Disability Status and Academic Performance in a Nigerian University: Instructional Implications for Inclusive Distance Education Practice

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Abstract
The need for Inclusive distance education in order to ensure that both abled and non-abled persons are included in the educational provision has become imperative to guarantee access to equal educational opportunities. In recent time, the academic performance of non-abled students has been a source of concern to stakeholders in the field of distance education. This study therefore, provided a causal explanation of academic performance through the analysis of students’ disability status at the National Open University of Nigeria. The study adopted the descriptive research design of the ‘ex-post facto’ type. Stratified simple random sampling technique was used to select 1500 participants while purposive sampling technique was adopted to select the National Open University of Nigeria. Data were collected through questionnaire during the 2009 contact session. Two research questions and one hypothesis were answered and tested in the study. Pearson correlation, regression analysis and t-test were employed for data analysis. Students’ disability status has significant contribution to academic performance. There was also a significant difference in students’ academic performance based on disability status (t=2.39, df= 1488, P<0.05). Institutional providers should provide for adequate special support services and personnel for the exceptional students who may be disadvantaged in the programme.

Keywords: Distance education, Academic performance, Disability status, Open university
Introduction
The need to overcome the seeming shortcomings of conventional formal education system, especially in widening educational access to those who were not earlier served, paved the way for the emergence and acceptance of distance learning system in most parts of the world including Nigeria. Aderinoye (2002) remarked that the emergence and acceptance of distance learning as a medium of instruction marked a turning point in the provision of educational opportunities for millions of people that had been left out of the conventional system all over the world. Distance education, now globally known as Open and Distance Learning (ODL) by the International Council for Distance Education (ICDE), as an emerging alternative mode of educational delivery and study according to Perraton (2000) does not only widen educational opportunities, but also, reduces inequality and cost, stimulates curriculum change, and helps to meet manpower needs. It has in fact, helped to extend market for education to clientele who had not been previously served (Calvert, 1986); and also removed many of the traditional barriers to working adults’ participation in educational programme (Ojokheta, 2000). However, Brindley (Ojokheta, 2000) argued that the results recorded so far by this mode of study contingent upon distance learners’ academic performance are not as successful and impressive as originally hoped.

The analysis of distance learners’ grade point average (GPA) at the Ibadan study centre of the National Open University of Nigeria during the 2007/2008 session lends credence to Brindley’s assertion of the unimpressive academic performance of students in distance learning programme.

Table 1: Analysis of Distance Learners’ Grade Point Average (GPA), Ibadan Study Centre, NOUN 2007/08.

<table>
<thead>
<tr>
<th>GPA Classifications</th>
<th>200 Level % Share</th>
<th>300 Level % Share</th>
<th>400 Level % Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Class</td>
<td>-</td>
<td>00.00</td>
<td>01</td>
</tr>
<tr>
<td>2nd Class Upper</td>
<td>256</td>
<td>19.09</td>
<td>202</td>
</tr>
<tr>
<td>2nd Class Lower</td>
<td>1040</td>
<td>77.55</td>
<td>904</td>
</tr>
<tr>
<td>3rd Class</td>
<td>45</td>
<td>03.36</td>
<td>05</td>
</tr>
<tr>
<td>Pass</td>
<td>-</td>
<td>00.00</td>
<td>02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1341</strong></td>
<td><strong>1205</strong></td>
<td><strong>1114</strong></td>
</tr>
</tbody>
</table>

Source: MIS Office, NOUN (Ibadan Study Centre)

From the Table, it was revealed that as at 2007/2008, only one student was on the first class honour list across the 200, 300 and 400 levels. This was 00.09%. The table also revealed that 202 and 904 students were on the second class upper and lower honours lists, which was 18.13% and 81.15% respectively. Only 5 students, that is, 00.45% were on third class honour list, while 2 students, which constituted 00.18%, were on the pass list.

Similar situation was discovered at the Distance Learning Centre of the University of Ibadan, Ibadan during the selected years (1997, 1998, 1999, 2000, 2004, 2005, and 2006) respectively.

Table 2: Analysis of the Summary of Distance Learners’ Graduation Results in Selected Years at the Distance Learning Centre, University of Ibadan.

