Benefits of using Mobile Applications in teaching Business Studies in Selected Secondary Schools in Luanshya District

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Abstract

Our modern lives are filled with technologies. In fact, they have become so integrated into our lives that many of them are frequently used but never really thought about. Few people stop to consider that civilization once lived on without them. Many of these technologies are so common today that they have become almost invisible. The study focuses on the benefits of using Mobile Application in teaching Business Studies in selected Secondary schools in Luanshya District of the Copperbelt province in Zambia.

Introduction

The use of ICTs in most government sectors has been welcome by many key players in these sectors. Despite the Introduction of ICT in Education System, much hasn't been done to ensure that the technology is fully utilized to the benefit of its intended users (educators and learners). The education sector has seen minimal benefits of ICTs as it has just been introduced. Some of the challenges that the secondary school system faces in regard to the use of ICTs include: Resistances to change amongst the staff in secondary schools and inadequate qualified personnel. The other aspects that need to be looked at are the lack of ICT tools as well as the inadequate qualified personnel in these schools. Despite the introduction of ICTs in schools little has been done to ensure continued use of these

gadgets to foster education. The integration of mobile applications will encourage better results in the teaching of business studies.

Theoretical frameworks

This research draws on the experience and the benefits of integrating ICT in Business Studies and aims at a further development of integrating perspectives in terms of theoretical frameworks, this time closely relating their construction with the development of specific ICT tools and experimentations of these in realistic educational contexts (Artigue & al., 2006). Integrating perspectives raises some fundamental questions like: how can the integration of ICT in Business Studies bring benefits to learners and Teachers? Can the unified perspective be unreasonable, due to the incommensurability of most of the existing theoretical frameworks? And it can only make sense to look for structures and languages allowing us better understand the characteristics of the corresponding approaches, organize the communication between different fields and benefit from their correlations? If so, is it possible to elaborate such integration and correlation? How can these be made operational? These are the questions the research was facing and addressed.

The integrative theoretical frame (ITF) for us is neither a theory, nor a meta-structure integrating the main theoretical frameworks, used in this research. It is more a meta-language allowing the communication between ICT and Business Studies, a better understanding of the specific coherence underlying each theoretical framework, pointing out overlapping or complementary interests, as well as possible conflicts, connecting constructs which, in different frameworks are asked to play similar or close roles or functions. The ITF is planned to make sense and become an efficient tool for a wide community of researchers, designers and teachers. The structure and the language have thus to be understandable by a wide range of potential users, even if we propose to include in it, at a later stage, illustrative prototypical examples to facilitate communication.

Taking into account the lessons drawn from the analysis of the research work and the complementary sources, we proposed to keep for the ITF the two dimensional structure around the notion of integration functionality, and the subjects of *concerns* which seems to be effective. But considering the specific focus of the research on representations and contexts, we proposed to reorganize the presentation of concerns around these two focuses at each level of the structure. As regards representations, we propose to limit the analysis to external representations and consider these according to two dimensions: (1)

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presentation of application used in the research, and (2) representation of interaction of the user of the application.

The ITF was planned used at different stages of the elaboration of the project:

- in relation with the design and development of ICT tools or parts of existing tools: the ITF provides a guideline for questioning the main decisions made in the design phase, highlighting the role of theoretical frameworks in these decisions and identifying the most sensitive concerns of the designers;

- in relation with the development of a conceptual model of scenario, which is considered as representing the "Benefits of integration of ICT in business studies" involving the use of ICT tools produced for research. The model of scenario is based on a set of attributes aimed at describing the design of an actual teaching/learning process to be enacted. The ITF and the model of scenario can be seen as complementary conceptual tools aimed at bridging the gap between different research contexts and between research and ordinary school contexts, in that they provide a common structure for describing and comparing different approaches and perspectives in the field of

Business Studies and ICT related subjects in education.

The conduct of the study

The research was carried out in Luanshya District of the copperbelt Province in Zambia. It was necessary to use Luanshya District because the District has many schools with ICT and also for convenience sake. The selected schools were found appropriate because they were fully equipped with the ICTs necessary for the teaching and learning process. The study used a survey research design. The design is deemed appropriate because the researcher could collect more information through the use of samples. This was a specific survey seeking information on the integrating ICT in Business studies, the independent variable, which is the benefits of integration ICT, was not introduced. The variable is already under treatment. The introduction of the integration could not have been possible by the researcher because it is expensive.

To come up with a quality research, the author opted for a mixed research approach that consisted of both quantitative and qualitative attributes. Mixed research is a general type of research in which quantitative and qualitative methods, techniques or other paradigm characteristics are mixed in one overall study. Specifically, the author settled for a mixed model

research in which both qualitative and quantitative research approaches were used within the stages of the research process. The author conducted a survey and used a questionnaire that was composed of multiple closed-ended as well as several open-ended. The quantitative and qualitative aspects of the study arose from the questionnaires administered to the teachers and students of Business Studies as well as interviewing the head teachers of the selected schools and focusing on the same phenomenon.

Three secondary schools constituted the target population for this study. The selected schools utilizes the new introduced ICT. Reconnaissance had been done to confirm that the three had similar ICT resources. Head teachers, teachers and students of Business Studies in those schools constituted the target population. In the study, Head teachers, Grade 8-12 teachers and students of Business Studies were identified as potential members of the sample. Grade 8-12 teachers and students of Business Studies were chosen due the fact that the class had utilized the approach longer than any other class. The Grade 8-12 Business Studies teachers have had a longer experience using the approach than other teachers in lower classes.

