CONTENT, DESIGN AND USABILITY OF DISTANCE EDUCATION COURSE MATERIALS: STUDENTS' PERCEPTIONS

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Summary

The intent of this study was to explore the perceptions of distant learners enrolled in the Diploma in Adult Education at the University of Botswana on the content, design and usability of the study materials. The findings revealed the challenges that learners faced when they interacted with the study materials. The three themes that emerged from the study were inadequate content, use of draft study materials, relevance and desirability of study materials.

The descriptive results of this study indicated that overall the learners positively perceived the content relevant and desirable. However, learners were not only dissatisfied with "draft" study materials but discouraged as they perceived them as of very low quality.

The findings also highlighted the significance of instructional design as an important component in the development of distance education materials. Good design of learning materials such as use of color, white space, activities etc. attracted the learners to the study materials.

The implications of the study are that: the content of the study materials should be revised in order to meet the needs of the learners. "Draft" study materials should be eliminated and replaced with the final copies that meet the university standard. Distance education materials like conventional learning materials should constantly be revised to meet the ever-changing needs of the workplace.

Abstract

This study qualitatively examined through a case study the distance learners' perceptions on the course materials (modules) for the Diploma in Adult Education and their effects on learning. Specifically the study:

- Examined content, design and usability of the course materials
- Evaluated the effects of the course materials on learning.

The case study shares lessons learned that would enable the department to gain a deep understanding on the design process of the course materials and suggest alternative ways for improvement. The proposed study used use face-to-face interviews with semi-structured questions and document analysis. The interviews were tape-recorded and later transcribed for analysis

Introduction

The development of distance education in Botswana can be traced historically from pre-and post-independence periods. However, the development of distance education institutions took place in the post-independence era. These institutions have opted for distance education because of the existing demand for educational programs at different levels. There is high demand for basic secondary and tertiary education in Botswana. Nevertheless, it has never been possible to meet this demand for educational opportunities through the existing formal programs.

One of the major strategies advocated by the government of Botswana as a way to reach out-of-school youth and people in employment is using distance education (National Development Plan (NDP): 2003/04-2008/9).

The University of Botswana (UB), the only national university, has included in its vision statement "lifelong and open learning approaches" as focal points for the institution. The university also identifies students-centered learning as a key component in its vision, which is one of the important features of distance learning.

Distance education at the UB has been provided through correspondence in the past supported by occasional face-to-face interaction. However, starting around 2001 online learning emerged as the vehicle through which instructional technologies can be used to teach courses online at UB. It was hoped that the adoption of such technologies will create new avenues for learners to access educational opportunities both on and off campus (Uys, 2003). Unfortunately online learning has not taken off as quickly as it was anticipated. There are many factors that are militating against that which includes faculty reluctance to develop online courses; lack of reward structures; lack of online learning policy and issues of infrastructure to mention just but a few.

This therefore means that distance education programs at UB are still heavily dependent on print materials. While distance education programs steadily increase at the UB, no studies have been done to find out if the materials meet the needs of the learners. The programs that are currently offered by the Department of Distance Education (DDE) at the UB include the following: diplomas in Adult Education (DAE), Non-Governmental Organization (NGO), Youth Development Work (DYD) and Business degree in the areas of accounting, finance and marketing.

The purpose of this study was to qualitatively examine the distance learners' perceptions on the course materials (modules) for the DAE and their effects on learning. Specifically the study examined content, design and usability of the course materials and evaluated the effects of the course materials on learning.

Main Body

With the increasing prevalence of distance education programs at UB that are print-based, it is important to examine students' experiences to promote development and delivery of quality course materials.

Population Sample

A purposeful sampling procedure (Bodgan & Biklen, 2003) was used to identify and select research participants involved in this study. The participants were learners enrolled in the Diploma in Adult Education (DAE) in the Department of Distance Education at the UB. The participants were identified from the class lists generated from the ITS.

A consent form was sent via email to all the participants inviting them to participate in the study as well as requesting their demographic information. The interviews were conducted during the time when students were on campus attending tutorial sessions at the beginning of semester two (March, 2009). More participants will be interviewed as the study continues. At the time of compiling this report, only eleven participants had been interviewed due to time constraints. The sample included seven male and four female. Age of participants ranged from 24-48.