<table>
<thead>
<tr>
<th>Grade</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
<th>% Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Class</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>0.03</td>
</tr>
<tr>
<td>2nd Class Upper</td>
<td>98</td>
<td>62</td>
<td>37</td>
<td>29</td>
<td>73</td>
<td>-</td>
<td>201</td>
<td>512</td>
<td>19.82</td>
</tr>
<tr>
<td>2nd Class Lower</td>
<td>470</td>
<td>275</td>
<td>204</td>
<td>155</td>
<td>327</td>
<td>12</td>
<td>562</td>
<td>1993</td>
<td>77.18</td>
</tr>
<tr>
<td>3rd Class</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td>-</td>
<td>16</td>
<td>43</td>
<td>1.66</td>
</tr>
<tr>
<td>Ordinary Pass</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>6</td>
<td>19</td>
<td>34</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>Failed</td>
<td>14</td>
<td>17</td>
<td>13</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>15</td>
<td>85</td>
<td>3.18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>586</strong></td>
<td><strong>355</strong></td>
<td><strong>256</strong></td>
<td><strong>193</strong></td>
<td><strong>438</strong></td>
<td><strong>26</strong></td>
<td><strong>813</strong></td>
<td><strong>2667</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Records Office, University of Ibadan, Ibadan.
The analysis of the summary of distance learners’ graduation results has revealed from the table indicated that the numbers of those in the pass and third class honours lists were 34 and 43, that is, 1.31% and 1.66% respectively, while majority that is, 77.18%, which was 1993 were in the second class lower honour list. Those in the second class upper honour list constituted 19.82%, that is, 512 and 0.03%, which is 01 distance learner was in the first class honour list. It was also revealed from the table that since the inception of the programme over twenty years ago, the Centre has succeeded in producing only one first class student.

The reverse however was the case when compared with the graduation results of the regular full-time students in the Faculty of Education at the University of Ibadan, Ibadan. For instance, a total number of 8 regular full-time students graduated with first class honours, this is 0.4%. Three hundred and twenty students, which was 19.08%, had second class upper division while 1,190 students, about 71% fell within the second class lower honour list. Also, 7.69%, that is, 129 students were in third class list while 1.78%, that is, 30 students had pass. This was a better performance than that of the distance learners. Table 3 gave the breakdown of the analysis.

Table 3: Analysis of the Summary of Regular Students’ Graduation Results in Selected Years at the Faculty of Education, University of Ibadan.

<table>
<thead>
<tr>
<th>Classifications</th>
<th>2000</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
<th>% Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Class</td>
<td>01</td>
<td>03</td>
<td>02</td>
<td>02</td>
<td>08</td>
<td>0.4</td>
</tr>
<tr>
<td>2nd Class Upper</td>
<td>95</td>
<td>80</td>
<td>80</td>
<td>65</td>
<td>320</td>
<td>19.08</td>
</tr>
<tr>
<td>2nd Class Lower</td>
<td>356</td>
<td>397</td>
<td>287</td>
<td>150</td>
<td>1190</td>
<td>70.96</td>
</tr>
<tr>
<td>3rd Class</td>
<td>04</td>
<td>55</td>
<td>48</td>
<td>22</td>
<td>129</td>
<td>07.69</td>
</tr>
<tr>
<td>Ordinary Pass</td>
<td>-</td>
<td>03</td>
<td>14</td>
<td>13</td>
<td>30</td>
<td>1.78</td>
</tr>
<tr>
<td>Failed</td>
<td>03</td>
<td>05</td>
<td>14</td>
<td>10</td>
<td>32</td>
<td>1.87</td>
</tr>
<tr>
<td>Total</td>
<td>459</td>
<td>543</td>
<td>445</td>
<td>262</td>
<td>1709</td>
<td></td>
</tr>
</tbody>
</table>

Source: Records Office, University of Ibadan, Ibadan.

