

Benefits And Challenges Of Using ATLAS.ti

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Abstract

The first time I used ATLAS.ti was during my master's program. Part of the program was to take a course that would benefit faculty members, students at the college and other nursing college back home on my return through capacity building. Therefore, learning about ATLAS.ti was ideal as it had not yet been introduced at the college in 2002. The model used to acquire knowledge and skills of ATLAS.ti was the participatory empowerment model by Fetterman. This was to be realized by enrolling in ATLAS.ti course, practice using different data sets as well as mentor at least four people on my return home to evaluate my knowledge and skills. The first experience was when I used the software to analyze data of my thesis. The major benefit noted was that the software directs the researcher, through use of different types of codes that enhances formulation of categories and themes, thus reducing time used to analyze data manually. At college level it meant sharing of new knowledge on data management which is congruent with the academic tradition. The challenges were lack of adequate software; technical support and time to practice. Based on my experience, I recommend that knowledge and skills of ATLAS.ti are important in this era of technology and when working at a higher institution of learning. The college needs to build capacity and encourage faculty to know and use this software.

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Keywords

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Introduction

Malawi is a landlocked country in southeast Africa formerly known as Nyasaland. It is bordered by Zambia to the northwest, Tanzania to the northeast, and Mozambique on the east, south and west. It has a population of 15 million people with 85% living in rural areas and about half being under 15years. The country has a female president. The capital city is Lilongwe situated in the central part of the country and English is the official language.

University Of Malawi - Kamuzu College Of Nursing (KCN)

Kamuzu College of Nursing become one of the five constituent colleges of the University of Malawi (UNIMA) in 1979. However, one of the constitute colleges of the UNIMA is now a standalone university, thus now UNIMA has four constitute colleges spread in three districts [one district in the central part and two in the southern part of the country].

Kamuzu College of Nursing can be traced back to 1965 when it was called National School of Nursing. It has two campuses in Lilongwe (LL) the main campus and Blantyre (BT), separated by a distance of about 300 kilometres. Programmes vary from certificates, under graduates degrees and Masters levels in the

fields of Nursing and Midwifery and PhD is starting next academic year of 2014. To date, KCN is the biggest national producer and major trainer of high quality professionals in nursing and midwifery for Government, private and mission hospitals, as well as training institutions for almost all nursing and midwifery instructors in Christian Hospital Association of Malawi (CHAM) and private colleges. Thus KCN has a major responsibility and role in ensuring quality nursing and midwifery services in Malawi.

The focus of KCN is on total student and staff development while its mission is “to deliver quality and cost effective nurse midwifery education and other Health related programmes to students and participants in order to promote professional growth that would contribute to the healthy status of the people of Malawi.” In order to accomplish this mission KCN has values that include; caring, commitment, competency, hard working team work respect and having a positive attitude. Furthermore, faculty believes that learning is a lifelong dynamic process which is participative and transformative; goal directed using both pedagogical and androgogical perspectives of teaching and learning.

Teaching And Learning In The Digital Age

Today's students are digital 'natives' from a very early age and are more aware of getting value for money resulting in having high expectations from their faculty. This means university education is becoming student centered and resource based learning focusing on 'providing stimulating learning environments' rather than didactic teaching. Faculty, therefore need to be skilled, competent and knowledgeable with current technology and available resources to vary teaching and learning methods. Inadequate resources for student's learning like lack of computer hardware disadvantage both faculty and students resulting in lowered morale for both faculty and students.

Experience With ATLAS.ti

I first used ATLAS.ti software during my MSc program as part of fulfilling the program. Part of the requirement of the program was to take a course that would benefit my college back home on my return through capacity building for both faculty members of the college and other nursing colleges as well as students. Since the capacity building was to be in an area that was not currently available at the college, learning about ATLAS.ti was ideal. This was because the software had not yet been introduced at the college at that time in the year 2000, evidenced by analyzing qualitative as well as quantitative data manually. The second reason for choosing ATLAS.ti was because of the challenges noted during my previous experience of analyzing qualitative data manually which included lots of paper prints, coloring different portion of the data with different colors, and hanging papers on the wall just to mention a few areas. This required a lot of concentration, time and care in order not to mix parts. Therefore, using the software would be a sign of growth and progress. Lastly, since my study was qualitative in nature it was an added strength to undertake ATLAS.ti course so that I could have skills and knowledge in using the software.

