Factors influencing academic performance in Basic Business statistics Course at Polytechnic of Namibia

Lillian Pazvakawambwa, Elizabeth Ngololo, Efraim Dumeni

Abstract

The Polytechnic of Namibia offers the Basic Business Statistics course for all its undergraduate registered students for the Bachelor of Technology degrees in Business Administration, Public Administration, Marketing, Human Resources Management and Economics programmes as part of their curriculum requirements, on full-time, part-time and distance education (open learning) basis.

Academic performance in this course is generally poor, leaving a lot of students with the Basic Business Statistics Course outstanding even after their final year of study, thus delaying their graduation. This paper seeks to the determinants of the students' performance in this course by fitting a binary logistic regression based on the population of distance students who enrolled for the course in the first semester of 2012. The dependent variable is the performance or final result (Pass or Fail) for the Basic Business Statistics course. The independent variables include gender of student, Matric Score (Maths, English), home language, and degree programme.

From this study it was concluded that gender does not play a significant role in the academic performance in the Basic Business Statistics Course. Academic performance in Basic Business Statistics was associated with the language spoken at home by the student, his or her programme of study, the regional base station of the student, and to a lesser extent, the school leaving matric score in Maths and English.

More effort is required to increase the proficiency in English of Namibian College students as a way of improving overall academic achievement. More female students should be encouraged to enrol in the distance learning program as it offers a lot of flexibility. There is need to provide uniform distance learning infrastructural requirements across all regions.

Keywords

distance education, logistic regression, academic performance

Introduction

Distance education programs have grown tremendously in both universities and colleges world-wide, underlining the need for providing adequate library services to distance students. Smiti (2003) examined additional responsibilities, opportunities and challenges encountered by academic librarians in trying to address these needs.

Rutkauskiene(2012) presented opportunities and challenges of distance education in Lithuania. The Lithuanian distance education project in partnership with the World Bank Global Development Learning network, aimed at

- Co-operation among higher education institutions in distance education development
- 2. Development of distance education infrastructure based on modern telecommunications, information and video-conference technologies
- 3. Maintenance of virtual universities and
- 4. The advancement of e-learning.

The video-conferences, pre-offline seminar sessions, webcasts and Adobe connect chats, collaborative on-line document preparation and discussion space were very helpful. From this project, lessons learnt were that they should always develop means to ensure participant demand for session topics, to always integrate video-conferencing with other forms of online and offline communication, and that social media and online collaborative tools should be utilized for community building among the participants.

According to Bower (2001), distance education in its various forms has attracted a lot of interest and debate in higher education institutions. College administrators increasingly pressurize faculties to take part in distance education programs. Faculty members have generally not embraced the concept citing several reasons such as adequacy of institutional support (in terms of salaries, promotion and tenure, workload and training); the change in interpersonal relations and quality (in the sense that it changes the way instruction is delivered, access to resources such as library, labs and faculty, and learner-centeredness).

Prummer and De Christine(2000) examined challenges and opportunities for women enrolled in distance education programmes. Evidence from different countries supported

the conclusion that open and distance learning has the potential to provide equal opportunities in higher and continuing education which are currently out of reach of a considerable number of women in the world. They argued that distance education, while involving a degree of risk to the stability of families and relationships, it offers women a chance worth taking. The authors challenged distance education policy makers to develop a framework for women students that will limit their risks and maximize their opportunities. Forsyth, Pizza, Laxton and Mahony (2010) studied the experience of distance educators at anAustralian campus-focused university and identified organizational structure and culture as critical success factors for quality in distance education, with technology as a minor consideration. They concluded that the growth of e-learning technologies has blurred the boundaries of educational modes to such an extent that the distance education programs can be offered without any visibility on campus. While distance education has opened once-closed doors to industry, the e-learning strategy has failed to comprehensively prepare a way for issues unique to distance education. The authors recommended that campus-focused universities must protect their reputation through systematic quality assurance of their distance offering.

