A Comparative Analysis of the Academic Performance of Distance and Oncampus Learners

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INTRODUCTION

Despite the critical role of knowledge in economic development and growth in the global village, African universities, like the University of Swaziland, continue to face unprecedented challenges such as high demand for university education; dwindling financial resources to maintain and expand physical infrastructure such as lecture rooms and theatres, offices, auditorium, laboratories, libraries, lecturers' house, and hostels; recruit and maintain quality personnel; and invest in new information and communication technologies (Makhubu, 1998). Yet, developing countries, like Swaziland, need highly skilled people with tertiary educational background. In Swaziland, for example, the last national survey on human resource needs indicated that 10% of the labour force fitted the definition of educated and trained human resource and the majority of technical professionals (70%) were expatriates (Government of Swaziland, 1986).

Until recently, African universities have been providing university education through conventional methods such as residential or on-campus teaching. Unfortunately, due to limited financial and human resources, and physical facilities on campus, conventional methods of providing higher education have not been able to admit the large number of people seeking university education. Some of these people are adults who cannot afford to enrol on a full-time basis because of work, family responsibilities, and business commitment. They have children to feed, cloth and send children to school, mortgages and insurance premiums to pay, and businesses to run (Dlamini, 1998).

Over the years, because of lack of space on campus, the University of Swaziland has been rejecting a large proportion of applicants qualifying to undertake university education. Between 1995 and 1998, for example, 20% of the 2181 applicants who qualified to undertake university education were rejected by the University because of lack of space on campus (Dlamini, 1998).

In an attempt to redress this challenge, the University of Swaziland established the Institute of Distance Education (IDE) in 1994 to provide university education through distance education (Magagula, 1998). The first intake of off-campus learners into IDE was in 1996. Since then, IDE has been offering the following programmes: Certificate in French, Diploma in Law, Diploma in Commerce, Bachelor of Commerce, Bachelor of Arts in Humanities, and Bachelor of Education (Adult). All these programmes, with the exception of the Diploma in Law, were also offered to on-campus learners using the conventional face-to-face teaching methods.

The entrance requirements and the content of both on-campus and off-campus programmes were the same. The on-campus and off-campus learners were taught by the same lecturers. They wrote similar tests, assignments, and final examinations. On completion of the programmes, both on-campus and off-campus learners were awarded the same certificates, diplomas and degrees. Off-campus and/or on-campus learners who wish to transfer to on-campus and/or off-campus programmes were permitted. In a nutshell, off-campus and on-campus programmes were the same and comparable. The only difference was the mode of delivery, and perhaps to a certain extent, the background characteristics of the off-campus and on-campus learners.

Against this backdrop, although the University of Swaziland had been offering parallel oncampus and off-campus programmes to off-campus and on-campus learners since 1996, no study had been undertaken to examine the background characteristics of off-campus and on-campus learners enrolled in these parallel programmes, the extent to which the academic performance of off-campus and on-campus learners similar

- 1. By distance learning is meant the system of teaching by someone who is removed in space and time from the learner through teaching materials that have been systematically developed using different types of media to provide two way communication (Gandhe, 1995; Smith, 1990; Keegan, 1986).
- 2. In addition to the basic entrance requirements, the University used aggregates of the University of Cambridge Ordinary-Level results to admit the applicants. Applicants with lower aggregates got first preference than applicants with higher aggregates.

and/or different, the advantages and disadvantages of learning at a distance as perceived by off-campus learners, and how these disadvantages could be addressed.

THE PURPOSE OF THE STUDY

The purpose of this study was to examine the background characteristics of off-campus and on-campus learners enrolled in the parallel programmes at the University of Swaziland, the extent to which the academic performance of off-campus and on-campus learners were similar and/or different, the advantages and disadvantages of learning at a distance as perceived by off-campus learners, and how off-campus learners felt these disadvantages could be addressed.

THEORETICAL FRAMEWORK

One of the basic principles of managing educational programmes is to evaluate the extent to which they save the purposes for which they were established for. The evaluation process usually focuses on the various aspects of the programme's inputs, processes, and outputs. Indeed, the purpose of evaluation is to make judgments about the efficiency, effectiveness, relevance, sustainability, merit, value, and worthiness of educational programmes (Borg and Gall, 1989). Such judgements are usually guided by the epistemological foundations of generating knowledge.