The unique nature of distance learners makes their social characteristics worthy of investigating in study. One of the students’ social characteristics of special interest is their disability status. In fact, students with disabilities had often been identified as non-traditional and they constituted distinct populations with needs that were different from matured non-traditional learners according to Hughes (Octernaud, 1990). In view of this fact, the academic performance of non-able distance learners has therefore, been a source of concern to researchers in the field of distance education (Pamela, 2006). Thus, there is urgent need to explore the extent to which distance learners’ disability status, (that is, whether able or non-able) predict their academic performance in the programme. This appears to have received little or no attention in Nigeria.

Statement of the Problem

The academic performance of distance learners, especially the non-able ones has been a source of concern to researchers in the field of distance education. This is contingent upon the fact that students’ academic performance is one of the major criteria for judging the standard and quality of any educational programme. From the background information however, it seems that distance learners’ academic performance since the inception of the National Open University of Nigeria is unimpressive. This study therefore, provided a causal explanation of academic performance through the analysis of distance learners’ disability status with a view to improving their academic performance at the National Open University of Nigeria. The study provided answers to the under stated research questions and hypothesis:
Research Questions

- Does students’ disability status predict academic performance at the National Open University of Nigeria?
- What is the contribution of students’ disability status (if any), to the prediction of academic performance at the National Open University of Nigeria?

Hypothesis

- There is no significant difference in students’ academic performance based on disability status at the National Open University of Nigeria.

Scope of the Study

The study covered the Ibadan Study Centre of the National Open University of Nigeria. Participants in this study were undergraduate distance learners during the 2009 contact year. The selected factor included in the study as predicting academic performance was students’ disability status.

Literature Review

The literature review for the study was carried out under these headings:

- The Concept of Distance Education.
- Inclusive Distance Education.
- National Open University of Nigeria: Historical Development.
- Disability Status and Academic Performance.

The Concept of Distance Education

The concept “Distance Education”, otherwise globally known as “Open and Distance Learning” by the International Council for Distance Education (ICDE), according to Ojokheta (2000) and Aderinoye (2002), has shown a tremendous growth during the last few decades due to its unique nature of being a users’ friendly system (Sharma, 2002). It has been perceived as a fast growing international phenomenon. The terms “distance education” or distance learning” have been applied interchangeably by many different researchers to a great variety of programmes, providers, audiences, and media. Its hallmarks are the volitional control of learning by the student rather than the distant instructor (Jonassen, 1992); the separation of teacher and learner in space and/or time (Perraton, 1988); and non-contiguous communication between student and teacher mediated by print or some form of technology (Keegan, 1986; Garrison & Shale, 1987).

Distance education, a discipline within education, has been associated with various definitions and terminologies. Many terms have been used to identify distance education and it was debatable as to whether these terms were in fact, synonymous with distance education. Some of the languages used included correspondence education, open learning, independent study, non-traditional education, technology-based education, and online learning.

Early in the field of distance education, Peters (1973) defined distance education as a method of imparting knowledge, skills and attitudes, which are rationalized by the application of division of labour and organizational principles as well as by the extensive use of technical media, specially for the purpose of reproducing high quality teaching material which makes it possible to instruct great numbers of students in the same time wherever they live. It is an industrialized form of teaching and learning.

According to Dohmen (1977), distance education is a systematically organized form of self-study in which students’ counselling, presentation of learning materials and securing and supervising of students’ success are carried out by a team of teachers each of whom has responsibilities. It is made possible at a distance by means of media, which can cover long distances. In the submission of
Holmberg (Keegan, 1996:42), distance education refers to that “kind of education which covers the various forms of study at all levels which are not under continuous and immediate supervision of tutors present with their students in lecture rooms on the same premises but which nevertheless, benefits from the planning, guidance, and tuition of a tutorial organization”.

Keegan (1986) had earlier made a synthesis of most of the definitions of distance education after reviewing similar definitions from other scholars. He then came up with a list of basic characteristics essential for a definition of distance education namely:

- the quasi-permanent separation of teacher and learners throughout the length of the learning process (this distinguishes it from conventional face-to-face education);
- the influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programmes);
- the use of technical media – print, audio, video or computer – to unite teacher and learner and carry out the content s of the course;
- the provision of two-way communication so that the student may benefit from or even initiate dialogue (this distinguishes it from other use of technology in education); and
- the quasi-permanent absence of the learning group throughout the length of the learning process so that people are usually taught as individuals and not in groups with the possibility of occasional meeting for both didactic and socialization purposes Keegan (1995).

