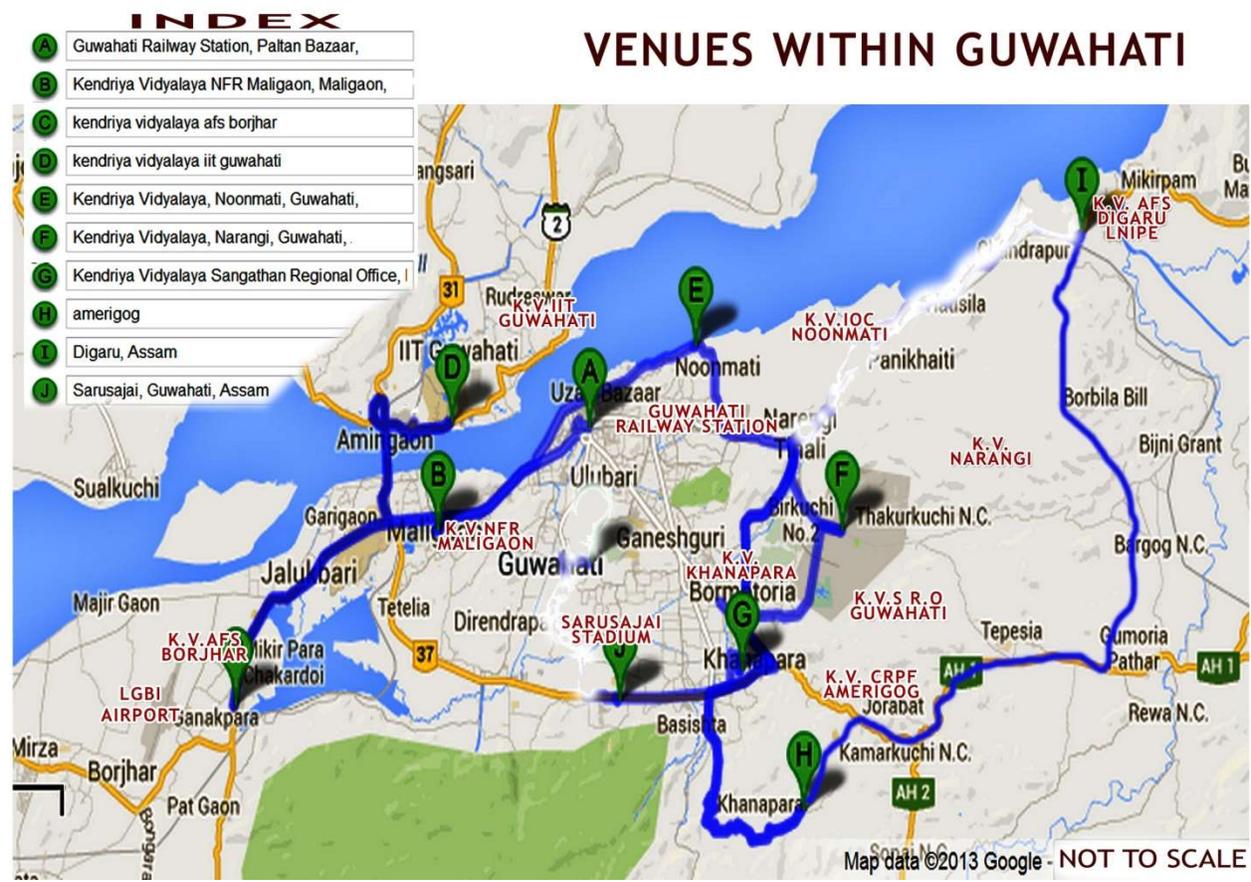


Figure: 2 Map of Guwahati city

**Table No: 1****Enrolment of learners in various courses of KKHSOU study centers in Guwahati city**

Academic year	Male (%)	Female (%)
2011-12	52.64%	47.36%
2012-13	64.92%	35.8%
2013-14	55.8%	44.2%

Source: collected from the various study centers

**Table No: 2****Enrolment of learners in M.A (Education) in Gauhati University**

Academic year	Male (%)	Female (%)
2011-12	22%	78%
2012-13	12%	88%
2013-14	18%	82%

