Students' Experience of a Music Theory E-book Unesa

Budi Dharmawanputra[1*], Harpang Y. Karyawanto[1], Joko Winarko[1]

[1] Universitas Negeri Surabaya, Surabaya, Indonesia
*budidharmawanputra@unesa.ac.id

Abstract. The purpose of this paper is to present an overview of student experiences using e-books in music theory classes of Unesa's music arts study program. This music theory book is presented in the form of an e-book on the digital library page. This theoretical music lecture is assessed using a self-evaluation questionnaire that collects quantitative data on student satisfaction from lecture activities with music theory e-book facilities. The questionnaire consisted of 6 closed questions on the Likert scale and offered data on satisfaction with music theory e-books. Frequently asked questions about the effectiveness of using e-books with a comparison of printed books showing the evaluation criteria used by thirty students. The results of the analysis showed five variables, namely: access to books, ease of material, readability of images and notation, independent learning, interest, and excitement with an average increase in learning experience outcomes of 21.1%. The content of the book material, the explanation of the material in the chapter, the description of pictures and notation, and its practicality received a positive response from students.

Keywords: E-book, Students Experience, Music Theory.

1 Introduction

The world of technology is developing rapidly in the era of the industrial revolution 4.0. The use of science and technology in education has become endemic to face the challenges of the times. Innovative thinking must be put forward to keep up with the development of the increasingly modern world of education [12]. Art is an identity of a nation. In this case, the development of the world of art education has also undergone a major change. One of them is science and technology-based music learning. Everything is instant and fast, so it requires us to develop innovations to design art learning products more modern and adapt to the era. Recent developments in learning analytics enable information based on learning logs and digital traces to provide timely personalized feedback at scale and enhance student satisfaction with feedback processes [1], [2], [3].

Music Theory is one of the subjects that must be taken by students of FBS Unesa music art study program. This course contains fundamental material and affects the sustainability and development of student musicality in learning music academically. However, the availability of textbooks related to learning music theory is still scarce. The lecturers still use books that are said to use old learning methods, so they are not

A. Mustofa et al. (eds.), *Proceedings of the International Joint Conference on Arts and Humanities 2023 (IJCAH 2023)*, Advances in Social Science, Education and Humanities Research 785,
https://doi.org/10.2991/978-2-38476-152-4_62

interesting and seem difficult. Therefore, through this development research, it is expected to answer and bridge the learning of academic and non-academic students as a whole. In addition, there must be innovation in developing strategies for learning methods of this book, so that it is easier to understand the material and interesting to increase interest in learning basic music theory. In this study, the packaging of a textbook makes it interesting to accompany students in learning at each stage. Based on this phenomenon, researchers are interested in conducting research on the development of basic music theory books at the Music Art Study Program FBS Unesa. An activity can be said to be a learning process if it has the following characteristics: a) Changes that occur consciously; b) Changes in learning are active and positive. In the sense that the more intensive the learning effort, the better the changes obtained; c) Changes in learning are functional. It means that a change that occurs will cause the next change and will be useful for the next life or learning process; d) Changes in learning are not temporary. The knowledge we acquire relative will always stick in our memory, even though it is acquired through experience; e) Changes in learning are always purposeful and directed, where changes in behavior that occur due to goals to be achieved; f) Change covers all behavior. For example: changes in aspects of deeds, words, attitudes, and habits [4].

The urgency of this research is to increase the effectiveness of lectures by using e-books in Unesa Study Program as an effective medium in lectures, considering that music theory is one of the foundations of music science. This research is expected to produce cooperation agreements in developing products that have been tested sustainably. In the development of music theory textbooks, the involvement of all parties is required. Helping students deal with these issues by providing an appropriate support network is reflected in the student's experiences [5]. Students and lecturers need to work together to ensure that the textbook can be a useful and effective source of information for lectures and research. In ideal circumstances, design education has transformative potential, producing students who have capabilities, knowledge and skills to bring about important societal changes and positive impact [6], [13]. That way, the development of textbooks in universities can provide significant benefits for the advancement of education and the development of science [14]. The results of this research besides being useful for users, can increase UNESA's superiority in the competency map of art education with a research focus on developing teaching materials in the future.