Research Questions

1. Does the content help you acquire the relevant knowledge that you need?
2. Is the language used in the module clear and appropriate?
3. Do you like the design of the modules (e.g. appearance, layout, in-built activities etc.)?

Collection Procedures

Contextual information was needed pertaining to the site and the distance education course under review. This information was obtained by way of documents review. Systematic examination of documents and other sources that provided relevant information on the course materials was carried out. Perceptual information was collected by way of individual face to face interviews. The information collected from the interviews shed light on perceptions surrounding the impact of the content, design and desirability of the materials. Surveys provided demographic information. The researcher prepared an interview protocol that consisted of semi-structured questions describing content, design and desirability of the course materials. The interviews were conducted in English. The interviews started with a brief explanation of the reason for the meeting. The following features of interview techniques were important in developing the interviews and protocols for this study:

• Purposive selection of the participants
• Participants have a way of expanding the question initially asked. This means that the questions asked were not limited to the ones prepared beforehand
• The interview method enables the researchers to establish personal rapport with the participants
• It offers a level of interaction contributing to the depths and richness of the information gathered
• With the interview method, "participants are representatives of the same experiences or knowledge; they are not selected because of their demographic reflection of the general population" (Denzin & Lincoln, 1998, p.74).

A tape recorder was used to record the interviews. All the interviews were transcribed.

Data Analysis

Data analysis was iterative process, beginning with the development of a coding scheme, extending into three analytic categories and culminating with thematically organized findings. Coding categories were developed and refined on an ongoing basis, drawing from interview transcripts. To analyze data from the interviews transcripts, the researcher used constant comparative method, borrowed from Grounded Theory (Glaser & Strauss, 1967; Lincoln & Guba, 1985). During this process, the researcher coded data, developed categories and

compared emergent themes. Each interview was examined to find any similarities and differences of responses.

Findings

This study yielded three emergent categories from the interviews. Data is reported in the participants own words regarding content, design and desirability of the course materials.

Content Inadequate

In response to the question of content, the participants' reactions ranged from mixed to negative. Some participants believed that the content of the course materials was adequate while others thought it was "shallow" and often missing important information. The former believed that generally the content was sound and provided helpful adult education principles that are applicable to their workplaces. Miss Mareko (police officer) stated that:

> Content has brought some changes on how I do my job; for example, "supervision." In case of HIV/AIDS, gender issues- understand them better. The skills that we learn do not only help me at work but also at home.

> Mr. Sets (police officer) lamented that:

> Some of the modules are shallow. The module does not expand on the concepts; it seems like some points are missing. Sometimes you have to look for other sources to expand on the concepts.

> Mrs Mae (senior Adult education officer-Out of school Education) shared the same sentiments with Mr. Setso when she lamented that:

> Content is not enough. We think we should rely on the module because as a distant learner, we are far away from the library. The module should contain adequate information.

> Miss Ratang (teacher) expressed some disappointment on some course materials. She gave an example of the course DAE 103 study material which she said has "missing content "and "missing pages numbers." However, she was happy with the course material for the course entitled "DAE 104: Principles of Adult Learning" which she said was "relevant to my job."

Mr. Marata (police officer) indicated that "most modules were fine except that at times information is too limited hence difficult in sourcing out that information. There is need for elaboration in some cases."

Mr. Jase (police officer) expressed concern about some course materials, he said that content is "not adequate; some of the units do not have sub-headings hence difficult to follow. Some modules do not have page numbers and references."

Miss Hosana (technical assistant veterinary officer) argued that,

Some modules have too much information which could be misleading. Other modules are well written with well defined subheadings, in-built activities etc. Some modules are attractive, others are drafts with do not match University of Botswana standard.

It was quite clear from the participants' responses that, even thought the course materials are relevant in providing requisite skills that are applicable for the job, the content was not enough hence need for revision.

<u>Use of draft course materials</u>

Distance learners satisfaction is an important dimension in understanding the success of a print based course. One of the utterances that came up frequently in the interviews was the dissatisfaction about some course materials which were in a "draft" form. The participants decried the use of draft course materials. They felt that the materials do not meet the university standard; let alone international. Following are some of the statements that they made.

Mr. Thuso (soldier) lamented that:

We use draft modules that sometimes have missing pages. Drafts are not well bound. In these draft modules, it seems like the writers were not interested in their work.