Manson (1996) quoted by Rambaree (2008) described qualitative data analysis as a technique that is done to sort, organize and index the data before analysis. Therefore since the course was for one [1] semester, I was given an opportunity to undertake extra tutorials for four extra months in order to have adequate knowledge and skills, required to effectively analyze qualitative data as well as assist others.

About ATLAS.ti

ATLAS.ti offers a variety of tools for accomplishing the tasks associated with any systematic approach to unstructured data, e.g., data that cannot be meaningfully analyzed by formal, statistical approaches. The software also acts like a “container” that keeps all the data, codes, memos, and findings from the same project in a single environment. Thus it helps the researcher to manage, extract, compare and explore the data within the texts which has a meaning for the analysis. Furthermore, the software assists to build networks and relationships resulting in creating a graphical view of the data (Foreman, n.d.; Fritz, 2008). These activities are possible because the software visualizes, integrates or put together relevant issues, discovers and explores hidden concepts. Although the software allows organizing transcript data in preparation for analysis it does not analyze the data (Fritz, 2008). This suggests that to use the software there is need to have both the knowledge as well as skill.

Learning ATLAS.ti

The model used to learn about ATLAS.ti was based on the participatory methodology of empowerment model by Fetterman. The model was designed to empower and help individuals as well as organizations to assess and improve their practices by establishing mechanisms that would allow properly planned strategies for change and be able to evaluate these for their effectiveness (Wandersman, ; Snell-Johns 2005). Additionally, participatory empowerment model stresses collaboration as this reinforces tests and modifies internal use of a new activity. Institute for the Study of Knowledge Management in Education [ISKME], (2008) explains that utilization of a proper method has shown improvements in using the skill and promotes continual practice. In this case, knowledge and skills in using ATLAS.ti that began with one faculty member at KCN would improve the way management analysis of qualitative data resulting in staff development and effective supervision of students' projects.

I enrolled in the course of ATLAS.ti from January to April, 2003 together with other 19 participants from different programs. The first part of the course was the theoretical component that included the background, parts of the software and their use; how to install and uninstall; development of an instrument; formulation of different codes, network and how to define them. Secondly, each participant interviewed two people using the interview guide developed by the team. Once the data was collected each participant transcribed his or her interviews and later all the 20 transcripts were merged into one. Thirdly, the participants paired and coded own and the partner's transcripts for validity. There after all the coded primary documents were merged before each participant chose the area to write the report own, and finally presentation of results was done.

It was an eye opener to see that the data that was collected by different people could be managed with ease by merging, coding and analyzing and yet came up with very minimal differences. Additionally, it was easy to note that ATLAS.ti reduced the workload as compared to manual data analysis. One other interesting thing was that the same portion of data coded by different codes was shown with different colours to indicate the difference in focus and to direct the researcher.

Benefits And Challenges

The benefits and challenges of using ATLAS.ti are according to author's observations as well as from faculty and students who have been oriented and used the software.

Benefits

Manual and other related documents organization

The ATLAS.ti manual is well organized in a simplified format making it user friendly and easy to follow even by a beginner. The manual and all other related documents outline and directs the user step by step beginning with the background its significance and uniqueness of the software. This attracts the reader to use and know the software (Friese, 2011; Foreman; Muhr 1997). The manual also directs the user how to effectively install as well as how the researcher could use the software itself to manage data including analysis, making the whole process simple and interesting because of the way the data is organized (Muhr, 1997).

