

Students' Perception of the e-book in Teaching and Learning of Basic Cost Accounting Subject in Polytechnic Sultan Salahuddin Abdul Aziz Shah, Selangor, Malaysia

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Abstract

One of the basic courses that all Business Studies students at the polytechnic must take is basic cost accounting. It's thorough, practical, and theoretically sound. Power-point slides and library-borrowed reference books are typically used in the teaching and learning process in the classroom. With the development of technology, this conventional method of instruction faces difficulties in piquing students' interests. The electronic book has been introduced as a new method of information acquisition. This study aimed to examine how students felt about basic cost accounting e-books in terms of interface, study materials, exercises given, and the practicality of the e-book. The Polytechnic Sultan Salahuddin Abdul Aziz Shah's Commerce Department hosted this descriptive study utilizing a questionnaire, which included 68 participants who took this course and used the e-book. The data were analyzed using central tendency measures. The data collection results showed that students have a favorable opinion of electronic books. Based on the findings, it is clear that all aspects have very high scores which proves that students have a good and positive perception of e-books. This research demonstrates the potential of e-books as a learning tool and their beneficial effects on instruction and learning.

Keywords: Students' Perception, E-Book, Basic Cost Accounting

Introduction

The most crucial thing to accomplish in order to succeed academically is the purpose of education. The collaboration of teachers and students is required to support this. As a result of technological development, learning systems started utilizing digital tools. In terms of educational media, there have been numerous advancements since the 1990s first days. This makes it possible for instructors and students to use electronic books as learning tools and resources.

The world of education in Malaysia today has undergone major changes. Educational institutions in Malaysia have implemented various initiatives to ensure the continuity of the

teaching and learning process can continue including by applying elements of technology and innovation in line with the goals of the Ministry of Higher Education (Mustafa et. al. 2008). Not only does the development of education depend on the readily accessible internet, computers, and various other technology, but it requires students to have easy access to the course material. A need for e-books in the learning system has arisen as a result of this transformation in the educational system. Although e-books have been around since the late 1990s, they have only recently become important in the field of education. According to Langston's research from 2003, e-books have recently become the most talked-about subject. Printed books are any type of content that can be read on paper or in print format, whereas e-books are any type of publication shown in electronic form and read using electronic devices. (Davidson and Carliner, 2014).

A variety of digital books or a version of printed books are referred to as e-books. An e-book is a book-length, digital publication that can be read using computers or other electronic devices and covers text, graphics, or both (Adeyinka et. al., 2018). E-books vary from their print counterparts in that they offer a number of benefits. Mobility, ease of accessibility, convenience, interactivity, multi-media capabilities, display customization, connections to reference sources, language translation, ease of searching and navigation, and free access to numerous public domain e-books are only a few of the significant advantages of e-books. There are also some disadvantages of e-books. According to Walter (2013), there are some drawbacks to e-books, such as e-books can be used if you have a suitable device. The reader device batteries are limited and must be charged. There are some technical issue with the device that prevents the reader from accessing the e-books or some people will have eye strain for looking too long at the device while accessing the e-books.

Students frequently have trouble understanding basic financial concepts and language. The lack of shared information or experiences among the students is the main cause of the difficulty of teaching introductory managerial accounting courses. These days, curricular demand is more student-focused. According to Adeniyi et al. (2016), using multimedia in the classroom can help make instruction more student-centered and improve learners' academic performance. Additionally, students are in charge of their own education and can engage with the material however they like (Neo et al., 2003).

In order to gauge students' impressions of how using e-books can improve their learning, Sun et al. (2012) conducted a poll. According to the findings, students' judgments of how useful e-books are for assisting their learning have a direct impact on their ability to study. In other words, if a student perceives an e-book as useful, this will improve the student's learning outcomes. The researchers discovered that students' use of e-books in the classroom can also benefit their learning outcomes. They came to the conclusion that e-books, because of the extra features they provide, can significantly contribute to students' learning. These qualities should encourage students to use e-books in the classroom and build the groundwork for their widespread acceptance.

The usage of electronic books is thought to have a part to play in influencing the shift from traditional teaching to technology-based teaching in order to diversify teaching and learning approaches and make the learning environment more interactive.

Background of the study

Higher education institutions need to incorporate greater levels of technology into their curriculum design and delivery. Furthermore, previous research found that online learning materials can improve learning outcomes (Wong, 2013). Online learning materials could come

in various formats for example audio, video, pictures, and e-books which can easily accessible using social media platforms or any web-based resources. The number of information resources that are available and growing rapidly on the web is enormous. Due to their variability in subject, complexity, language, etc., they are of potential value to all web community members. Studies have revealed that searching for information on the web is like surfing aimlessly with the waves of water (Mat Yamin, Fadhilah & Ramayah, T. (2011)). Although there are billions of information resources available on the web, the resources are not of uniform quality, nor do they offer equal value to all stakeholders in higher education or meet specific course syllabus.