There have also been many definitions put forward in modern literature. Greenberg (1998:36) defined contemporary distance learning as “a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning”. Teaster and Blieszn er (1999:41) maintained that “the term distance learning has been applied to many instructional methods, its primary distinction is that the teacher and the learner are separated in space and possibly time”. Keegan (1995:7) gave the most detailed definition when he asserted that “distance education and training result from the technological separation of teacher and learner which frees the student from the necessity of traveling to “a fixed place, at a fixed time, to meet a fixed person, in order to be trained”. From these definitions, we can see that the student and teacher are separated by space, but not necessarily by time.

Besides the afore discussed definitions of distance education, there is the need for further clarifications among other several terms that are not only closely related to, but also almost convey similar meanings. The terms “distance education”, “distance learning”, “open learning” and “open and distance learning” though, are synonymous words that represent approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners, slight differences could still be made among these terms as highlighted below:

- Distance education is any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium either electronic or print (The United Nations Educational, Scientific and Cultural Organizations (UNESCO) 2000).

- Distance learning refers to situations where learners are physically separated from the educational provider, communicating in writing, (using letter mail, email, fax, or computer conferencing); verbally (by telephone, audio conferencing, video conferencing); or in face-to-face tutorial sessions (The Commonwealth of Learning, (COL) 2003).

- Open learning refers to situations where learners use resources in a flexible way to achieve their goal. These resources may be print, audio- or computer-based; used at home, at a study centre or in the workplace; with or without the guidance of a tutor or mentor. Open
learners’ goals vary greatly, from completing formal accreditation, to learning a specific job related skill, to pursuing a leisure interest (COL, 2003).

- *Open and distance learning* refers to education and training in which using learning resources, rather than attending classroom sessions, is the central feature of the learning experience (COL, 2003).

### Inclusive Distance Education

According to Florien (Adediran, 2008), inclusive education is a part of broad human rights agenda which argues that all forms of segregation are morally wrong. In the opinion of Adediran (2008), inclusive education is premised on the advocacy of full human rights and social justice, and equalizing educational opportunities. Also, as embodied in the six point inclusion charter:

*Segregated education is a major cause of society's widespread prejudiced against adults and those experiencing difficulties in learning and that efforts to increase their participation in community life will be seriously jeopardize unless segregated education is reduced and ultimately ended (Adediran, 2008:4).*

In view of the above declaration therefore, desegregating special education is a crucial first step in helping to change discriminating attitudes in creating greater understanding and in developing a fairer society (Kalu, 2008). By inclusive education, the Centre for Studies in Inclusive Education (CSIE) (Adediran, 2008) maintained that it is a process of bringing the disabled and non-disabled children and young people to learn together in ordinary pre-school, primary Schools, Colleges and Universities with appropriate network of support. It can also be described as an educational approach which assembles the abled and non-abled together in an academic environment with an array of professionals attending to their specific needs to ensure a smooth-sailing academic progress (Adediran, 2008).

The Federal Government of Nigeria (2008) submitted that inclusive education involves changes and modifications in contents, approaches, structure and strategies, with a common vision, which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children. Consequently, it is held that “there is no legitimate reason to separate children from their education, rather children belong together with advantages and benefits for every one” (Kalu, 2008:15).

Essentially therefore, the issue of mainstreaming children within the formal education system is all important for internal inclusion. Inclusive distance education has deduced from the description made above could be regarded as that regular distance educational programme, consisted of abled and non-abled students in which a significant portion of the entire teaching and learning is conducted by someone far removed in space and/or time.