Indeed, researchers (Bachelor & Maxwell, 1987; Codd, 1988; Juran, 1989; Kemmis, 1984) have raised concerns about the assumptions of the epistemological traditions and theories (positivism, hermeneutics, critical theory, and change theory) guiding evaluation of educational programmes. The basis of raising such concerns is because the assumptions of each of these epistemological traditions in terms of the generation of valid and reliable knowledge are different, sometimes contradictory and lead to different conclusions. Thus, Nouwens and Robinson (1991) suggest a new framework, the action-evaluation for evaluating educational programmes. The present study was guided, in part, hermeneutic assumptions in the sense that it sought to examine 'reality' from the worldview of participants, how they perceived challenges, and how they felt such challenges should be addressed.

RESEARCH QUESTIONS

Research questions of this study were:

- What were the background characteristics of the off-campus and on- campus learners?
- To what extent was the academic performance of off-campus and on-campus learners similar and/or different?
- How did off-campus learners perceive the advantages and disadvantages of learning through the distance mode?
- What were off-campus' recommendations for minimizing the disadvantages of learning at a distance?

3. The reader is referred to Nouwens and Robinson's work for a detailed discussion on the action-evaluation theory for evaluating distance education institutions and organizations.

RESEARCH DESIGN

Rumble (1997) asserts that if the entrance requirements and content to off-campus and on-campus programmes are the same, the lecturers are the same, and both off-campus and on-campus learners write the same final examination, then it should be possible to compare the academic performance of both on-campus and off-campus learners. Thus, the research design of this study was a survey questionnaire. The target population was 210 year two students enrolled in the Bachelor of Arts Programme in (i) the Institute of Distance Education and (ii) the Faculty of Humanities. Of the 210 students, 90 were off-campus learners and 120 were on-campus learners. Simple random samples of 70 off-campus learners and 70 on-campus learners were selected to participate in this study.

Both distance and on-campus learners were taking the same course content, taught by the same lecturers, wrote similar tests and assignments, and sat for the same final examinations. The only difference between off-campus and on-campus learners was the mode of course delivery. Off-campus learners were taught using distance learning methods (through print modules and face-to-face tutorials at the regional centres), whilst on-campus learners were taught using the conventional face-to-face methods of teaching.

Data collection instruments were: (i) a questionnaire and (ii) an interview schedule constructed and piloted by the authors. The questionnaire and the interview schedule were piloted to similar on-campus and off-campus learners. Arrangements were made with lecturers to administer the questionnaire to off-campus and on-campus learners during class sessions. Apart from providing background information, the questionnaire requested participants to provide their final grades in the following subjects: Academic Communication Skills, History, Theology and Religious Studies, African Languages and Literature, Geography, and English Language and Literature.

Of the 70 off-campus learners and 70 on-campus learners, only 23 (33%) off-campus learners returned usable questionnaires, and of the 70 on-campus learners only 40 (57%) returned usable questionnaires. Interviews were conducted with 8 off-campus learners. The findings of the study are provided in the next section

FINDINGS

One of the research questions of this study was to determine background characteristics of distance and on-campus learners in the Bachelor of Arts Humanities programme. The results of the analysis are shown in Table 1.

Table 1 indicates that the majority of distance and on-campus learners were females (68%); single (90%), between 20 to 25 years old (92%), had completed O Level (76%) and were unemployed (97%).

Table 1:

Background Characteristics of the Distance and on-campus Learners Enrolled in the Second Year of the B.A. Humanities Programme

Variable	Off-campus	On-campus learner	Total	
	learners	_		
Sex				
Males	10 (50%)	10 (50%)	20 (32%)	
Female	13 (30%) 30 (70%) 4:		43 (68%)	
Total			63 (100%)	
<u>Marital Status</u>				
Single	21(37%)	36 (63%)	57 (90%)	
Married	2 (33%)	4 (67%)	6 (10%)	
Total	23 (37%)	40 (63%)	63 (100%)	
<u>Age</u>				
20-25 years	21 (36%)	37 (64%)	58 (92%)	
26-30 years	2 (40%)	3 (60%)	5 (8%)	
Total	23 (37%)	40 (63%)	63 (100%)	
Educational level				
0-level	22 (46%)	26 (54%)	48 (76%)	
Certificate	-	3 (100%)	3 (4%)	
Diploma	1(25%)	3 (75%)	4 (6%)	
Total	23 (37%)	40 (63%)	63 (100%)	
Employment Status				
Employed	2 (100%)	0 (0%)	2 (3%)	
Unemployed	21 (34%)	40 (66%)	61 (97%)	
Total	24 (38%)	40 (62%) 63 (100%)		