The Grade 8-12 students too have used the technologies longer as compared to the other student fraternity. In order to achieve a desired result with minimum costs, the researcher selected all the three Head teachers as well 15 grade 8-12 Business Studies teachers from the three selected schools. A total of 127 grade 10-12 Business Studies students constituted the sample. The sample was 50% of the total grade 10-12 Business Studies students in the three selected schools. The study assumed simple purposive and simple random sampling techniques to get a representative sample. Purposive sampling was used in selecting the three Head teachers and 15 grade 8-12 Business Studies teachers. Simple random sampling was used to select the 127 out of the 252 Form Four Business Studies students.

The study used two instruments in collecting primary data, namely questionnaires. Two types of questionnaires were designed and used. One questionnaire for students was designed and another for the teachers. The instruments were used because they give the respondents adequate time to provide well thought-out responses to questionnaire items. It also makes it possible for large samples to be covered within a short time. Since standardized questionnaires for the study were not available, the author designed the required questionnaires on the basis of objectives, research questions and reviewed literature. The questionnaires used are now presented below.

The students' questionnaire was intended to corroborate and confirm the information obtained from the teacher- respondents. Apart from collecting information given by the teachers, it also focused on the attitudes of students towards Business Studies as a subject when using the new integrated ICT in schools.

Both descriptive and inferential statistics were used for data analysis. Data was tabulated and frequency tables were generated. Frequencies were converted to percentages to illustrate the relative levels of opinion on the issued items. Descriptive statistics entailed calculation of means scores using the Likert scale. Under inferential statistics, analysis of Variance (ANOVA) was employed to determine the significant differences in students' and teachers' perception towards the new approach. Thus the analysis was focused on testing the null hypotheses. The raw data collected from the Likert type of items were summarized in tables and coded before they were entered into the computer for analysis using the Microsoft Excel spreadsheet.

The findings of the study

This study sought to investigate whether the new approach could bring benefits in teaching and learning other subjects. Lack of syllabus coverage on time to allow for revision can affect the learners' outcomes especially in examinations. In the study, teachers' to gauge the efficiency of integrated ICT in Business Studies responded to several items. The findings were as presented in Table 1.

Fast Coverage of Subject Topics

80% of the teachers said that they could deliver learners faster with the use of ICT while 20% responded otherwise. The overwhelming agreement could be attributed to the fact that ICT tools may be used to increase student productivity, particularly with repetitive, low-level tasks involving writing, drawing and computation. Teachers only need to guide students at the initial stages of performing tasks and thus apply similar trends for all other subjects. This allows the teachers to teach a topic faster and replicate in other topics.

Learning to use ICT for teaching

65% of the teachers find it easy to learn how to apply ICT in delivery of lessons as they have a good background in ICT while 35% had difficult on learning ICT because they had never learned the Course before. The overall results were overwhelming.

Student view of integrating ICT in Business Studies

90% of the students welcomed the idea and were happy and wanted the integration to be spread to other subjects like mathematics and physics. 10% didn't know whether the idea could bring benefits to learning Business Studies but agreed to give it a try.

Number of Students Taught at the Same Time

68.5% of the teachers stated that the method allows teaching many students at ago while 20% were not sure and 1(11.5%) did not agree with the statement. This was so because teachers can use ICT to support learning experiences that involve more cooperation among learners across classes and a more interactive relationship between students and teachers. In particular the use of Business Studies App enables the teacher to join up students from different classes and teach the topic of interest at once.

Teaching Business Studies using App

25% of the teachers agreed that the approach allow one to teach across the classes while 25% disagreed and 50% were not sure. It is evident that most teachers in the schools had not tried to teach using Apps

Limitations of the Study

The study was limited to the public schools in Luanshya District of Zambia, which are so far known to utilize the ICT in learning approach. Time and financial resources did not allow accomplishing the study on a larger scale. The study was limited to Business Studies and therefore the generalization of the findings was limited to the subject.

Conclusion

According to the study findings, the integration of ICT in Business Studies enables the teachers to deliver lessons fast, complete their syllabus on time; allows for student revision; allows teaching many students at ago; allows one to teach across the classes; enables teachers to teach the syllabus; allows for extra time, and allows for simpler lesson preparation. As such, it is recommended that the Ministry of Education should embark on fostering innovative networking and partnership arrangements with the private sector such as the computer companies such as MTN, Airtel, ZICTA and many others. This will enable schools acquire both hardware and software at cheaper costs. Schools should also be encouraged to set up innovative partnerships with local ICT providers for purposes of sustainability of the innovation.

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Table 1

Table 2

	Fast Coverage of Subject when integrated with ICT			
	Statements	**Yes**	**No**	**Not Sure**
1	Cover my syllabus on time ⌊SEP⌋	80%	00%	20%
2	Allows student revision of the ⌊SEP⌋syllabus	68.5%	11.5%	20%
3	Simpler lesson preparation ⌊SEP⌋	75%	00%	25%
4	Achieve lesson objective ⌊SEP⌋	90%	5%	5%
5	Deliver lessons effectively	75%	15%	10%
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	Fast Coverage of Subject when integrated with ICT	
	Statements	**Mean score**
1	Cover my syllabus on time ⌊SEP⌋	4.0
2	Allows student revision of the ⌊SEP⌋syllabus	3.5
3	Simpler lesson preparation ⌊SEP⌋	3.8
4	Achieve lesson objective ⌊SEP⌋	4.0
5	Deliver lessons effectively	4.0
Average Mean		**3.8**