In Botswana, studies were conducted by Sikwebele and Mungoo (2009) at Molepolole College of Education involving teachers and tutors in the Diploma in Primary Education program by distance mode, in an in-service program for upgrading academic and professional qualifications of primary school teachers. The purpose of the study was to understand the levels of access to resources and the challenges faced by both teachers and tutors. The research findings revealed that teachers should be enrolled in the programmes at a younger age and that issues that led to delays in completion of the programs should be addressed. The authors recommended that the Botswana Ministry of Education should hire full-time tutors to support teachers at their base stations, provide resources for practical subjects, organize workshops to familiarize tutors with appropriate strategies for adult learners, to increase the duration of residential sessions, to explore the use of instructional technologies, and institute regular customer evaluations.

The Jamaican Ministry of Education and Culture in collaboration with the University of West Indies also embarked on a project to upgrade teachers' qualifications to match the needs of newly upgraded high schools. The teachers with Diplomas in Education were upgraded to the Bachelor of Education degree qualification through a programme composed of ten courses in a content area and ten education courses using open distance learning. Joseph (2002) cited challenges in administration, the program structure within an educational institution that was essentially arranged for face-to-face delivery of instruction. The following recommendations were made:

 The group specific relevance of existing courses could facilitate the development of open and distance learning programs once a team of writers

willing to undertake the task of conversation and adaptation was identified, to give attention to the pedagogical skills in the design of the material.

- 2. With online delivery, there was need to blend the traditional forms of assessment with online assessment.
- 3. They expressed the need for lecturer training to write for distance education and to internalize pedagogical skills required
- They highlighted the need for team work across faculty in courseware development.

Jung, Wong, Li, Baigaltaugs & Belawati (2011) investigated the national quality assurance systems for distance education at higher educational level in Asia with the aim of contributing a better understanding of the current level of development of quality assurance in Asian distance education, and to offer potential directions for policy makers when developing and elaborating quality assurance systems for distance education. They selected 11 Asian countries namely: China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Mongolia, Philippines, Singapore, and Sri Lanka. They assessed the national systems based on the following quality assurance standards and criteria: Vision, mission, values and/or goals; assessment and evaluation; educational resources; leadership, governance, and administration; finance; IT infrastructure; teaching and learning; curriculum and course development; student support; faculty and staff, internal quality assurance system; and research. They concluded that the level of quality assurance policy integration varied considerably among the eleven countries examined. The countries were at different stages of quality assurance system development. Each country's quality assurance systems development showed that the quality assurance purpose, policy framework, methods and instruments were customized to suit each country's needs. There were commonalities that connected different quality assurance efforts in the form of :

- 1. Working toward promoting a culture of quality with quality assurance agencies and distance education providers
- Positioning of quality assurance in the pursuit of self- improvement and public accountability in distance education institutions
- 3. Considering distinctive features of distance education in quality assurance frameworks or during evaluation processes
- Linking quality assurance results to direct or indirect funding, levels of autonomy, or other support
- 5. Adopting both internal and external assessments and making quality assurance results public.

Overall, quality assurance in distance education was still at an early stage of development compared to quality assurance in conventional higher education.

According to Brennan (1999), quality assurance in higher education is for the purpose of:

- 1. Ensuring accountability of public funds
- 2. Improving the quality of educational provision
- 3. Stimulating competition within and between institutions
- Verifying the quality of new institutions
- Assigning institutional status
- 6. Underwriting transfer of authority between state and institutions and
- 7. Facilitating national and international comparisons.

The paper by Belawati and Zuhairi (2007) examined the experience of Terbuka University's quality assurance initiatives and concluded that quality assurance must be developed as institutional policy and strategy for continuous improvement.

According to Weimin and Dhanarajan (1999), open distance learning is characterised by the separation of teacher and learner in time or space or both; institutional accreditation, i.e. learning is accredited or certified by some institution or agency; use of mixed media courseware (print, radio, television broadcasts, video and audio cassettes); computerbased learning and telecommunications; two- way communication interaction between tutors and learners from the passive receipt of broadcast signals; possibility of face to face meetings (for tutorials, learner – learner interactions, library study and laboratory of practice sessions; and the use of industrialised processes (In large scale open and distance learning operations, labour is divided and tasks are assigned to various staff who work together in course development teams.)