Academic Performance

The second objective of this study was to determine the academic performance of distance and full -time learners in the following subjects in the following subjects: Academic Communication Skills (ACS), History, Theology, African Languages, Geography, and English. Academic performance was operationalized as the overall average mark or grade obtained by a learner in each of the six subjects in year one of the final examination at the University of Swaziland. To determine the academic performance of distance and on-campus learners, the learners' grades were subjected to the Statistical Package for Social Sciences (SPSS). The results of the analysis are indicated in Table 2.

With the exception of Theology, a closer look at Table 2 indicates that off-campus learners consistently performed better than on-campus learners in five subjects: Academic Communication Skills (ACS), History, African Languages and Literature, Geography, and English Language and Literature. For example, the observed mean scores of off-campus learners were higher than the mean scores of on-campus learners. The mean scores of off-campus learners in Academic and Communication Skills (p.> .029), African Languages and Literature (p.> .006) and Geography (p.> .023) were statistically significant than the mean scores of on-campus learners.

However, although the mean scores of off-campus learners in History and English Language and Literature were slightly higher than the mean scores of the on-campus learners, the observed differences were not statistically significant. Notwithstanding the above, it can be concluded that the results of this study indicate that off-campus learners performed better in most of the academic subjects than on-campus learners.

4-The grading system at the University of Swaziland was as follows. A grade mark below 40% meant "a fail and repeat" (F), between 40% and 49% meant "fail, supplement", between 50% and 59% meant "pass", between 60% and 69% meant "a good pass", between 70% and 79% meant "a very good pass", and 80% and 100% meant "a distinction" (University of Swaziland Calendar, 1998/1999).

Subject	Group	N	Mean Score	SID	STD Error	F. Score	Sign
ACS	Distance On-campus	21 36	3.2429 2.7222	.7928 .6146	.1730 .1024	5.004	.029
HIS	Distance	7	3.0000	.5774	.2182	.0200	.658
	On-campus	20	2.8500	.8127	.1817		
<i>TRS</i>	Distance On-campus	13 28	3.0769 3.2500	.7596 .6455	.2107 .1270	.571	.455
ALL	Distance On-campus	20 32	3.3000 2.5938	.8013 .9108	.1792 .1610	8.095	.006
GEO	Distance On-campus	3 9	4.3333 2.6667	.5774 1.000	.3333 .3333	7.212	.023
ELL	Distance On-campus	21 25	3.1429 3.0800	.5732 1.0770	.1251 .2154	.058	.811

Advantages and Disadvantages

The third objective of the study was to determine the advantages and disadvantages of studying through distance education as perceived by off-campus learners. Specifically, off-campus learners were requested to list (i) advantages and (ii) disadvantages of learning through the distance mode. The responses of the off-campus learners on this issue are summarized in Table 3.

Table 3:
Advantages and Disadvantages of Learning through Distance Education

Advantages of Learning Through	Disadvantages of Learning Through Distance
Distance Education	Education
1. One immediately applies the knowledge and skills learned in the work place; 2. One does not forego his/her employment, continues to earn income and attend to family commitments; 3. One is able to study at his own pace, time and place; 4. One learns to be independent, learns to manage time, and self-discipline; 5. One is able to easily access modules that are well written and easy to read and understand.	 Tutorials on Saturdays at the regional centres are an inconvenience because one is unable to have a free weekend; There is less time to consult course lecturers; failure of centre coordinators and tutors to timely attend to distance learner' problems; Some courses do not have written modules, therefore tutors and lecturers tend to dictate notes and give out photocopied handouts; Failure by the system to timely distribute modules to students; Inadequate time for off-campus learners to use the library on Saturdays due to tutorials; and Failure of some tutors to show up for tutorials

According to table 3, distance and on-campus learners pointed out that the advantages of learning through distance education included, among others, immediate application of knowledge and skills learned in the programmes at the place of work; the opportunity to continue working if employed or self-employed, earn income and attend to family commitments; the flexibility of studying at one's own pace, time and place; the opportunity to develop independent learning skills, learn to manage time, and develop self-discipline; and access to modules which are well written and easy to read and understand.