The software benefits

The experience of the course of ATLAS.ti was that the software only complements the researcher's skills but does not substitute the skills of the research. Furthermore I learnt that the primary tool for analyzing qualitative data is the researcher and not the software and that it is better to use the software known to the researcher than to explore. What was observed when using the software is that once the researcher is familiar with the software's parts the data is easily broken down and reorganized and regrouped according to themes, categories and areas of interest e.g. primary documents, codes and network families; memos and quotations, resulting in maintaining consistency in data handling. Apart from ATLAS allowing exploring several research materials at the same time, it reduces time and amount of mistakes, because there is consistency and transparency during the analysis process. Furthermore, the software allows the researcher to write, save memos and comments. Furthermore, categories, super codes as well as ordinary codes direct the trend of the results. Finally, during report /results writing of a study ATLAS.ti becomes handy as quotations can be easily searched, copied and pasted. Finally, there is room for creativity with ATLAS.ti.

Personal benefits

There is personal gain when one has knowledge and skills of a specific technology or apparatus/software like ATLAS.ti. One such benefit is increased reputation when assisting others as the person gets recognition quickly resulting in networking, collaboration with colleagues around the world. Preserving a record of teaching innovations is another personal benefit as having the knowledge and skills and using such to benefit others make the person leave a legacy after leaving academia and allows others to emulate.

Institutional benefits

Having knowledge and skills in using ATLAS.ti is a major benefit for any institution of higher learning as this advances knowledge by unlocking information for the benefit of all resulting in expanding access to non-traditional skills of data management among educators and researchers at college and country level. This is achieved through sharing of knowledge and skills which is congruent with the academic tradition. The public image of the institution is enhanced thus attracting candidates as they will know that the college has high standards and quality for teaching and learning (Hodgkinson-Williams, 2010). Availability of the resource like ATLAS.ti at an institution of higher learning and more especially nursing college provides an opportunity since most of the research studies are qualitative in nature as not much has been done in this field. It is also an added opportunity for students who may use it for data analysis for their dissertations and thesis and thus supporting learning and collaboration.

Challenges

The challenges were categorized in three areas; college, faculty and availability of software and time. In order to encourage staff to develop professionally, institutions need to consider ways to support its faculty according to needs and mission of the institution like use of modern technology to enhance teaching and learning. For KCN this took a while as the college had other priorities like faculty training to undertake their academic responsibilities, development of programs and to attend to the primary needs of the nation i.e. production of human resources for health facilities and health related institutions. The delay could also be due to uncertainty about the importance for training more faculty in using ATLAS.ti as noted by Klaas-Jan Stol and Muhammad (n.d); who found that people are sometimes uncertain in buying or using a product because of future consequences.

For faculty the major challenge was time as the academic calendar has always been tight. Additionally, faculty members were not ready to be oriented to the use of the software because not many were interested to learn and use it as they preferred quantitative research.

For some faculty it was noted that their unwillingness was related to the fact that they had no qualitative data and therefore felt would not benefit from the course. Other faculty members who had data were not willing to share their data when orientating other faculty members in using ATLAS.ti. The fact that not many people in the country had undergone the ATLAS.ti course further reduced the morale of

faculty and contributed to lack of faculties' interest. Lastly since I had taken the course of ATLAS.ti with senior members of the college it was naturally assumed that it would be their responsible to initiate the capacity building at college level which was not the case as they had other interests.

Availability Of Software, Technical Support And Expertise

In order for the college to adequately support the process of faculty members' capacity building in using ATLAS.ti, licences need to be purchase. The barrier being that the software is relatively speaking expensive and not widely available in Malawi. The unavailability of technical support and expertise locally for consultation as compared to other programs was another stumbling block for the college to be willing to support the activity. Nonetheless, the aim is to integrate the ATLAS.ti platform within the institutional infrastructure and to provide a user-friendly environment including readily available technical support. This can be done through a range of strategies like having a deliberate policy on the use of technology, providing relevant support and advice to faculty who are willing to take up challenging tasks for the benefit of the college.

Conclusions

It is worth having knowledge and skills of ATLAS.ti especially because this enhances recognition and professional growth. For institutions there is need to build capacity if it is to enhance and vary its standards and quality of teaching and learning. The choice will depend on the institution's priorities; the type of program offered, needs, available funding, champions and time. The importance of collaboration and networking cannot be overemphasized as we are leaving in a global village and depend on each other.

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