Source: collected from the department of education

To answer research question number one, this was to determine to what extent the two groups, distance learning students and traditional on-campus students, differed by the background factors of gender and age, the researcher used the Chi square analysis. For age, two groups were formed. One group were those students that were less than or equal to 25-years-old and the other group were those students that were greater than 25 years-old. For research question two, which was to determine how the two groups differed on previous academic

performance, a two-sample *t*-test was used. The independent variable in this study was how the program was administered, through distance learning or through traditional on-campus methods. The independent variable was categorical. The variables of gender and age were also categorical. For this reason, the statistical method used was the Chi square. The Chi square is a nonparametric analysis that is a test of significance. This analysis allowed the researcher to determine whether frequency differences within the groups differed significantly from what was expected (Sprinthall, 2003).

For differences in previous academic performance, research question two, a two sample *t*-test was used. The two-sample *t*-test allows a researcher to make a probability statement as to whether two samples represent a single population. To use the two-sample *t*-test the two groups must be independent of each other (Sprinthall, 2003). In addition, the dependent variable must be in the form of interval or ratio data (Gall, Gall, and Borg, 2003). In this research, the independent variable, distance learning or traditional on campus learning, was categorical and the two groups were independent of each other. The researcher determined if there were significant differences in academic performance between the two groups of students, distance learning and on-campus. Academic performance was determined by comparing final GPA scores and external certification pass rates between the two groups.

### **3.11 Tools Used:**

In order to collect data, two questionnaires were developed by the investigator. One is for the learners of the traditional on campus student and other for the open and distant learning student.

1. Attitude and Socio-Economic background of the learners

2. Academic Achievement (collected by Investigator from the concerned department and study centers)

### 3.12 Description of the Tools:

Socio-Economic Background of the student: A questionnaire schedule developed by the investigator for socio-economic background and attitude of the post-graduate student on distant learning.

Academic Achievement - However, no tool was used for measuring the Academic achievement for investigation purpose. It was decided to collect student's secured marks in the final Examination, which was conducted by the university. The marks were collected through Personal Visits to those Schools by the investigator from official personnel.

The categories of students were classified on the basis of their secured marks in the above mentioned examination as given below:

Category	Marks Secured
1 <sup>st</sup> High	60% and above
2 <sup>nd</sup> Average	45% and above
3 <sup>rd</sup> Low	Below 45%

### 3.13 Data Analysis

Various statistical tools were used to answer the research questions. However, to begin with, descriptive statistics were used to describe the demographic characteristics of the sample. Sprinthall (2003) defined descriptive statistics as describing data and Gall, Gall, and

Borg (2003) stated that descriptive statistics are mathematical techniques that are used for summarizing numerical data. To answer research question number one, which was to determine to what extent the two groups, distance learning students and traditional on-campus students, differed by the background factors of gender and age, the researcher used the Chi square analysis. For age, two groups were formed. One group were those students that were less than or equal to 25-years-old and the other group were those students that were greater than 25 years-old. For research question two, which was to determine how the two groups differed on previous academic performance, a two-sample *t*-test was used. The independent variable in this study was how the program was administered, through distance learning or through traditional on-campus methods. The independent variable was categorical. The variables of gender and age were also categorical. For this reason, the statistical method used was the Chi square. The Chi square is a nonparametric analysis that is a test of significance. This analysis allowed the researcher to determine whether frequency differences within the groups differed significantly from what was expected (Sprinthall, 2003).

## CHAPTER 4

### Report of data and Analysis

The purpose of this study was to determine the differences in academic performance between distance learning students and traditional on-campus students in post graduate level. In addition, the researcher also determined if there were differences in the two groups on student background characteristics and previous academic performance.

#### Research Questions

The primary purpose of this study was to determine the differences in academic performance between distance learning students and traditional on-campus students. Additionally, the researcher sought to determine if there were any differences between the two groups in student background characteristics and previous academic performance. With these purposes in mind, the researcher focused on the following research questions:

1. To what extent do the two groups, distance learning students and traditional on-campus students, differ by the background factors of gender and age?
2. To what extent do the two groups, distance learning students and traditional on-campus students, differ by previous academic performance?