The disadvantages of learning through distance education, according to the distance and on-campus learners, included the inconvenience of using Saturdays for tutorials at the regional centres instead of attending to their social activities; lack of time to consult course lecturers since the Saturday tutorial schedule were always fully packed; failure of the Institute to timely attend to off-campus learners' problems; unavailability of modules for some course modules at registration; the use of notes and photocopied handouts in the absence of modules; failure of the Institute to distribute modules to students on time; inadequate time for off-campus learners to use the library on Saturday; and failure of some course tutors and lecturers to show up for tutorials and lectures.

Off-Campus Learners' Recommendations

The study's final research question asked off-campus learners to recommend possible solutions to the disadvantages of learning at a distance. On the issue of using every Saturday for tutorials/lectures, off-campus learners recommended that tutorials should not be scheduled every Saturday. This would enable off-campus learners to attend to their personal activities. Regarding unavailability of some modules at registration, off-campus learners suggested that no course should be offered if its module was not available. On the issue of notes and photocopied handouts, off-campus learners felt that these were not serving any useful purpose since they were inappropriate for distance learning in the first instance.

With respect to the library opening hours on Saturdays, off-campus learners were of the view that the library should close after 6.00 p.m. on Saturdays to enable them to use its resources. On the issue of consultation with lecturers, off-campus learners suggested that lecturers should be available in their offices for consultations, not only on Saturdays, but also during the week. In addition, lecturers should prepare consultation schedules for off-campus learners and pin them on their office doors. On the issue of some course tutors and lecturers failing to turn up for tutorials, off-campus learners viewed this as a serious breach of contract, and suggested that such tutors lecturers should be reprimanded and/or requested to repay off-campus learners for the travelling costs they incur to regional learning centres.

DISCUSSION

One of the interesting findings of this study is that the majority of distance and on-campus learners were females. This was not surprising considering that on-campus students' enrolment records in the Faculty of Humanities at the University of Swaziland over the years reflect female predominance. For example, during the 2000 academic year, of the 563 students who had enrolled in the Faculty of Humanities, 329 (58%) were female students (University of Swaziland, 2001).

However, the picture of on-campus students' enrolment in the Faculty of Science was the opposite of that in the Faculty of Humanities. For example, in the same year, of the 294 on-campus students who had enrolled in the Bachelor of Science degree, only 109 (37%) were female. The question that arises is why? Could it be that female students shy away from science-related programmes in high schools? Why this was the case requires further research.

The second interesting finding of this study worth discussing is that off-campus learners tended to perform better in the academic studies than the on-campus learners. One would have thought that since on-campus learners had better O-Level grades, had more access to library facilities and course lecturers, had more quality time to study, and more face-to-

face interaction with course lecturers than off-campus learners, they would perform better than off-campus learners. However, this was not the case.

This finding, however, confirms findings of other research studies (Newlands and Mclean, 1996; Nielsen and Totto, 1993). Newlands and Mclean (1996) studied the performance of part-time and on-campus students and found that part-time students performed at the same level as on-campus students and sometimes better. Nielsen and Totto (1993) studied the academic performance scores of primary teachers in Sri Lanka and Indonesia who were studying a language programme through distance learning and found that they performed better than their on-campus counterparts. Similarly, Cohen, et al.'s (1998) meta-analysis review of empirical studies looking at academic performance of on-campus and off-campus learners found that academic performance scores of off-campus learners were as good as, if not better than, those achieved in conventional classrooms.

However, Hawkes (1995) and Whittington (1987) reviewed studies that compared distance learning technologies with traditional forms of face-to-face learning or contrasted the outputs of one distance learning medium over another. They found that students taking courses through instructional television achieved at the same level as students taking courses through traditional methods. Likewise, classroom achievement for students learning through interactive distance modes was equivalent to achievement of students in traditional classrooms.

The question that arose was why? Holberg (1985), Perry and Rumble (1987) and Keegan (1990) speculate that off-campus learners tend to perform better than on-campus learners because the printed materials are well written, packaged, and have clear objectives. Second, the content and concepts are properly sequenced in small chunks, starting with simple concepts to more complex concepts. Lastly, off-campus learners receive more direct learner support services through face-to-face tutorials than on-campus learners.