### National Open University of Nigeria: Historical Perspective

The National Open University of Nigeria (NOUN) is the only single mode distance education dedicated University in Nigeria. The University was initially established by the Sheu Shagari’s civilian administration on July 22, 1983 through the Open University Act which subsists in the Law of the Federation of Nigeria (1980). It was however, proscribed by the succeeding military government of Gen. Muhammed Buhari (rtd). The University was later re-established and re-named the National Open University of Nigeria (NOUN) in 2002, incidentally by another civilian administration of Olusegun Obasanjo. According to Ajadi (2010), though, its headquarters is at Lagos, NOUN has a campus in Kaduna, an office annex in Abuja and 36 study centres scattered all over the country including three special centres namely a study centre for the Army at Sobi Barracks, Ilorin; one for the prisoners at the Kirikiri prison in Ikoyi, Lagos, and the third one for the Air force at the Air force base Apapa, Lagos. NOUN was re-launched upon Nigeria’s realization that distance education was becoming an increasingly important policy option for developing countries (Ambe-Uva, 2006).
The University has embraced a ‘learner-centered’ approach to learning. A learner-centered educational process is a departure from the conventional teaching and learning culture, in that one now employs a wide range of information and communication technologies (ICTs) as well as instructional methodologies to bring about learning outcomes. These ICTs are designed to support self-learning. They include printed course materials, tutor marked assignments, self assessment exercises and feedback systems, radio and television broadcasts, audio and video tapes, CD-Roms, tutor-assistance, individualized counseling and assistance via telephone, facsimile, or electronic mail. These technologies and methodologies according to Ambe-Uva (2006) enabled remote distant delivery to an ever increasing number of learners, despite physical distances.

The increase in the University’s study centers from 18 in 2003, to 27 in 2007, spread across the six geo-political zones, is an indication that NOUN now opens access to education as far as the remotest parts of the country. As at 2007, NOUN has 35,000 students enrolled and was projected to grow to more than 100,000 by the end of that year (Jegede, 2007). The University is therefore an essential means of meeting the needs of Nigerians who, for reasons of distance, religious obligations, and work or family commitment, could not otherwise engage in regular educational opportunities. In other words, the University reaches people in communities in which they would have been otherwise deprived of opportunities to learn. Moreover, NOUN’s expansion of its service area is expected to make a significant contribution in the individuals’, societal and of course, nation’s educational development by increasing people’s access to education. According to Jegede (2003), NOUN’s educational programmes are designed in such a way as to enable people to start applying what they have learned immediately.

The University also strives to ensure that those educated will remain in their local communities, thereby reducing localized unemployment rates which in turn, would help to alleviate rural poverty, increase literacy, and hopefully, stimulate and invigorate local economies (Jegede, 2003). The main strength of the University is that it is a fundamental tool needed to break the vicious cycle of poverty that has griped many areas of Nigeria. NOUN aims to achieve this goal by increasing access to affordable, yet quality education that transcends all barriers.

In addition, in recognition of the special needs of distance learners, NOUN according to Ambe-Uva (2006) has established the Directorate of Learner Support Services (DLSS). The DLSS plays a supportive role and provides the much needed people, structures, and environment for both students and staff. The Directorate also serves as the intermediary between students and the institution. Student counselors are important arm of NOUN’s Learner Support Services (LSS). Apart from supporting students through their academic work, LSS provides counseling and guidance related to Sexuality Education, HIV/AIDS awareness, Peer Education, and other professional consultations to staff and students who are engaged in distance education (Ipaye, 2006). Counselors are also responsible for keeping in touch with distance learners and provide ‘early warning signals’ regarding difficulties with studies and behavioural problems. NOUN has since pushed ahead of conventional Universities, through its provision of two counselors for each NOUN study centre, a move that was recently commended by the Nigerian Psychological Association (NPA).

**Disability Status and Academic Performance**

Moisey (2004) first observed that students with disabilities took courses at a much higher rate than their non-disabled counterparts: an average of four courses over the three-year period of the study compared with two courses for the general undergraduate population. She further reported that these students with disabilities experienced somewhat less success in these courses. Their overall course completion rate (including early withdrawals) of 45.9% was lower than that of the general Athabasca University population (52.5% when early withdrawals are included; 59.5% when early withdrawals are excluded). Moreover, completion and performance rates ranged from 40% for students with psychological disabilities to more than 65% for students with sensory disabilities.
In addition, Hampton and Mason (2003) examined the impact of gender, disability status, and sources of efficacy on self-efficacy beliefs and academic achievement in the concept of Bandura's social cognitive theory. Two hundred and seventy-eight high school students participated in the study. Structural equation modeling was used. The results revealed that disability status had indirect influence on self-efficacy via the source variable; gender did not have direct or indirect influences on self-efficacy; sources of efficacy had direct impact on self-efficacy, which in turn affected academic performance. The structural model fit the data well and explained 55% of the variance in academic achievement.