Problem statement

Basic Cost Accounting is one of the common cores for the Business Studies Program in the Polytechnic curriculum. Students in their second year (semester three) take this course which carries 3 credit hours. This course consists of six (6) topics, including costing for materials, costing for labor, costing for overhead, costing methods, and budgets for planning and control. This course was offered to students in 2021 but the students were having difficulties in finding information that is suitable using the bound books used as a reference book in the classroom because it does not follow the syllabus content. From observation in the classroom, we also found that 60% of the students were not interested in buying reference books which are so expensive. According to Shahriza Abdul Karim, N. and Hasan, A. (2007), the website is seen as an increasingly important reading source.

An analysis of the course outcome review was conducted in August 2021 where we found that the group attainment for Course Learning Outcome 01 (CLO 01) and Program Learning Outcome (PLO 01) of all 4 classes which are DPM4A, DPM4B, DPM4C & DPM4D is the lowest as shown in Table 1

Table 1

Course Outcome Review Report (August 2021)

| Course Learning Outcome (CLO) | Program Learning Outcome (PLO) | Group Attainment (DPM4A, DPM4B, DPM4C & DPM4D) |
|-------------------------------|--------------------------------|--|
| CLO 01 | PLO 01 | 67 % |
| CLO 02 | PLO 02 | 75 % |
| CLO 03 | PLO 04 | 92 % |

According to Table 1, student performance in CLO 01 was at the lowest level (67%) where most students cannot master the cost accounting theory well (CLO 01/PLO 01) and lack the ability to analyze issues and solutions causing them to unable to answer well in quiz questions, tests, and final exam questions regarding topic 1, Introduction to Cost Accounting (CLO1), topic 2 Costing for Materials (CLO 1), topic 3 Costing for Labours (CLO 1) and topic 4 Costing for Overhead (CLO1).

Research Objective

The research objective for this study is

- i. To determine students' perception of the interface of the e-books of basic cost accounting.
- ii. To determine students' perception of study materials provided in the e-books of basic cost accounting.

- iii. To determine students' perception of exercises given in the e-books of basic cost accounting.
- iv. To determine students' perception of the practicality of the e-books of basic cost accounting.

Methodology

This study aims to determine Business Studies students' perception of e-books of basic cost accounting. Quantitative research was used to improve the study's accuracy and achieve its objective. For the development of the questionnaire, it was adapted from Chikal Lexsti, Fitrawati (2020). The question was then modified based on the suitability and objective of the study. A Google form was used and 68 students were respondents for this study. The reliability test was conducted to ensure that each of the used scales was assessed to ascertain the internal consistency of the study. The scales of Cronbach's alpha are displayed in Table 1. The figures suggest a high degree of reliability. Nunnally (1978) asserts that a dependability coefficient of at least 0.7 is usually appropriate. According to Table 1, the test reliability score is more than 0.7.

Table 2

Result of pilot test

| Aspects | No of items | Items deleted | Cronbach's Alpha |
|-------------------------------|-------------|---------------|------------------|
| Interface of e-books | 13 | - | 0.88 |
| Teaching materials in e-books | 8 | - | 0.81 |
| Learning exercises in e-books | 6 | - | 0.77 |
| Practicality of e-books | 9 | - | 0.87 |

Student perception of e-book use is measured based on the mean value of the Likert scale obtained from each respondent's answer. The Likert scale used is Strongly Disagree with a score of 1 to Strongly Agree with a score of 5. Data were obtained and analyzed using descriptive methods to find the mean, standard deviation, and percentages. To identify the respondents' perception, the Interpretation of the Means score by Moidunny (2009) is used as shown in Table 3 below.

Table 3

Interpretation of Mean Score

| Mean Score | Interpretation |
|-------------|----------------|
| 1.00 – 1.80 | Very Low |
| 1.81 – 2.60 | Low |
| 2.61 – 3.40 | Medium |
| 3.41 – 4.20 | High |
| 4.21 – 5.00 | Very high |

Findings/Results and Discussion

Descriptive analysis

3.1.1 Respondent Demographic Profile

Table 4 shows the demographic information for the 68 respondents who filled out the 68 questionnaires.