The quality of open distance learning depends on a variety of internal and external factors such as levels of skills and expertise of staff, amount of resources available, and strength of leadership, efficiency of its administrative systems or the communications infrastructure of a country (Robinson, 1995). Their paper sought to examine some aspects of managing quality in general and quality assurance with particular focus on specification of standards, staff involvement, documentation, training and staff development, monitoring and costs. They concluded that while attention to managing processes and procedures is essential for assuring quality in open distance learning, staff also need a clear institutional vision of what constitutes good quality learning, what conditions foster it, and how to access it.

Rausaria and Lele (2002) identified and explained the parameters relevant for selfassessment and accreditation of programs in distance learning institutions. They cited program goals and objectives, program design and development, curriculum design, learning materials, use of print media, use of media in development of programs, the delivery of programs and program review. They recommended that institutions could constitute a core group which from time to time could carry out program monitoring and evaluation; which would relate to a research wing for quality improvement and thus help the institution to carry out its assessment for quality.

According to Derek and Corners (2012), in dual mode institutions, many students student take both traditional and online courses. Not much is known about how students fare once they have moved beyond those target courses. Concerns have been raised about the quality of education that students receive in distance learning classes relative to their peers taking similar courses in the traditional classroom setting. The study explores and compared the determinants of student learning outcomes in distance learning courses with traditional, classroom based courses. There was no significant difference between the performances of students from the two modes of learning.

Studies to investigate factors affecting student performance in Arab Open University-Kuwait Branch using ordinary least squares multiple regression revealed that the Grade point average (GPA) of a student is affected by age, high school score, and nationality. Younger students performed better than mature students and non-national students performed better than national students. The results further revealed that significant gender differences existed with female students performing better than their male counterparts. It was also interesting to note that married students performed better than their unmarried counterparts.

Kim, Yang, Sogang and Kim (2010) selected determinants of educational effectiveness from previous literature regarding traditional educational environments and examined factors that affectededucational effectiveness in terms of learner satisfaction and application performance using structural equation modelling. Their results indicated that factors in traditional education are still significant in terms of application performance while certain factors in distance education affect learner satisfaction.

In Malaysia, Ghani, Said, &Nasir (2008) identified factors perceived to be important in choosing an institution of higher learning through distance education. The top three factors established were qualification recognition, future career advancement and personal satisfaction.

Masasi (2012) investigated whether personal attributes affect a student's performance in an undergraduate accounting course at the Open University of Tanzania using correlation

and regression analysis. The studies established that the more children a student had, the better grades earned. Male students' performance was better than that of female students. Performance was also influenced by the nature of work the student was involved in outside the university. Marital status did not seem to have an influence on student performance.

Studies by Fakeye and Ogunsiji (2009) examined the extent to which secondary school students' proficiency in English predicted their overall academic achievement in the Oyo and Osun state of Nigeria using correlation and regression analysis. Their results showed that English language proficiency of the students had a significant positive relationship with their overall academic performance. Kong et al, (2012) investigated the use of English language proficiency and academic reading assessment scores to predict future academic success of English learner students using regression equations. Their results suggest that English proficiency may be a more important predictor of future academic achievement of English learners, than their previous academic achievement. On the other hand, Oliver et al, (2012) were concerned about the increasing number of international students enrolled in Australian universities who were experiencing considerable difficulty in their academic courses. The study analysed data to ascertain if English Language proficiency requirements were sufficient to ensure academic progress of adequate numbers of international students. The best evidence for potential academic success was found to be standardised tests.

Data and Methods

Data used in this paper was extracted from the Polytechnic of Namibia Student records for all distance education students who registered in the first semester of 2012. No sampling was done as all the population of distance education students registered for the Basic Business Statistics Course were recorded. This paper sought to establish the determinants of performance in this course by fitting a binary logistic regression based on a population of 370 distance education students who enrolled for the course and were examined. Therecords were extracted from the Integrated Tertiary System (ITS) database where student data is stored. The dependent variablewasthe final result (Pass or Fail) for the course, which is dichotomous. The independent variables included gender of student, Matric Score (Maths,English), home language, and region station of the student. The independent variables choice was guided by literature review and was also limited by the availability of data students' records.

