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Assignment #3
Due November 27, 2010

Classification of Six Institutions into Five Generations of Technology of Distance Education

Introduction

Study Group 3 (SG3) in OMDE 601 collaboratively researched five generations of technology in distance education (DE) and classified one institution into one of the generations. The scope of this subsequent, individual assignment is to select six institutions from around the world – divided evenly between Europe, America and Asia. This assignment will build on SG3's selection of the Open University (OU) in the United Kingdom, with five additional DE institutions classified into the five generations of technology. The classification will be based on the six characteristics of DE institutions selected by SG3, to determine whether the characteristics selected were effective. The characteristics selected were audience, modes for delivery, communication or interactive media, types of technology used, affordability, and breadth of course offerings. The following sections are broken down by the five generations, with six DE institutions classified into the five generations.

First Generation: Correspondence/Home Study/Independent Study

The University of South Africa is the world's oldest DE institution, and prior to 1970 was the only institution that was autonomous in structure. In 1955 there were about 5,500 students enrolled, but today there are more than 130,000. The phrase "being open to all" means something different in South Africa than it does in other countries. Now, they try reaching students to give them a second chance at education, although most of them never had a first chance. In the land of apartheid the black population was not allowed to attend "white" universities. Only at this school was correspondence study – using the postal service and non-computer based media, able to mature into an acceptable form of education; it has continued to grow to its present day delivery using the technologies in other

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generations of distance education. The University of South Africa is a state school, offering affordable and subsidized tuition. The breadth of courses includes humanities, education, economics, law, science and theology (Peters, 1998).

The New Zealand Correspondence School of the Bible is an interesting distance education institution. This school has no course fees or tuition, but relies on contributions. The only financial obligation for students is the cost of postage to send assignments to and from the teacher. Their website indicates the program is freely open to New Zealand residents with a mailing address in the country. Their mode of delivery is solely correspondence, but students need to have an e-mail address to sign up initially. Clearly, the breadth of course offerings at this correspondence school is limited, as they offer only an in-depth study of the entire King James Bible. (<http://www.nzcsb.org.nz/info.htm>)

With these two institutions SG3's six criteria were all useful in classifying them into the first generation.

Second Generation: Broadcast Radio and Television

The Chinese Central Radio and Television Universities (CCRTVU), a national centralized university, began in 1979 and operated primarily via television stations. Peters (1998) says "the minister of education saw the possibility of educating more people quickly and at lower cost" (p. 213). The courses were primarily delivered via the Chinese Education Television (CETV), in order to reach the more than 65 percent of Chinese residents who live in rural areas (Moore & Kearsley 2005). The courses offered cover the natural sciences, engineering, the humanities, economics and management, and medical science. In the first twenty years of operation (until 2000) the CCRTVU had nearly 3 million college graduates (<http://www.edu.cn/20010101/21803.shtml>).

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The characteristics of SG3 were all useful in classifying the CCRTVU, although initially upon development it does not appear there was a lot of interaction between the student and teacher.

Third Generation: A Systems Approach

The Systems Approach is widely-seen around the world, but one of the most widely-recognized examples is the **Open University in the United Kingdom (OU)**, because it served as a model for future, large single-mode DE institutions (Guri-Rosenblit, 2009). The third generation joined concepts from correspondence, television, satellite delivery, audio and videotape delivery with a team approach to course preparation and teaching (Moore & Kearsley, 2005). Today, they also use technologies from the third and fourth generations for some course delivery. The OU has always served adult learners, who are often students with jobs and families, professionals wishing to enhance their skills, and the underserved portion of the population. Government sponsorship lowers the cost at the OU (Bates & Poole, 2003). The OU offers undergraduate studies, with more than 600 courses for 60 degrees and graduate programs with more than 50 programs (The Open University, 2010).

SG3 classified the OU in the third generation, using all of the criteria in their analysis.

Fourth Generation: Interactive Teleconferencing by Audio/Video/Computer

The **National Technological University (NTU)**, based in Fort Collins, Colorado is an accredited university offering graduate and continuing education courses in the field of engineering (Moore & Kearsley, 2005). There is no faculty at NTU, but courses are taught by faculty from large universities around the country using one-way video and two-way audio (Peters, 1998). Downlinks are located in more than 500 locations, including universities and government agencies. The NTU has changed substantially and expanded over the years in that it has merged numerous times with private

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companies, including the Public Broadcasting System, Sylvan Learning and Walden University (<http://www.ntu.edu/home/aboutus.asp>).

The SG3 criteria was not as easily applied to the NTU because it has changed much in ownership and merged with other private companies. Especially difficult to apply were affordability and audience.

Fifth Generation: Evolving Technologies

Many DE institutions can be classified into this generation, as they offer online classes and entire degree programs via the Internet. The **University of Maryland University College (UMUC)** serves mainly adult, part-time students through both traditional and innovative instruction. UMUC offers associate's, bachelor's, master's, certificates, and professional development programs. Degree programs are primarily in arts and humanities, behavioral and social sciences, business and management, computing, education, and technology. In addition, UMUC offers a professional doctoral degree in management (Parker, 2006). They continually improve and expand their course offerings, an example being the new undergraduate and graduate program in the exciting field of cybersecurity. UMUC is a state university, so tuition is moderate and subsidized, especially for residents of Maryland. UMUC has used other generations of technology at one point in time, from one-way video broadcasting, telephone and voice mail delivery of conversations, face-to-face courses, and their most popular online courses offered via their proprietary system called WebTycho, which allows for extensive communication between students and instructors.

All of the SG3 criteria can be applied to classifying UMUC as a fifth generation DE institution.

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Conclusion

The field of distance education has been widely-researched – more than most traditional academic researchers know. There is research on the generations, modes of delivery, and types of distance education. Data is even available on the oldest forms of DE typically considered first generation. Currently active universities that fit into the second through fifth generations are more prolific, and can be researched more easily. Many of these institutions started as correspondence study but have kept up with evolving technology, allowing them to grow into a fifth generation DE institution.

The characteristics developed by SG3 were all useful in classifying an institution into a particular generation. The characteristics of affordability, except as mentioned in terms of state vs. private institutions, and breadth of courses was not as relevant in classification. This same classification assignment could have been accomplished using fewer characteristics, namely audience, modes for delivery, communication or interactive media and types of technology used.

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