Table 4

Demographic profile of the respondents

| Demographic profile | Frequency (N) | Percentage (%) |
|----------------------------|---------------|----------------|
| Gender | | |
| Female | 51 | 75% |
| Male | 17 | 25% |
| Race | | |
| Malay | 64 | 94% |
| Chinese | 2 | 3% |
| Indian | 2 | 3% |
| A device used for studying | | |
| Handphone | 54 | 79% |
| Tablet | 37 | 54% |
| Laptop | 52 | 76% |
| Others | 6 | 9% |

Table 4, provided that 51 of the respondents (75%) were female, and 17 (25%) were male. In terms of race, 64 respondents (94%) were Malay, 2 (3%) were Chinese and 2 (3%) were Indian. As for the device used for studying, 54 respondents (79%) use a handphone, 37 (54%) use a tablet, 52 (76%) use a laptop and 6 (9%) use others.

Descriptive statistics for variables

Central tendency is defined as the statistical measure that identifies a single value as representative of an entire distribution (Manikandan, 2011). The mean, median, and mode are the three commonly used measures of central tendency. Descriptive statistics were also used and calculated for each item and variable to investigate their level among respondents.

Table 5

Aspect 1 - Interface of e-books

| Item | Statement | Mean | Standard Deviation | Level |
|------|---|------|--------------------|-----------|
| 1 | The layout is simple, well-organized, and straightforward. | 4.53 | 0.56 | Very high |
| 2 | The composition of colors and lettering is appropriate. | 4.49 | 0.59 | Very high |
| 3 | The placement of pictures and videos is appropriate. | 4.38 | 0.67 | Very high |
| 4 | The font used in interactive e-books is appropriate. | 4.47 | 0.61 | Very high |
| 5 | The font size is customizable. | 4.16 | 0.86 | High |
| 6 | The interface design is legible without fatiguing eyes. | 4.38 | 0.73 | Very high |
| 7 | The use of buttons, icons, and menu items is clear, understandable, and consistent. | 4.46 | 0.68 | Very high |
| 8 | The text in an interactive e-book can be highlighted in different colors. | 4.28 | 0.91 | Very high |

| | | | | |
|----|--|------|------|-----------|
| 9 | The interactive e-book offers note-taking on pages of the books. | 4.16 | 0.92 | High |
| 10 | The interactive e-book offers book marking multiple pages. | 4.18 | 0.90 | High |
| 11 | The page view is customizable. | 4.37 | 0.75 | Very high |
| 12 | The users can search keywords within the whole book or within the chapter being opened. | 4.16 | 0.91 | High |
| 13 | The interactive e-book provides a table of contents, avoiding disorientation and quickly accessing relevant pages. | 4.49 | 0.63 | Very high |
| | Average | 4.35 | 0.75 | Very high |

Table 5 presents the mean ratings of respondents on the interface of e-books. The 13 items had mean values ranging from 4.16 to 4.53. The average mean of 4.35 indicates that all of the respondents strongly agreed that the interface was very well organized. The standard deviation values range from 0.56 to 0.92, revealing that the respondents were close to one another in their opinions thus indicating that the respondents are not far from the mean.

Table 6

Aspect 2 - Teaching materials in e-books

| Item | Statement | Mean | Standard Deviation | Level |
|------|---|------|--------------------|-----------|
| 1 | The materials are convenient with the curriculum and syllabus. | 4.62 | 0.58 | Very high |
| 2 | The materials are explicit. | 4.41 | 0.84 | Very high |
| 3 | The materials are easy to understand. | 4.59 | 0.63 | Very high |
| 4 | The examples provided are relevant to the materials. | 4.65 | 0.58 | Very high |
| 5 | The materials are presented attractively | 4.62 | 0.63 | Very high |
| 6 | The video materials used in the e-book are relevant to the topic being discussed. | 4.63 | 0.53 | Very high |
| 7 | Topics in e-books are relevant and useful to learners. | 4.65 | 0.53 | Very high |
| 8 | The materials help learners to develop confidence. | 4.66 | 0.53 | Very high |
| | Average | 4.60 | 0.61 | Very high |

Table 6 presents the mean ratings of respondents on the teaching materials in e-books. There were 8 items that had mean values ranging from 4.41 to 4.66. The average mean of 4.60 indicates that all of the respondents strongly agreed that the teaching materials were relevant and easy to understand. The standard deviation values range from 0.53 to 0.84, revealing that the respondents were close to one another in their opinions thus indicating that the respondents are not far from the mean.