Binary logistic regression was chosen as the best model, since the outcome variable can take the value 1 with a probability of success θ , or the value 0 with probability of failure 1- θ . A general form of the logistic regression equation is:

$$\operatorname{logit}\left[\theta(\mathbf{x})\right] = \operatorname{log}\left[\frac{\theta(\mathbf{x})}{1 - \theta(\mathbf{x})}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_i x_i$$

Where α = the constant of the equation and, β = the coefficient of the predictor variables.

The logistic regression model is flexible since it makes no assumption about the distribution of the predictor variables. There are no conditions that predictor variables have to be normally distributed, linearly related or homoscedastic within each group. The Wald statistic and its corresponding significance level test the significance of each of the coefficients of covariate and dummy independent variables in the model. If the p-value is less than 0.05, then the parameter is significant in the model. Evaluation of the goodness of fit of the full model was based on the Likelihood ratio test and the Hosmer-Lem show goodness of fit test.

Results

Figure 1: Performance of ODL students in Basic Business Statistics



The pie chart in Figure 1 clearly shows that more than half of the distance students (62%) failed Basic Business Statistics, which is a cause for concern. Table 1: Profile of the background characteristics of distance students registered for the

Basic Business Statistics Course

| Background Characteristic | Frequency | Percentage | |
|---------------------------|-----------|------------|---|
| Gender | | | |
| Female | 204 | 55.1 | |
| Male | 161 | 43.5 | |
| Not Specified | 5 | 1.4 | |
| Language Spoken at home | | | |
| Afrikaans | 42 | 11.4 | |
| Other Language | 2 | 0.5 | |
| Damara | 4 | 1.1 | Ĩ |
| English | 19 | 5.1 | |
| Herero | 31 | 8.4 | |
| Kwambi | 7 | 1.9 | |
| Kwangali | 7 | 1.9 | |
| Kwanyama | 26 | 7.0 | |
| Lozi | 18 | 4.9 | |
| Mbalantu | 4 | 1.1 | |
| Mbanderu | 2 | 0.5 | |
| Nama | 6 | 1.6 | |
| Ndonga | 42 | 11.4 | |
| Ndandjera | 4 | 1.1 | |
| Portuguese | 7 | 1.9 | |
| Subiya | 3 | 0.8 | |
| Tswana | 2 | 0.5 | |
| Wambo | 58 | 15.7 | |
| Language Not specified | 86 | 23.2 | |
| Regional Centre | | | |
| Gobabis | 6 | 1.6 | |
| Katima | 4 | 1.1 | |
| Keetmanshoop | 9 | 2.4 | |
| Ongwediva | 43 | 11.6 | |

| Opuwo | 1 | 0.3 |
|---|-----|------|
| Otjiwarongo | 14 | 3.8 |
| Outapi | 13 | 3.5 |
| Rundu | 7 | 1.9 |
| Tsumeb | 13 | 3.5 |
| Walvis Bay | 48 | 13.0 |
| Windhoek | 207 | 55.9 |
| Region not specified | 5 | 1.4 |
| Programme Name | | |
| Bachelor of Public Management | 31 | 8.4 |
| Bachelor of Business administration | 113 | 30.5 |
| Bachelor of Human Resources Management | 55 | 14.9 |
| Bachelor of Human Resources Management (New) | 49 | 13.2 |
| Bachelor of Marketing | 42 | 11.4 |
| Bachelor of Technology in Economics | 35 | 9.5 |
| Bachelor of Technology in Public Management | 37 | 10.0 |
| Non Diploma Purposes | 3 | 0.8 |
| Program not specified | 5 | 1.4 |
| Matric Score (Maths, English) | | |
| A | 5 | 1.4 |
| В | 24 | 6.5 |
| С | 54 | 14.6 |
| D | 58 | 15.7 |
| E | 65 | 17.6 |
| F | 22 | 5.9 |
| G | 1 | 0.3 |
| Mature Age Entry | 124 | 33.5 |
| Matric Score not specified | 17 | 4.6 |

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| Basic Business Statistics Final Result | | | | |
|--|-----|------|--|--|
| Pass | 140 | 37.8 | | |
| Fail | 225 | 60.8 | | |
| Result not specified | 5 | 1.4 | | |

