Introduction

In this paper we examine the use of radio technology by the University of Botswana and how this technology facilitates learning at the institution. Through its Centre for Continuing Education area, the University extends its educational strength by using open and distance learning with a variety of delivery methods (University of Botswana, 2009a, para. 3), radio being one of them.

Radio technology is used by the Public Education Unit of the University of Botswana's Centre for Continuing Education to deliver courses, instruction, and other information designed to help the public. The delivery of the content comes from government-owned Radio Botswana which is broadcast in English (their official language) and Setswana (Press Reference, 2009, para. 5).

While technologies of varying types are used by the University to reach distance students (i.e., audio/video, television, teleconferencing, video conferencing, and computer technologies), the broadest audience has more access to classes through radio transmissions. Although radio is considered technology from an earlier generation, it nonetheless continues to provide a valuable service and has wide application and acceptability across the globe. As has been documented by Bates and Poole, there are situations where new technologies are not always the best fit for students and that technologies that already are available to them are the appropriate solution (Bates & Poole, p. 83) – such is the case for radio technology in Botswana.

Programs for the radio coursework are designed as both credit and non-credit, as well as degree and non-degree needs through lifelong and part-time learning (University of Botswana, 2009a, para. 1). Encouragingly, the vision and mission statements of the Centre define students as

potentially being the entire population of Botswana, promoting its programs as being designed to provide "prosperity for all" (University of Botswana, 2009a, para. 2-3) and giving support to the notion that education is designed for the everyday citizen of the country. This is where the use of radio as a technology for education has the greatest appeal and strength – though its ability to go into the homes, cars, and minds of all of its people, no matter what economic, social, or geographic status they may have.

The SECTIONS Model

To determine the possibilities of how radio technology has an impact on students, faculty, and the University as well, it is necessary to employ a standard in which to evaluate it. While some aspects are difficult to determine based on the information available, a model can provide the framework through which we can examine how this technology has an impact on the institution's educational delivery and reception.

Using the SECTIONS Model (Bates & Poole, 2003, p. 79-104), the University of Botswana's Centre for Continuing Education uses radio technology in the following manner:

- **Students:** The University caters to both students and the general public through the use of radio technology. The nature of the education falls under an umbrella of public education, which in this circumstance applies to the needs for remote education as well as information dissemination. It's far-reaching impact and accessibility is utilized to bring programs, as needed and requested, to different parties throughout the country. When specifically designed for students, radio-supported classes also have the capacity to

provide recordings of sessions that can be replayed at study centers in the country (Kuruba, 2004, p. 9).

- **Ease of Use/Reliability:** Radio is a reliable and predictable technology. It has been around for many years and its use is commonplace and widely used around the world, particularly for educational purposes (Moore & Kearsley, p. 78). Using this broadcast technology is beneficial in Botswana because of the country's size, number of transmitting stations (Department of Information and Broadcasting, 2009, para. 5), and the availability of receivers (as opposed to devices needed to support other technologies). As a matter of fact, radio still appears to be the "most common means of mass communication in Botswana" (Press Reference, 2009, para. 5).

Costs: Because the material is freely broadcast, reception of the information is not directly charged by the institution. While Radio Botswana (i.e., the informational and educational branch referred to as Radio Botswana 1) is a state-run service providing support for national development (Department of Information and Broadcasting, 2009, para. 3), however, there was no specific information available regarding costs for classes, lectures, conferences, discussions, or workshop taken through this delivery method. As a medium though, it allows for "swift updating of material at low technical cost" (Moore & Kearsley, p. 79).

Teaching and Learning: As a distance education method, radio reaches a significant number of people in Botswana (other methods such as print, audio cassettes, video, video conferencing, and online learning are also available to various learning programs). The Centre for Continuing Education Public Education Unit provides support for institutional efforts to help give students flexibility in how they access their education so that they can decide the best delivery method for

their individual needs. However, many broadcasts are ad hoc to suit the needs of the presenter and/or message (University of Botswana, 2009b, para. 3).

- **Interactivity:** The inherent design of radio is that it is a synchronous "one-way technology" (Bates & Poole, p. 54, 2006). Depending on the course offering, there may be discussions or other forms of interaction at a studio or other closed collaborations, but very little interaction with students. There are opportunities, however, for situations where programming and instructors can allow for students to phone in to the lecturer to ask questions or engage in other exchanges. Additionally, other technologies and techniques exist that can augment the use of radio and enhance the education experience.
- **Organizational Issues:** The University's Public Education Unit works with "public education advisory committees and other government and non-government organizations" (University of Botswana, 2009b, para. 2) in order to develop and administrate education programs. Additionally, the unit collaborates with outside agencies to act as host for other educational programs (University of Botswana, 2009b, para. 7). This creates a potential variety of programming issues, not the least of which is trying to schedule the material within the framework of Radio Botswana program scheduling.

- **Novelty**: Radio technology has been around for decades. There is no indication that its use by the University of Botswana for educational purposes requires any additional technology or support other than course materials that may be required to take a particular class. The use of radio as an information delivery system is very straightforward and its use in the country is "more appropriate than others for presenting

certain content" (Bates & Poole, p. 173). Radio is also in a position to be the most accessible technology that reaches a majority of Botswana's residents since they are a predominantly radio-using population (Press Reference, 2009, para. 5).

- **Speed**: The speed at which course and informational material is designed and ready for delivery for radio broadcast at Radio Botswana is not documented. The flexible nature of radio, however, is that can provide its audience with quick and timely delivery of content (Moore & Kearsley, p. 79). Independent of the mechanisms necessary to create video-based or computer-delivered subject matter, it can be available to students just as quickly as a typical face-to-face lecture or similar presentation.

Closing

The University of Botswana is pursuing a number of different technological directions to advance itself and its people. While newer technologies provide a number of ways in which students in that country can access education at a more accelerated rate, radio is still given a rightful place in the delivery of learning so that more of Botswana's population can receive its benefits.

The versatility of radio is often challenged because of its synchronous nature and presentation style. A directed communication that is akin to a lecture-like style, radio has been maligned as being inflexible to the needs of modern education technology.

Although its "send and receive" method of communication has not changed much to the average user over the years, it has the capacity to provide more student support than it has been allowed. It is because of its "dated" technology that many people can access the material being sent and use their skills to learn the content as opposed to learning an interface, and it is because it can

reach a large body of people without significant restriction that it provides a viable and useful solution to Botswana's education technology needs.

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