Table 7

Aspect 3 – Learning exercises in e-books

| Item | Statement | Mean | Standard Deviation | Level |
|------|--|------|--------------------|-----------|
| 1 | The e-book has enough exercises. | 4.43 | 0.69 | Very high |
| 2 | The type of exercise is various. | 4.50 | 0.65 | Very high |
| 3 | The exercises challenge the learners to think. | 4.56 | 0.66 | Very high |
| 4 | The e-book provides immediate feedback related to learners' answers. | 4.28 | 0.76 | Very high |
| 5 | Exercises give students the opportunity to practice and extend their skills. | 4.41 | 0.70 | Very high |
| 6 | The exercises build on and reinforce what students have already learned. | 4.56 | 0.59 | Very high |
| | Average | 4.46 | 0.68 | Very high |

Table 7 presents the mean ratings of respondents on learning exercises in e-books. There were 6 items that had mean values ranging from 4.28 to 4.56. The average mean of 4.46 indicates that all of the respondents strongly agreed that the learning exercises helped them to understand the topic better. The standard deviation values range from 0.59 to 0.76, revealing that the respondents were close to one another in their opinions thus indicating that the respondents are not far from the mean.

Table 8

Aspect 4 - Practicality of e-books

| Item | Statement | Mean | Standard Deviation | Level |
|------|--|------|--------------------|-----------|
| 1 | The e-book has all the functions and capabilities that students have expected. | 4.49 | 0.60 | Very high |
| 2 | The content in e-books is effective in helping students to complete the tasks. | 4.53 | 0.58 | Very high |
| 3 | Students are able to complete their work efficiently using the e-book. | 4.57 | 0.59 | Very high |
| 4 | The information provided in the e-book is clear. | 4.51 | 0.63 | Very high |
| 5 | The interface of the e-book is pleasant. | 4.54 | 0.61 | Very high |
| 6 | The E-book provides an attractive learning environment. | 4.56 | 0.61 | Very high |
| 7 | Students find it easy to become skillful in using e-books. | 4.49 | 0.60 | Very high |
| 8 | Students find it enjoyable to use e-books. | 4.47 | 0.63 | Very high |
| 9 | The actual process of using e-books is pleasant. | 4.54 | 0.63 | Very high |
| | Average | 4.52 | 0.61 | Very high |

Table 8 presents the mean ratings of respondents on the practicality of e-books. There were 9 items that had mean values ranging from 4.47 to 4.57. The average mean of 4.52 indicates that all of the respondents strongly agreed that e-books were practical to use. The standard

deviation values range from 0.58 to 0.63, revealing that the respondents were close to one another in their opinions thus indicating that the respondents are not far from the mean.

All of the aspects scored a mean of more than 4.21 which was Very High and shows that the students have good and positive perceptions of e-books. The findings of the overall study show that the students agree that the use of e-books can help them focus on the teaching and learning process.

Teaching materials in e-books got the highest mean score. It shows that the materials provided in e-books helped them to understand more about the topic they learned in class. This finding is in line with Hanafi et. al. (2018) where the combination of text, graphics, and video can make learning activities more interesting and fun. Mayer in Choo and Kwon (2017) mention that learners can learn effectively using multimedia-mediated content instead of using a single medium to serve the information. According to Askar (2014), interactive elements like video, audio, and quizzes are thought to aid students in learning since they allow them to customize the activities to their preference.

The practicality of e-books got a score of 4.52 which is also Very High. It shows that e-books were practical to use when they can use them for their assignment. Abram (2010) concurs that users of e-books can simply do searches to help their teaching and learning. It also provides them with a pleasant learning environment where they can watch videos and do exercises at their own pace and time.

Learning exercises in e-books got a mean score of 4.46 which is also Very High. Students were able to do the exercises and check their answers afterward. It gave them more confidence in what they had learned in class. Various types of questions also helped the students to reinforce the knowledge they had. This is supported by Sowell (2017) who agrees that the exercises should build and improve what students have learned.

The interface aspect had a mean score that was the lowest, 4.35. Students had positive opinions about it even though it received the lowest score. Students thought that the layout of the elements and the visual aspect of the e-books were already shown through the interface. According to Bhaskar et al. (2011), users of the interface anticipate that the items on the screen will be ordered according to their purpose and in the correct order.

Conclusion

The results of the data analysis lead to the conclusion that students provide good responses and are thought to view the use of e-books favorably. The educational materials in the e-books provided the best aspect, while the interactive part provided the worst. Based on the student input, there is still an opportunity for improvement even though the average mean score was good.

An e-book is an effective educational technology that provides learners with an interactive environment that further improves content presentation using multiple media. The rapid development of technology has given way to wider use of e-books. It not only reduces the cost of printing and paper but also of updating information.

For future research, it is suggested to use other tools to get responses from the respondents, like interviews, and to conduct research on another area like students' attitudes toward e-books.

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