Table 1 shows that 55% of the registered and examined distance learning students were female. From the frequency distribution of languages spoken at home, it is evident that Namibia enjoys a rich and wide diversity of languages and dialects across the country. The large diversity of languages can be attributed to the vast geographical land area of the country. It is postulated that this diversity could negatively impact on the academic performance of students, since the medium of instruction is English, which to some students, is a second or third language. The majority of students speak Oshiwambo or its close dialects. English was introduced as the formal or business language at Namibia's independence. For this variable some languages had very small frequencies which would result in unstable logistic regression estimates. As a result some related languages were bunched together to address the anomaly as follows:

Wambo, Kwambi, Kwanyama, Mbalantu, Ndonga, Ndandjera

Herero, Mbanderu

Lozi, Subiya

Others (Tswana, Portuguese, Kwangali)

Nama, Damara

On the program of study, most students were enrolled for the Bachelor of Business Administration Degree (30.5%) and very few (0.8%) took the Basic Business Statistics course for non-diploma purposes. This very small group was combined with those students whose program was not specified and considered under ' Others'.

Eleven regional centres were established by the Polytechnic of Namibia to cater for distance students in the various regions of the country. The bulk of students were stationed in Windhoek(55.9%), Walvis Bay (13.0%) or Ongwediva (11.6%). Again because of small numbers in some regions, those close together like Katima & Rundu, and Opuwo & Outapi regions were bunched together to stabilise logistic regression estimates.

With regard to school leaving matric score (for Maths and English), very few students (7.9%) had a score of(A or B). The bulk of the students had been admitted to the degree programmes on a mature age entry (33.5%) ticket. For the same reasons as for other independent variables, for the Matric scores from Maths and English, Grades A & B, C &

D, E, F & G were also bunched together to facilitate model fitting.Results from the logistic regression are presented in Table 2.

 Table 2: Logistic regression results on ODL student factors associated with performance in Basic Business Statistics

| ODL student factors | Odds Ratio (OR) |
|--|-----------------|
| Language Spoken at Home | |
| Afrikaans | 0.528 |
| Wambo, Kwambi, Kwanyama, Mbalantu, Ndonga, Ndandjera | 0.663 |
| Herero, Mbanderu | 1.899 |
| English | 0.407 |
| Lozi, Subiya | 0.089** |
| Nama, Damara | 0.242* |
| Others (Tswana, Portuguese, Kwangali)® | 1.000 |
| Gender | |
| Male | 1.102 |
| Female [®] | 1.000 |
| Program of Study (Bachelor's degree) | |
| Public Management | 10.35 |
| Business Administration | 1.099 |
| Human Resources Management | 3.370* |
| Human Resources Management (New) | 0.517 |
| Marketing | 0.971 |
| Economics ® | 1.000 |
| Region (Base Station) | |
| Gobabis | 2.704 |
| Katima , Rundu | 0.655 |
| Keetmanshoop | 2.615* |
| Ongwediva | 9.860** |
| Opuwo , Outapi | 3.250 |
| Tsumeb | 0.321 |
| Walvis Bay | 8.347* |

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| Windhoek [®] | 1.000 |
|--|-------|
| Matric Score (English, Maths) symbol | - |
| A or B | 0.497 |
| C or D | 0.296 |
| E or F or G | 0.746 |
| Mature Age Entry ® | 1.000 |
| *= reference category., -2 Log Likelihood =401.630, Overall Chi- Square =84.390** | |
| Degrees of freedom =26, Number of Cases =365, $*p<0.05$, $**p<0.01$ | |

The logistic regression results indicate that the type of language spoken at home was a significant predictor of students' performance in Basic Business Statistics. Those students who spoke Lozi or Subiya (OR = 0.089, *p-value*<0.001) and those who spoke Nama or Damara (0.242, *p*-value=0.046) were less likely to pass the course compare to those who spoke Other languages.

Surprisingly, the gender of the student was not significantly associated with performance in the course (OR =1.102, *p*-value=0.713. With regard to programme of study, students who enrolled under the Human Resources Management degree program were about 3 times more likely to pass Basic Business Statistics compared to their counterparts in the Economics degree programme (OR=3.370, *p*-value=0.015).