In a study conducted by Benz and Fabian (1996), the participants for the study consisted of 25 learning disabled students from a southern high school. The participants were exposed to training in study skills, which focused on organization skills, study habits, note taking and test taking strategies. The result of the study showed that there were therapeutic gains as the participants performed better in the post-test.

Research and data collection with respect to the academic success of students with disabilities is sparse. Canadian studies are largely theoretical and tend to examine single variables and employ cross-sectional rather than longitudinal designs (Outcomes Group, 1998; Taillon & Paju, 1999; Moisey, 2004). For example, the Outcomes Group examined the grade point averages (GPAs) of former students with disabilities from 21 British Columbia public junior/community colleges and institutes. Students were surveyed nine months after they had completed all, or a significant part, of their programme. The results showed that the GPAs of students with and without disabilities were virtually identical, regardless of programme of study. The study also found that women with and without disabilities had higher GPAs than men, and this was true regardless of programme.

However, the sample was heterogeneous, except for gender and programme type, and did not take into consideration other background variables. Moisey (2004) examined the course completion rates of students with disabilities in distance education at a Canadian university, and found that their completion rates were lower than the general University population (45.9% versus 52.5%). Taillon and Paju (1999) also investigated the labour market outcomes of 300,000 Canadians who graduated in 1995. The study reported that 6% of graduates in vocational and career programmes and 4% of university graduates in Bachelor’s, Master’s, and Doctorate programmes were persons with a disability. These percentages are lower than the 7% of persons with disabilities who reportedly participate in post-secondary education in Canada (Canadian Association of Disability Service Providers in Post-Secondary Education [CADSPE], 1999), suggesting a lower graduation rate. None of these studies examined graduation or retention rates based on a longitudinal tracking of students.

In Britain, Richardson (2001) and Richardson & Roy (2002) studied a series of large-scale studies on the academic outcomes of University students with and without disabilities. Richardson and Roy (2002) made a comparison of a large group of students with visual impairments to students with no cases of any form of disabilities. In a cross-sectional analysis, the relative proportion of students with visual impairment in a group of students who had completed their studies (completed group, \( n = 363,631 \)) was compared to a group who were enrolled and were still progressing toward their qualifications (continuing group, \( n = 1,183,285 \)). The representation of students with a visual impairment was lower in the “completed group” (.09%) than in the continuing group (.13%).

The difference which remained significant even when background variables such as age, marital status, gender, ethnicity, and entrance qualifications were considered, suggested that students with visual impairment were less likely to complete their programmes of study. However, in another study (Richardson, 2004), when differences in similar background variables were also taken into consideration, reported that hearing loss had no effect on the academic measures namely number of courses passed, credit points gained, and final workload investigated.

As regards American studies, there have been series of conflicting results with respect to the academic outcomes of students with disabilities. For example, a study from Gavilan College (2002) reported that students with “learning disabilities” and “other disabilities” performed as well as students
without disabilities in Mathematics and English courses, and that students with learning disabilities were more likely to obtain an award. Horn and Berktold (1999), on the other hand, reported that students with disabilities who enrolled in post-secondary education for the first time in 1989–90 were less likely than students without disabilities to have enrolled or earn a post-secondary degree or credential within five years. Vogel and Adelman (1992) found that graduation rates for college students with a learning disability were not significantly different from those of a group without disabilities, although they undertook a lighter course load and took longer to graduate. This contradicts the findings of an earlier study (Adelman, 1990), which found that the time taken to graduate for students with a learning disability did not differ from those without a disability.