The researcher utilized a quantitative causal-comparative research design. Preexisting data were used to determine if there were any differences in academic performance between the two groups of students, distance learning and on-campus students. The independent variable was the program offered either distance or traditional on-campus. The dependent variable was the academic performance of the two groups of students. Academic performance was measured by

the students' final GPA scores. The researcher also compared differences in the two groups on gender, age, and previous academic performance.

**Table- 3**  
**Frequency Distribution for Age of the Distance learner**

Variable(class interval)	n	Valid %	Cumulative %
21-25	12	15.38%	15.38%
26-30	12	15.38%	30.76%
31-35	18	23.07%	53.83%
36-40	22	28.21%	82.04%
41-45	5	6.41%	88.45%
46-50	5	6.41%	94.86%
51-55	4	5.13%	99.99 % (100%)
Total	78	99.99%	100%

Table 3 illustrates that the highest percentage of respondents (almost 82.04%) were aged between 21 to 40 years, and the least number of respondents (almost 18%) were above 40 years of age. 54% of the respondents were between 25-35 years of age in distance education.

**Table- 4****Frequency Distribution for Gender of the Distance learner**

Variable	number	male	percentage	female	percentage
21-25	12	7	8.97%	5	6.41%
26-30	12	8	10.25%	4	5.13%
31-35	18	12	15.38%	6	7.69%
36-40	22	12	15.38%	10	12.82%
41-45	5	2	2.56%	3	3.84%
46-50	5	2	2.56%	3	3.84%
51-55	4	4	5.13%	1	1.28%
Total	78	47	60.26%	31	39.74%

Descriptive statistics were performed to determine the demographic profile of the sample. Table 4 shows that out of the 78 students, 47 students (60.23%) were male and 31 (23%) were female. Table 1 displays the frequency distribution of the age of the students included in the sample. The ages ranged from 21 to 55. Fifty-three percent of the students were between the ages of 21-35 years old.

The study was interested in whether academic performance varied with gender. Table 5 shows the relationship between gender and academic performance as determined using the independent sample t-test results.

**Table- 5**  
**Summary of the t-test results for the relationship between gender and Academic performance**

Sex	Frequency	Mean	Std. Deviation	t	Sig
Male	47	2.31	0.42	0.96	0.44
Female	31	2.26	0.49		

Means in Table 5, suggest that there is no difference between academic performance of male and female students. This is proved by the t value of 0.956 and its calculated sig = 0.439, which is greater than alpha = 0.05. The conclusion therefore is that there is no significant difference in academic performance between male and female students.

Table No- 6

**Summary of the descriptive statistics and results for the  
relationship between age and academic performance**

Age	Frequency	Mean	SD	F	Sig
21-25	12	2.15	0.45	6.42	.01
26-30	12	2.15	0.45		
31-35	18	2.2	0.49		
36-40	22	2.26	0.57		
41-45	5	1.2	0.21		
46-50	5	1.2	0.21		
51-55	4	1.2	0.21		
Total	78	52.27	13		

Means in Table 6, suggest that different age groups scored slightly differently on academic performance with age 36 – 40 years scoring highest and more than 40 years scoring lowest. To confirm whether the differences were significant we consider the F value 6.42, whose significance value of 0.1 is greater than  $\alpha = 0.05$ . The conclusion therefore is that there is no significant relationship between age and academic performance.

**Table 7**  
**Results of Chi-square Test for Program and Age**

Variable	Program	
Age	On-campus	Distance
<25 years of age	98%	15.38%
>25 years of age	15%	85%

$\chi^2=28.29$ ,  $df=1$ ,  $p<.01^*$

The purpose of this research study was to determine the differences in academic Performance between the two groups, distance learning students and on-campus students The researcher answered four research questions. The following is a discussion of the findings obtained from the four research questions.