2 Methods

The method used was a descriptive method with a form of study research case. The research subjects in this study were students of the music arts study program, Faculty of Language and Arts, Surabaya State University. After being tested for the feasibility of developing music theory e-books, then a learning process was carried out using the e-book selected 30 students to be interviewed. Data collection techniques in this study were observation techniques and direct communication techniques. The perspective we used to frame this study was an investigation of students' perceptions of experi-

ence and how those perceptions impacted their views of e-book use. In discussing the relationship between learning approaches and differences in learning outcomes, it found that differences in learning outcomes depend on differences in the way students engage to achieve such learning [7], [8], [11]. They found two ways to engage that students could adopt and described those approaches to learning.

3 Results and Discussion

Before going to the stage of student experience in using music theory e-books, this book is tested first on the feasibility of content by validators / experts. There are 3 validators to test the Content Eligibility component. The compatibility between basic music theory material and the curriculum of Unesa's music arts study program, the description of the score calculation is as follows:

Table 1. Score Analysis of Validity Test Results Feasibility Component Content of music theory e-book.

No	Statement	Point Answer				
		SB	B	C	K	SK
		5	4	3	2	1
1	Compatibility of music material in the basic music theory e-book with the curriculum of the UNESA Music Arts Study Program	√				
2	Music theory material contains an introduction to musical notation, tempo and dynamics	√				
3	The content of the material indicates novelty in music theory		√			
4	The packaging of the e-book on the music library page can be accessed easily	√				
5	Reference material for music theory can be applied to date		√			
6	Image illustration captions and notation are legible and easy to understand		√			

Source: Author, 2023

Table 1 shows the answers (SB): 4 people; Answer (B): 2 people; Answer (C): 0; Answer (K) : 0; and Answer (SK) : 0.
Score for 4 people answered (SB) : 4 x 5 = 20
Score for 2 people answering (B) : 2 x 4 = 8
Score for 0 people answered (C) : 0 x 3 = 0
Score for 0 people answered (K) : 0 x 2 = 0
Score for 0 people answered (SK) : 0 x 1 = 0
28
Recapitulation of score trial (highest number of scores: 5 x 6 statements = 30).
Description interpretation percentage score for Likert Scale: [9]
Number 0% - 20% : Very Less
Number 21 % - 40 % : Less

Number 41%-60% : Sufficient
Number 61%-80% : Good
Number 81%-100% : Excellent

Based on item number 1 data obtained from 3 validators, the compatibility between basic music theory material and the curriculum of Unesa music arts study program has a percentage: 28/30 x 100% = 93.33%, classified as very good.

So, the Likert Scale formula is used: [10]

$$\text{Percentage Results} = \frac{Number\ of\ validation\ result\ scores}{Number\ of\ the\ highest\ scores} x\ 100\,\%$$

The results of the development of music theory books certainly have a significant impact on the learning process and outcomes of students in lectures. Table 2 shows numerical data in comparison of learning outcomes in lectures in music theory classes before and after using music theory e-books. The results showed that the ease of accessing books reached 56.6%-93.3%, an increase of 36.7%. The quality of easy-to-understand material reached 73.3%-80%, an increase of 6.7%. The readability of images and notation in the book reached 90%-96.6%, an increase of 6.6%. Mastery of material with self-study at home reached 63.3%-76.6%, an increase of 13.3%. Meanwhile, students' reading interest reached 53.3%-66.6%, an increase of 13.3%. At the last point, the affordability of learning costs reached 46.6%-96.6%, an increase of 50%.

Table 2. Comparison of learning outcomes before and after using music theory e-books (n = 30).

Variable	Printed books (Before there were music theory e-books) (% of 30)	Using e-books (After the development of music theory books) (% of 30)
Ease of access to music theory book material	56,6	93,3
The material in the book is easy to understand	73,3	80
Image readability and notation	90	96,6
Mastery of the material by self-study at home	63,3	76,6
Interest in reading	53,3	66,6
Affordability of learning costs	46,6	96,6

Source: Author, 2023

In this segment, questionnaires were distributed to 30 students to get response data on their experiences in using music theory e-books in class. Based on the data provided, here are the responses to students' experiences using music theory e-books in percentage form:

Table 3. Students' experience using music theory e-book (n=30).