Mr. Mensor (senior training Officer-Construction) shared the same disappointment and lamented that:

Some modules are drafts-which are somewhat discouraging. Draft modules are not consistent for the most part; they are difficult to follow particularly the ones that were written by people who did not understand Botswana context.

Mr. Podi (soldier) also expressed concern that:

Draft modules have missing information such as year of publication, name of writer and others. It is difficult to reference these course materials when doing assignment because they have missing information.

One of the participants expressed frustration that, "draft modules give the impression that the information in the module is not reliable."

In response to the issue of language appropriateness of the course materials, the participants had mixed reactions. Some of their testimonies include:

Sometimes the language is too simple. I recommend that the language of some modules be upgraded to suit a diploma level (Police Officer).

Language is easy to understand, no jargon (Police Officer).

The level of understanding varies from learner to learner. For me, the language is appropriate, not too difficult (Soldier).

Language is appropriate, very easy to follow. Information not complicated (Police Officer).

It is apparent from these varying perspectives that the issue of language is dependent on each learner's level of competency in English as their second language. Some participants were satisfied with the level of the language while others thought it should be upgraded to a higher level. It is evident from the findings that, students recognize university standards hence would appreciate that those standards be applied to the course materials.

Relevance and desirability of course materials

Positive responses were found with regard to the design of course materials. The participants were satisfied with the design of the course materials. Below are some of the comments from the participants.

I like the design. It's like you have a teacher in front of you. …Activities help you to think about what you are learning" (Police Officer).

GEC module is well designed. It is colorful and complete" (Police Officer).

Lay out is good. Activities help one to reflect on what they learned or read. The modules are user friendly" (Police Officer).

Layout is good and easy to read (Senior Adult Education Officer-Out of school education).

In-built activities help to promote further reading and understanding of the content.

Some modules are well designed with clear contents, topics etc. They are easy to follow; for example, DAE 210 could be used for research. It has references (Police Officer).

Activities provide guidance on what could be asked in a test. Layout makes learning/reading a module easier (Police Officer).

The responses of the participants suggested that the use of self-assessment activities embedded in the course materials promote learning and skill development in the learners.

Conclusion

The intent of this study was to explore the distance learners' perceptions on the course materials (modules) for the Diploma in Adult Education and their effects on learning. The study examined content, design and usability of the course materials and evaluated the effects of the course materials on learning. The findings revealed some insights on how the learners interact with the course materials; the challenges they face; and the effects these materials have on their learning. Three emergent themes from the study were inadequate content, dissatisfaction with the use of draft course materials and relevance and desirability of course materials.

The findings revealed some inadequacies in the content of the course materials. The content of the course materials need to be revised in order to meet the needs of the learners. The findings also revealed that learners were not only dissatisfied with draft course materials but they were also discouraged because in their opinion the materials did not meet the university standards. The Department of Distance Education should eliminate "draft" course materials and replace them with the ones that meet proper criteria for the university.

The descriptive results of this study indicated that overall the learners positively perceived the content relevant and desirable to them. This finding also highlighted the significance of instructional design in the development of distance education materials. Good design of learning materials such as the use of color, white space, activities etc. attracted the learners to the course materials. The course materials were to a certain extent user-friendly. Distance education materials like conventional learning materials should constantly be revised to meet the ever-changing needs of the workplace.

References

Bogdan, R. C., & Biklen, S. K. (2003). Qualitative research for education: An introduction to theories and methods (4th Edition). Boston: Pearson Education Group, Inc

Denzin, N. K., & Lincoln, Y.S. (1998). Strategies of qualitative inquiry. Thousand Oaks, CA: Sage.

Garrison, D.R., & Baynton, M. (1987). *Beyond* independence in distance education: the concept of control. *American Journal of Distance Education,* 1(3), 3-15.

Gilbert, S. (1995). Why distance education? A special bulletin. *American Association for higher education, 48.*

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: strategies for qualitative research. New York: Aldine DeGruyter.

Lincoln, Y. S., & Guba, E.G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage. Shaping our future: UBs Strategic Priorities and Actions to 2009 and Beyond. University of Botswana.

Republic of Botswana (2003). National Development Plan 9: 2003/04-2008/09. Gaborone: Ministry of Finance and Development Planning.

Uys, P.M. (2003). International review in open and distance learning. Retrieved June 25, 2004 from http://globe-online.com/philip.uys/200302Uyselearningreflection.htm