#### Research Question One

The first research question addressed the differences in student background characteristics between the two groups, distance learning students and traditional on campus students. The two background characteristics that were studied in this research project were gender and age. The Chi square statistical analysis was used to determine if there were differences between the two groups in gender and age. The total number of female students that were enrolled in the campus programs was 31. For males, the total enrolled in the distance program was 47. There was no statistically significant difference between the number of males and females enrolled in each program, distance and on-campus. The distant program was

comprised of 39.74% females and 60.26% males. The next background characteristic that was studied was age. Age was divided into two categories, those students less than or equal to 25-years-old and those that were greater than 25-years-old. Table 7 shows the Chi-square value for this research question. The analysis of the differences of age between the two groups was statistically significant

**Table 8**

**Results of the t-tests for Program and Outcomes of Previous Academic Performance**

Out Come	Program								
	Traditional On Campus			Distance					
Academic Achievement	M	SD	N	M	SD	N	95% CI for mean difference	t	df
		3.72	0.27	44	2.57	0.50	78	63.62,7.96	1.54

P<0.05\*

The first measure of academic performance was the students' final GPA scores. There were a total of 122 student scores used for this analysis. The mean final GPA scores for the entire sample was 3.56 on a scale from 0.00 – 4.00. The difference between the distance students' final GPA scores (M = 2.57, SD = 0.50, n = 78) and the on-campus students' final GPA scores (M = 3.72, SD = 0.27, n = 44) was not statistically significant. Table 8 shows the results for the *t*-test statistical analysis for this research question.

**Table- 6****Results of Chi-square Test for Program and Certification Pass/Fail Rates**

Pass/Fail	Program	
	Traditional on campus	Distance
Pass	90.9 % (44)	78.21 % (78)
Fail	9.1 % (44)	21.79 % (78)

Note: Numbers in parentheses indicate column percentages  
 $\chi^2 = 0.01$ ,  $df = 1$ ,  $p = 0.93$

Again, the researcher found no significant difference in the certification pass rates for on campus students and distance students. The on-campus students had a pass rate of 90.9% while the distance students had a pass rate of 78.21%. Table 6 shows the Chi-square analysis for this research question.

**Table- 7****Attitude of learners towards ODL system in Assam**

Attitude	Gender	
	M	F
Positive	95% (38)	80.65% (25)
Negative	5% ((9)	19.35% (6)

Table-6 shows that out of 47 male learners 95% i.e. 38 students have positive attitude towards ODL system of education. Only 5% learners shows negative attitude. Among the female learners 80.65% have positive attitude and 19.35% have shown negative attitude towards ODL System.

## CHAPTER 5

### **Summary, recommendation& suggestion and conclusion**

Researchers have performed academic performance comparison studies of distance learning students and traditional on-campus students, however there have only been a few studies performed that compared the academic performance of students that have taken their entire program through distance to their on-campus counterparts. In addition, there have only been a few studies that have used external certification scores as a measure of academic performance.

Researchers have reported varying results from these academic performance comparison studies. Some reported that distance students performed more poorly than their on-campus counterparts, others reported that there was no difference between the two groups, while others reported that distance learning students outperformed on campus students.

The deficit of research on academic performance studies in allied healthcare education and the conflicting results obtained in some of these studies establishes the importance of developing studies to answer the question of whether distance learning is a viable alternative for traditional on-campus learning. For this reason, the purpose of this study was to determine if there were any differences in academic performance between the two groups of allied healthcare students, distance and on-campus. Four research questions were created to determine if there were any differences in academic performance between the two groups. The first research

question was used to determine if the two groups differed by the background characteristics of gender and age. The second research question determined if the two groups differed in previous academic performance. The research questions were created to determine if there was a difference in academic performance between the two groups.

The student background characteristics of gender and age along with previous academic performance were studied in this research project. There was no statistically significant difference between the number of males and females enrolled in each of the two groups, distance and on-campus. However, there was a statistically significant difference in age between the two groups. Sixty-four percent of the on-campus students were 25-years-old or younger, while 72% of the distance students were greater than 25- years-old.

A comparison was made to determine if there was a difference between the two groups, distance learning students and on-campus students, in previous academic performance. The researcher found that there were no statistically significant differences in the two groups for overall admission GPA.