Further study on academic performance rates is however required, particularly with regard to the differential success rates that appear to exist among students with varying types of disabilities. Certain types of disabilities appear to be more amenable to assistance (Moisey, 2004). For example, nearly all students with learning disabilities who received assistance in technology completed their courses compared and performed better with about half of students with other types of disabilities who received this type of service. It was observed, according to Moisey (2004) that there is little doubt that distance education can enhance access to students with disabilities and that disability specific support services can enhance success. The best thing therefore, is to ensure that students with disabilities are findings our doors and getting success when they arrive.

Methodology

Design

Descriptive research design of the “ex-post facto” type was adopted for the study. This is because none of the variables of the study could be manipulated by the researcher.

Population

The study population consisted of 200, 300 and 400 level undergraduate distance learners at the Ibadan Study Centre of the National Open University of Nigeria. This was approximately 5,135 during the period under study.

Sample and Sampling Techniques

Purposive sampling technique was used in selecting the Ibadan Study Centre of the National Open University of Nigeria, one of the four Nigerian Universities approved by the National Universities Commission to operate distance learning programme. On the other hand, stratified simple random sampling technique was used to select one thousand and five hundred participants during year 2009 contact session. This was 29.21 per cent of the total population. The participants were first stratified into able and non-able. One thousand, four hundred and forty-one able and fifty-nine non-able participants were then selected simple randomly.

Instrumentation

Disability status item in the self-designed questionnaire titled Students’ Attitudes Towards Distance Learning Scale (SATDLS) earlier used in a related study by one of the authors, and whose Cronbach’s coefficient gave alpha value of 0.84 was adopted for the present study. The disability status was scored Yes/No, with yes having 1 and No coded 0. The researcher used another self-designed distance learners’ bio-data master sheet (DLBMS) to collect students’ records on results (Grade Point Average), which was used to measure the dependent variable of the study, that is, academic performance from the Institution’s records officers. It was scored as shown below:
Table 4: Scoring of Self-Designed Distance Learners’ Bio-data Master Sheet (DLBMS)

<table>
<thead>
<tr>
<th>Range of GPA</th>
<th>Interpretation</th>
<th>Corresponding Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.50 – 5.00</td>
<td>First Class</td>
<td>5</td>
</tr>
<tr>
<td>3.50 – 4.49</td>
<td>Second Class Upper</td>
<td>4</td>
</tr>
<tr>
<td>2.50 – 3.49</td>
<td>Second Class Lower</td>
<td>3</td>
</tr>
<tr>
<td>1.50 – 2.49</td>
<td>Third Class</td>
<td>2</td>
</tr>
<tr>
<td>0.5 – 1.49</td>
<td>Pass</td>
<td>1</td>
</tr>
</tbody>
</table>

Method of Data Analysis

Regression analysis was used to determine the contribution of the students’ disability status \( (x_1) \) in predicting distance learners’ academic performance \( (x_2) \). The criterion variable was therefore regressed on the explanatory variable. The study adopted t-test to determine the significant difference in students’ academic performance based on disability status.

Data Analysis

This section presents the analysis of the collected data basically to answer the two posed research questions and also, tested the only hypothesis in the study.

Research Question 1

- Does students’ disability status predict academic performance at the National Open University of Nigeria?
- What is the contribution of students’ disability status (if any), to the prediction of academic performance at the National Open University of Nigeria?

Table 5: Prediction of Academic Performance by Students’ Disability Status

<table>
<thead>
<tr>
<th>N</th>
<th>Students’ Disability Status</th>
<th>GPA (Academic Performance)</th>
<th>Sig (1-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td></td>
<td>.056</td>
<td>.015</td>
</tr>
</tbody>
</table>

Table 5 showed the prediction of academic performance by students’ disability status. From the table, it was revealed that students’ disability status predicted academic performance. The B value (prediction) was shown as .056. There was also a significant relationship between the two constructs (.015; P<0.5).

Research Question 2

- What is the contribution of students’ disability status (if any), to the prediction of academic performance at the National Open University of Nigeria?