There was significant association between the regional base station of the student and performance in Basic Business Statistics. Students from Keetmanshoop (OR=2.65, *p*-value=0.011) were three times more likely to pass the course compared to their counterparts in Windhoek, while those from Ongwediva were about ten times more likely to pass the course (OR=9.86, *p*-value=0.003) relative to their counterparts in the Windhoek region. Students from Walvis Bay were two times more likely to pass the Basic Business Statistics course (OR=2.366, *p*-value=0.025) compared to those from Windhoek.

From the results, the matric score does not seem to have an impact on the performance of distance students in Basic Business statistics except for those students who obtained scores of either a C or a D (OR=0.296, *p*-value=0.038), who were less likely to pass Basic Business Statistics compared to those in the Others category.

Discussion

The fact that gender did not seem to impact on the performance of students in Basic Business Statics is in contrast to findings from Tanzania by Masasi (2012) and studies in Kuwait Al Mutairi (2011), where male students' performance in studies was significantly higher than that of their female counterparts. This contrast could be because Namibia is a relatively more secularized society where the demarcation of gender roles is slowly fading.

Language was found to be a significant predictor of academic performance. These findings are in agreement with those by Fakeye (2009) and (Kong et al, 2012), whose results indicated that English language proficiency of students has a significant positive effect on their individual course and overall academic performance. In Namibia students have a variety of 13 main languages and English is the second or third language, making it more difficult for them to follow academic instruction delivered in English. Oliver et al.(2012) suggest that the best evidence for potential academic success is standardised tests, while students submitting other forms of English language proficiency tend to have more difficulties in their studies.

Regional factors also impacted on the academic performance of students in the Basic Business Statistics course. These finding differ from those of Xitao and Michael (199), Saadiya (2012) and Borland and Howsen (1999) who found that rural students performed as well as , if not better than their peers in metropolitan areas. The regional factors for distance students could matter in view of technological infrastructure required for students to access study material, and telecommunication challenges.

The program of study can affect student's performance in the sense that some courses may be more demanding, more technical or more mathematical than others, causing differences in performance. In this particular case, all the degree programs were business related with the Economics programme being more mathematical and this could be the reason why programme type did not impact much on the students' performance in Basic Business Statistics.

With regard to the Matric score predictor, which was only significant for the C and D gradesrelative to the Mature Age Entry category, the results almost suggest that performance in Basic Business Statistics is not influenced by the school leaving score. Interestingly, the findings are in agreement with those by Salahdeeen and Murtala (2005) who studied the relationship between university admission scores and university academic performance of first year medical students in Nigeria. Their results showed that there was no significant correlation between admission scores and the student's performance in preclinical sciences. For the Polytechnic of Namibia students, this result should be interpreted with caution since only 7.9 percent of the students population scored either and A or a B in the school leaving examinations.

Conclusions

From this study, it was concluded that gender does not play a significant role in the academic performance of the Basic Business Statistics Course. Academic performance in Basic Business Statistics was associated with the language spoken at home by the student, his or her program of study, the regional base station of the student, and to a lesser extent, the school leaving matric score in maths and English.

Recommendations

More effort is required to increase the proficiency in English of the Namibian university students as a way of improving overall academic achievement. Study material should be translated into local languages were possible to bridge the barrier. In addition, more intensive English courses should be offered in the first year of university to boost understanding of course materials which are in English. More female students should be encouraged to enrol in the distance learning programmes as it offers a lot of flexibility for mothers, housewives and working women without a significant gap in performance with their male counterparts. The significant association between regional base station of the student and academic performance could be addressed by providing uniform distance learning infrastructural requirements across all regions.