Academic performance was compared between distance learning students and on campus students. The first indicator of academic performance measured was the students' final GPA scores. The mean final GPA score for the on-campus students was slightly lower than the mean final GPA score for the distance students however; the difference was not statistically significant. The final measure of academic performance between the two groups was the pass rate on the external certification scores.

The purpose of this study was to determine if there was a difference in academic performance between distance learning and on-campus students. Differences between the two groups in student background characteristics and previous academic performance were also

compared. One key finding of this research is that there was a significant difference in the background characteristic of age between the two groups. The on-campus students consisted of the more traditional college students in regards to age while the distance students were older and could be classified as nontraditional college students.

Another important finding of this study was that there were no statistically significant differences between distance students and on-campus students in academic performance.

### **5.1 Discussion of Research Findings**

Research question one was utilized to determine if there were differences in the student background characteristics of gender and age between the distance learning and on-campus students. The researcher found that the two groups did not differ significantly in gender. However, when the background characteristic of age was studied, the researcher found a significant difference between distance learning and on-campus students. There were more traditional students, 25-years-old and younger, enrolled in the on-campus programs as opposed to more non-traditional students, over the age of 25, enrolled in the distance programs. Therefore, the researcher did find that the two groups were not equal in regards to age.

The differences in the background characteristics of gender and age were important to determine because some researchers have found that certain background characteristics have an impact on academic performance in the distance learning environment. Cheung and Kan (2002) and Alstete and Beutell (2004) found that gender did have an impact on student academic success in the distance learning environment. Both groups of researchers found that women outperformed men in the distance learning environment. In this research study, both

the campus and distance programs had more females than males enrolled, so this background characteristic should not influence the results when academic performance is compared.

Levine (2001) stated that since the 1980s and 1990s there has been a large influx of nontraditional students, over the age of 25, who have sought to obtain a higher education degree. The researcher of this study found this to be true in that there were more distance students that could be classified as non-traditional; however, the majority of the on-campus students were still comprised of the traditional, less than 25-years-old. Again, age is an important consideration when comparing academic performance between distance and on-campus students because some researchers have found that there is a significant positive relationship between age and academic performance (Alsete & Beutell, 2004; Bearden et al., 2002). Even though the two groups differed significantly on age in this study, with the distance students being older than the on-campus students, this researcher did not find that the distance students significantly outperformed their on-campus counterparts academically, and in addition, there was one area where the on-campus students performed significantly better than their distance counterparts.

The study measured the items of social economic status and academic performance. This study revealed that parents' social economic status is significantly related to academic performance of undergraduate students. The findings indicate that the higher a parents' social economic status, the higher the academic performance of the student.

The results of this study may be explained by Considine and Zappala (2002) who found that families where the parents are advantaged socially, educationally and economically foster a higher level of achievement in their children. They also found that these parents provide higher levels of psychological support for their children through environments that encourage the development of skills necessary for success at school. The results are also consistent with Hansen and Mastekaasa (2003), who argue that according to the cultural capital theory one could expect

students from families who are closest to the academic culture to have greatest success. The results of this study owe to the fact that, low social economic status negatively affects academic achievement because low social economic status prevents access to vital resources and creates additional stress at home. (Hansen and Mastekaasa, 2003). The results are not in agreement with Pedrosa, et al (2006) who found that students coming from disadvantaged socio-economic and educational homes perform relatively better than those coming from higher socio-economic and educational strata.

In the study it is observed that there is equal thinking about the academic achievements of the learners both traditional on campus and ODL system. The attitude of the learners found positive for ODL system because of non availability and non affordability of higher education in formal system. Another some factors like marriage of female learners, recruitment on job of some meritorious learner, poverty, unavailability of seats in universities most of them prefer ODL system. For them achievement is equal as formal system.

## **5.2 Recommendation and suggestion:**

It is observed from the study that KKHSOU offers number of courses including humanities, professional courses and certificate and diploma courses in different discipline. Most of the respondent joined ODL system because of its flexible characteristics and with the purpose of mainly getting a job. They perceived that the degree will help them to continue education, upgrade their knowledge and means of getting job. However in some cases their views were varied. It has some deficiencies such as

- All programmes and courses are not available in all the study centers.
- Lack of linkage between the study centers and community and society.
- Availability of other ODL institute in the state like IGNOU, IDOL.
- Lack of efficient faculty members.
- Lack of motivation of the learners as like the formal system.