Table 6: The Contribution of Students’ Disability Status to the Prediction of Academic Performance

<table>
<thead>
<tr>
<th>Factor</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta (β)</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.431</td>
<td>.505</td>
<td></td>
<td>4.566</td>
<td>.000</td>
</tr>
<tr>
<td>Students’ Disability Status</td>
<td>8.652E-02</td>
<td>.130</td>
<td>.068</td>
<td>2.136</td>
<td>.024*</td>
</tr>
</tbody>
</table>

*Sig.(P<0.05)

The Table revealed that the beta weights (β) of the paths (path coefficients) give the estimates of the strengths of the causation. It was revealed therefore, that students’ disability status at the NOUN contributed significantly to the prediction of academic performance (β=.068; p<.05).
Hypothesis 1: There is no significant difference in students’ academic performance at the National Open University of Nigeria based on Disability Status.

Table 7: Comparison of Students’ Academic Performance Based on Disability Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>t-value</th>
<th>Sig</th>
<th>Rmk</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-abled</td>
<td>59</td>
<td>2.63</td>
<td>1.56</td>
<td>1488</td>
<td>2.394</td>
<td>.017*</td>
<td>Sig</td>
<td>Reject</td>
</tr>
<tr>
<td>Abled</td>
<td>1441</td>
<td>2.96</td>
<td>1.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at P<0.05

From the Table, it was revealed that there was a significant difference between the academic performance of able and non-able distance learners at the National Open University of Nigeria \( t = 2.39, \text{df} = 1488, P< 0.05 \). The value of the level of significance (.017) was found to be significant at P< 0.05. Thus, the hypothesis was rejected.

Discussion of Findings

From the analysis so far, it was revealed that disability status had not just ordinary relationship with academic performance, but a significant one. This finding therefore lends credence to Pamela’s (2006) assertion that the academic performance of disabled distance learners has been a source of concern to researchers in the field of distance education. On the finding discovered in the hypothesis, whereby a significant difference was found between the academic performance of abled and non-abled distance learners, in which abled distance learners performed better than non-abled colleagues lends credence to the work of Moisey (2004) which reported that students with disabilities usually recorded less success. The rationale behind the finding of the present study might not be probably unconnected with the fact that adequate support facilities and personnel were not provided for the non-abled students in the programme.

Special student support services, especially in terms of supportive staff like sign language interpreters, speech therapists, audiologists and the like were not made available for students with disabilities in programme.

Contributions to Knowledge

The present study was carried out on the premise that the essence of carrying out any research work is to extend the frontier of knowledge. This study has therefore contributed to the extension of the frontier of knowledge especially in the field of distance education practice. It has shown the predictive power of the selected factor, that is, students’ disability status, in the determination of academic performance. In fact, the authors contend that nothing appears to have been done on non-abled distance learners in order to assist them to improve upon their academic performance.

Implications for Instructional Delivery

This study has the following implications for effective instructional delivery in the practice of inclusive distance education, since it has shown that non-abled students now patronize distance learning programme.

- The disability status of distance learners need to be considered during instructional delivery in the inclusive distance education programmes. Different categories of disabilities abound and they are needed to be considered when delivering instructions so that non-abled distance learners could gain meaningfully from the programme.
- There is the need for the provision of special students support services and personnel for the non-abled distance learners, especially the sign interpreters and the braillists so that they would not be left out during the instructional delivery.
Conclusion and Recommendations

There is no doubt that distance education is gaining ground in educational delivery globally. It is in fact, paying vital complementary roles in this regards. Inclusive distance education is however, likely to be the order of the day since we now have both the abled and the non-abled persons patronizing distance education programmes.

This study had underscored the need to consider distance learners’ disability status during curriculum planning and instructional delivery because of the serious implications they have for inclusive distance education. The researchers therefore believed that the authorities concerned need to be aware of these implications and be more supportive of especially the non-abled students. It is therefore, recommended as follows that:

- There should proper funding of inclusive distance education by making adequate provision for supportive personnel such as the sign interpreters and the braillists.
- Tutorial facilitators in the programme need to be wary of the presence of different categories of learners’ via-a-vis their disability statuses in order to ensure effective instructional delivery.

References


[23] Sharma, H. L. (2002). Student support services in distance learning system, a case of DDE, Maharshi Dayanand university. Turkish online journal of distance education. 3.4. 1-9.