CONCLUSIONS

One of the key factors for comparative advantage in the globalized economy is investment in human capital and creating the critical mass of highly skilled human resource. Africa is lacking in this regard. To begin to address this challenge, institutions of higher learning have no choice but to invest in distance learning and embrace information and communication technologies. This study, like others, seems to indicate that off-campus learners are as good as on-campus learners, if not better, so long as they are provided with appropriate support services.

Indeed, research elsewhere has shown that distance education is cost-efficient and effective (Daniel & John, 1982; Arena, 1989; Laird & Layard, 1974; Nielsen & Tatto, 1993; Walff & Futagami, 1982; Ericson, 1994; Miguel, 1995; Rumble, 1997). There is no way conventional universities are going to build hostels, classrooms, lecture theatres, auditoriums, hostels, student union buildings, refectories, libraries, offices, etc. as fast as the growing demand and need for university education. However, as Gabriel et al., (2002) assert, limitations of existing research indicate the need for further research on the effectiveness of distance education.

REFERENCES

Andrew, G. Et al; (1998). Help Seeking Among Students: Are Lecturers Seen as Potential Source of Help? Study in Higher Education, Vol. 23, No. 3

Arena, (1989). Actualization del calculo de la Telesecundaria Mexicana. In Oliveira, J.P. & G. Rumble (eds.). Educacion a distancia en America Latina: Analisis de costo-efectivedada. Washington, D.C.

Babbie, E.R. (1983). The Practice of Social Research. (3rd Ed). Belmont, California.

Bailey, K. (1987). Methods of Social Research, (3rd Ed), New York. The Free Press.

Besser, et al; (1996). Impact of Distance Independent Education. Journal of the American Society for Information Sciences, Vol. 47, No3, PP 80 - 91.

Batchelor, M. and Maxwell, T. (1987). 'Action evaluation' new education. International Journal of Educational Theory and Practise, Vol 9, No 1-2.

Borg, W. R., & Gall, M. (1989). Educational research: An introduction (5th edn), Longman, Melbourne.

Chale, E.M. (1983). Tanzania Distance Teaching Programme. In Perraton, (Ed). Alternative routes to formal education: Distance teaching for school equivalency. Baltimore, John Hopkins University Press

Chang, T.M. et al; (1983). Distance Learning. U.S.A. Kluwer-Nijhoff Publishing Company. Chickening, A.W. (1974). Commuting Versus Residential Students. London . Jassey-Bass Publishers.

Codd, J. A. (1988). Knowledge and control in the evaluation of educational organisations. Deakin University Press, Geelong.

Cohen, S. et al, (1998). The Information Resource Management Program: A Case Study in Distance Education. http://www.columbia.edu/~sc32/cmrevisedjpae.htm

David, J.S. (1982). Learning at a Distance A World Perspective. Athabasca University Edmonton.

Dlamini, S. (1998). Opening Remarks by the Hon. Minister of Education. in C. Magagula (Ed) Issues on University Education in Swaziland: A Report on National Seminar held at the University of Swaziland, Kwaluseni Campus

Dlamini, B.M. (1998). An Overview of the Key Issues in the Provision of University Education in Swaziland in C. Magagula (Ed) Issues on University Education in Swaziland. A Report on National Seminar held at the University of Swaziland, Kwaluseni Campus

Dodd, J. (1981). The Credibility of Distance Education. England: Longman. Ericson, et al; (1994). The Development of Flexible Modular MED. The International Journal Educational Management. Vol. 8, No.1 PP 68-80.

Fisher, P. (1986). Library Service and Quality of off-campus Education. London. Brandon University.

Garrison, D.R. (1989). Understanding Distance Education. London. Routledge.

Government of Swaziland. (1986). Survey of Manpower. Mbabane: Kingdom of Swaziland.

Government of Swaziland. (1998). Development Plan 97/98-1998/99. Mbabane. Government of Swaziland.

Haque, A.K. (1995). Cost-Effectiveness of Distance Education. One World Many Voices, Vol. 2

Hawkes, M. 1995. Evaluating interactive video distance learning systems. A practical guide of considerations and alternatives. Oak Brook, IL: North Central Regional Educational Laboratory.

Inglis, P. (1987). Distance Teaching is Dead Long Live Distance Learning. Conference of the Australia and New Zealand Association for the Advancement of Science, Queensland.