- Lack of the sense of employability.

The KKHSOU offers a wide variety of programmes that can enable the learner to be employed in a field of their choice, but are not only enough to give practical and vocational education but attempt should also made to involve the potential employers to collaborate with the institution for providing better exposure to the learners.

- More courses should be introduced especially vocational courses for women.
- All programmes should be made available in all study centers.
- Provision should be made for both pre-service and in-service teacher training programme.

Community awareness camp should be organized to popularized the importance and scope of distance education.

- More advertising the courses and employability.
- To create awareness about the equal value of the degree awarded by ODL system with traditional system.
- Experimentation on research facilities.
- Co-ordination should be maintained among teacher, learner and society.
- Placement facilities should be provided by the university after completion of the course.

### **5.3 Conclusion:**

No doubt academic performance is the ultimate goal for the learners wherever he or she may be ODL or on campus students. But some external or internal factors have affected directly or indirectly upon it. Formal or on campus types of education has play a vital role to develop the learners need. ODL is a new popular education system which has demand in modern busy society. Open and Distance Learning (ODL) is playing an important role in the field of

education of skill and knowledge in the most fundamental areas. Since it has the advantage of reaching out to learners scattered throughout this geographically diversified nation. It plays a vital contribution towards the development of this nation by equipping citizen with valuable knowledge and skill that will help them to improve and sustain their livelihood

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## Appendix A Questionnaire

**Dear Respondent,**

The researcher is carrying out a study whose main objective is to establish whether there is a relationship between age and sex, social economic status, school background, and academic performance of post graduate students between traditional on campus and ODL system of KKHSOU. You have been selected as one of the respondents for the study and the information you give will be treated with utmost confidentiality and used purely for academic purposes. The findings and recommendations from this study are likely to benefit for KKHSOU in areas such admission of students and teaching and learning. Kindly please spare some of your valuable time to answer these questions.

Thank you.  
Yours Sincerely  
Shikhamoni Das

### Section A: Background Information

1.

Sex	
Male	Female

2. Age

21-25 Years	
26-30 Years	
31-35 Years	
36-40 Years	

41-45 Years	
46-50 Years	
51-55 Years	

3. Faculty of study

Arts	Science

4. Year of study-----

5. What was your entry category into study center in KKHSOU?

1 <sup>st</sup> class	
2 <sup>nd</sup> class	
General pass	
Certificate	

### Section B: Socio-economic status

7. Which caste has you belong to?

Gen	
Sc	
St	
Other	

8. How would you rate the education level of your parent/ guardian?

Father/male guardian	Low	Medium	High
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Mother/female guardian	Low	Medium	High
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9. Please rate of the income level of your parents/guardian.

	Low	Medium	High
Father/Male guardian			
Mother/Female guardian			

10. Academic performance

	Poor	Fair	Good
In Mid –term test			
In your previous semester examination			
In Compulsory courses			
In final examination			

11. Attitude of learner on ODL system

Statement	Agree	Disagree	Can't Say
I have taken admission under KKHSOU because of its flexibility of time and age.			
I have decided to take admission to get a job.			
I have taken admission because of scarcity of seats in formal system.			
I preferred ODL because already have joined a job,			

I have joined the ODL system to pursue higher education after completion of the degree.			
ODL (KKHSOU) facilitates job placements.			
The programme of KKHSOU helped me in improving my job performance.			
The traditional mode of education is better than the distance mode for obtaining a job.			
In modern society ODL system of education fulfill the need of the learner who is eager to pursue higher education.			
There is equal value of the degree awarded by both traditional and ODL system.			
It is necessary to more focus on ODL system in rural areas.			
There is a lack of faculty members in teaching learning situation.			
There is negative attitude by the society on ODL system on employability.			
I have joined ODL system of education because of my poverty.			
The ODL system will help me to improving my job performance.			