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References

Al_Mutairi, A. (2011). Factors Affecting Business Students Performance in Arab Open university: The case of Kuwait, International Journal of business Management, 6 (5) 1-10

Belawati, T. and Zuhairi, A. (2007) The Practice of Quality Assurance System in Open and Distance Education: A Case Study of University Terbuka Indonesia, International Review of Research in Open and Distance Learning, 8 (1)

Borland, M. and Howsen, R.M. (1999). A note on students' academic performance: In Rural versus urban areas, American Journal of Economics and Sociology, 58 (3) 537-546

Bower, L.B. (2001). Distance Education: Facing the Faculty Challenge, Journal of Distance Learning Administration 4 (2)

Brennan, J. (1999). Evaluation of Higher education in Europe. In M. Henkel and B. Little (Eds): Changing relationships between higher education and the State, London, Jessica Kingsley

Derek, R. and Corners, S.E. (2012). Distance Learning in a Core Business Class: Determinants of success in learning outcomes and Post course Performance, Academy of Educational Leadership Journal, 16 (1)

Fayeke, D.O. and Ogunsiji, Y. (2009).English Language proficiency as a predictor of academic achievement among EFL students in Nigeria.European Journal of Scientific Research, 37 (3) 490-495

Forsyth, H, Pizzica, J., Laxton, R. and Mahony, M.J. (2010).Distance education in the era of e-learning: Challenges and opportunities for a Campus-focused institution, Higher Education Research and Development, 29 (1) 15-28

Ghani, E.K., said, J. and Nasir, N.M. (2008).Determinants of Malaysian Adult Learner's Distance Learning, US-Chine Education Review, 5 (5) 17-26

Josepha. (2002). Open Distance Learning and In-service Teacher Education: Challenges and Opportunities, University of West indies, Jamaica, Proposal Feedback, ID 711

Jung, I. Wong, T.M., Li, C. Baigaltaugs, S. and Belawati, T. (2011). Quality Assurance in Asian Distance Education: Diverse Approaches and Common Culture, International Review of Research in Open and Distance Learning, 3 (14) 1-10

Kim, J., Yang, H.K., Sogang, K.L. and Kim, S.T. (2010). Finding determinants affecting Distance Education Effectiveness in terms of Learner Satisfaction and Application Achievement, International Journal of Web-Based learning and teaching Technologies, 5 (2) 18-36

Kong, J., Powers, S., Starr, L. and Williams, N. (2012). Connecting English language learning and academic performance: A predictive study, American Educational Research Association, Vancouver, British Columbia, Canada.

Masasi, N.J. (2012). How Personal Attributes Affect Students' Performance in an Undereducated Accounting Course: A case Study of Adult Learning in Tanzania, International Journal of Academic Research in Accounting Finance and Management Sciences, 2 (2) 201-210.

Oliver, R., Vanderford, S. and Grote, E. (2012). Evidence of English Language proficiency and academic achievement of non-English speaking background students, Higher educational Research and development, 31 (4)541-555.

Prummer, V. and Christine, D. (2000). Women and Distance Education: Challenges and Opportunities, (B-3)

Rausaria, R.R. and Lele, N.A. (2002).Self Assessment of Distance Education Institutions: Identification of parameters relevant for Program Assessment, Indian Journal of Open learning, 11 (1) 147-157

Robinson, B.(1995). The Management of Quality in Open Distance Learning, Proceedings of the 8th Annual conference of the Asian Association of Open Universities, New Delhi, Vol 1 pp 95-109

Rutkauskiene, D. (2012). Opportunities and Challenges of Distance Education, Kaumas University of Technology, Global Development Network, ECA Region, Lithuania pp 1-31

Saadiya, T. (2012) Rural urban gaps in academic achievement, school conditions, students, teachers characteristics. International Journal of Education Management, 26 (1) 6-26.

Saladeen, H.M. and Murtala, B.A.(2005). Relationship between admission grades and performance of students in first year examination in a new medical school, American Journal of Biomedical Research, 8 51-57

Sikwebele, A.L. and Mungoo, J.K. (2009). Distance Learning and Teacher Education in Botswana: Opportunities and Challenges, The International review of Research in Open and Distance Learning, 10 (4) 1-16.

Smit, G. (2003). Academic Librarians and Distance Education: Challenges and Opportunities, Reference and User Services Quarterly, 43 (2) 138-154.

Weimin, Y. and Dhanarajan, G.(1999). Quality Assurance in Open Distance Learning: Training Toolkit, Trainers Kit 005, The Common Wealth of Learning and Asian development Bank.

Xitao, F. and Michael, J. (1999). Academic achievement of rural students: A multi-year comparison with their peers in suburban and urban schools, Journal of Research in Rural Education, 15 (1) 31-46.

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