Juran, J. M. (1989). Juran on leadership for quality. The Free Press, New York. Lindner, P. (1998). Assessment Tools for Distance Learning: A Review of Literature. Washington State

Board for Community and Technical Colleges and North Seattle Community College (ERIC Documentation Reproduction Service Number ED 436 176)

Kaman, J. (1995). Off-campus learners Perceptions of the Quality of Course Material and Student Support in Distance Learning Programmes in Kenya. One World Many Voices. Vol. 1.

Keast, D.A. (1998). Part-time University Education: the International Journal Education Management. Vol. 12, No.2, PP 114 - 119.

Keegan, D. (1990). Foundations of Distance Education. (2nd ed.). London: Routledge.

Kemmis, S. (1984). Educational research is research for education. Australian Educational Researcher, 11(1), March.

Khumalo, P. (1994). An Investigation into the Problems Encountered by PGCE part-time Students, Bachelor of Education. University of Swaziland, B.ED. Project.

Laird, B. & Layard, R. (1974). Traditional versus Open University teaching methods: A Cost Comparison. Higher Education. vol. 3, no. 4.

Magagula, C.M. (1998). Distance Education as an Alternative Strategy for Providing University Education in Swaziland. in C. Magagula (Ed). Issues on University Education in Swaziland. A Report on National Seminar held at the University of Swaziland, Kwaluseni Campus

Mahlck, L. and Temu, E.B. (1989). Distance versus College Training Primary School Teachers. Paris: IIEP.

Makhubu, L.P. (1998). Welcome Remarks. In C. Magagula (ed.) Issues on University Education in Swaziland. A Report on National Seminar held at the University of Swaziland, Kwaluseni Campus.

Miguel, C.M. (1995). Distance Education Universities in Latin America: Expectation and Disappointments. One World Many Voices, Vol. 2.

Ministry of Education. (1996). Education Statistics. Mbabane. Government of Swaziland.

Mutava, (1991). Some problems of Distance Education. London. Macmillan Press.

Nettlefold, B.A. (1988). Library Services for off-campus Students. Canada Ireland. Office of Educational Research and Improvement. One World Many Voices. Vol. 2.

Nouwens, F. and Robinson, P. (1991). Evaluation and the development of quality learning materials. Australian Journal of Educational Technology, 7(2), 93-116. http://www.ascilite.org.au/ajet/ajet7/nouwens.html

Newlands, D. and Mclean, A. (1996). The Potential of Live Teacher Supported Distance Learning: A Case Study of the Use of Audio Conferencing at the University of Aberdeen. London.

Nielsen, H.D. & Tatto, M.T. (1993). Teacher upgrading in Sri Lanka and Indonesia. In Perraton, (Ed). Alternative Routes to Formal Education: Distance Teaching for School Equivalency. Baltimore, John Hopkins University Press.

Perry, W. & Rumble, G. (1987). A short Guide to Distance Education .London. International Extension College.

Rumble, G. (1997). The Costs and Economics of Open and Distance Learning. London: Kogan page.

Snyder, A.C. Logue, S. & Preece, B. (1996). Role of Libraries in Distance Education.

Association of Research Libraries. Spec Kit 216. Washington D.C.

Stephen, F. Et al; (1995). Developing a Mixed Mode University: some Issues and Problems. One World Many voices. Vol. 1.

The Swazi Observer. (1998). Mbabane. Swaziland. 24th April.

The Times of Swaziland. (1998). Mbabane. Swaziland. 8th October.

University of Swaziland. UNISWA Calendar 1998/99. Institute of Distance Education (IDE). Kwaluseni: Publication and Information Office. University of Swaziland.

University of Swaziland. (1998). Graduation Ceremony. UNISWA Newsletter. Kwaluseni: University of Swaziland.

University of Swaziland. (1997). The Vice Chancellors Report. University of Swaziland. Kwaluseni Campus.

Walff, L. & Futagami, S. (1982). The Malawi Correspondence College. In Perraton,(Ed). Alternative Routes to Formal Education: Distance Teaching for School Equivalency. Baltimore, John Hopkins University Press

Whittington, N. (1987). Is instructional television educationally effective? A Research Review. The American Journal of Distance Education, 1: 47-57.

Wilson, J.M. (1996). Distance Learning for Continuous Education. Educom Review.

Wynne, M.P. (1998). Libraries without Walls; the Delivery of Library Services to Distance Users. United Kingdom. Macmillan Press.

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