Variable	Students' experience response using music theory e-book			
	Very interesting (%)	Interesting (%)	Quite interesting (%)	Not interesting (%)
Content of the book material	16.6%	73.3%	0.6%	0.3%
Explanation of the material in the chapter	26.6%	53.3%	13.3%	0.3%
Book packaging	40%	60%	0%	0%
Image captions and notation	30%	70%	0%	0%
Book expediency	13.3%	76.6%	10%	0%
Practicality	50%	46.6%	0.3%	0%

Source: Author, 2023

Table 3 presents data on the variability the book material: very interesting: 16.6%, interesting: 73.3%, interesting: 0.6%, unattractive: 0.3%. The explanation of the material in the chapter: very interesting: 26.6%, interesting: 53.3%, interesting: 13.3%, unattractive: 0.3%. Book packaging: very attractive: 40%, attractive: 60%, attractive: 0%, unattractive: 0%. Image captions and notation: very interesting: 30%, interesting: 70%, attractive: 0%, unattractive: 0%. Book benefits: very attractive: 13.3%, attractive: 76.6%, attractive: 10%, unattractive: 0%. Practicality: very attractive: 50%, attractive: 46.6%, attractive: 0.3%, unattractive: 0%. It follows that the majority of students consider music theory e-books interesting or very interesting in terms of book material content, explanation of material in chapters, book packaging, image captions and notation, book usefulness, and practicality. There is only a small percentage indicates quite attractive or unattractive in certain aspects.

4 Conclusion

As reported by the data of this study, it indicates that after the development of music theory books in the form of e-books, there has been a significant increase in several aspects, such as ease of access to book material, readability of images and notation, mastery of material by self-study at home, reading interest, and affordability of study fees. However, there is a slight decrease in the percentage of material that is easy to understand after using e-books. Meanwhile, based on data on students' experience responses using music theory e-books, it is concluded that the majority of students feel that music theory e-books are interesting and useful for them. The content of the book material, the explanation of the material in the chapter, the description of pictures and notation, and its practicality received a positive response from students. In addition, the packaging of this book also gets a fairly high value in terms of attractiveness.

References

1. A. Pardo, J. Jovanovic, S. Dawson, D. Gašević, and N. Mirriahi, "Using learning analytics to scale the provision of personalised feedback," *British Journal of Educational Technology*, vol. 50, no. 1, pp. 128–138 (2019).
2. A. Pardo, "A feedback model for data-rich learning experiences," *Assess Eval High Educ*, vol. 43, no. 3, pp. 428–438 (2018).
3. D. Carless and D. Boud, "The development of student feedback literacy: enabling uptake of feedback," *Assess Eval High Educ*, vol. 43, no. 8, pp. 1315–1325 (2018). doi: 10.1080/02602938.2018.1463354.
4. M. Nursalim et al., *Psikologi pendidikan*. Surabaya: Unesa University Press (2007).
5. L. Carswell, P. Thomas, M. Petre, B. Price, and M. Richards, "Distance education via the Internet: The student experience," *British journal of educational technology*, vol. 31, no. 1, pp. 29–46 (2000).
6. R. A. Price, "A review of resilience in higher education: toward the emerging concept of designer resilience," *Studies in Higher Education*, vol. 48, no. 1, pp. 83–99 (2023). doi: 10.1080/03075079.2022.2112027.
7. N. Entwistle and P. Ramsden, *Understanding student learning (routledge revivals)*. London: Routledge (2015).
8. F. Marton, "Approaches to learning," *The experience of learning*, pp. 39–58 (1997).
9. M. B. A. Riduwan, *Skala Pengukuran Variabel-variabel Penelitian*. Bandung: Alfabeta (2012).
10. N. S. Ibrahim, *Penelitian dan Penilaian Pendidikan*, 1st ed., vol. 1. Bandung: Sinar Baru (2001).
11. S. Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif Dan R & D*. Bandung: Alfabeta (2016).
12. Sh M. Sindarova, U. T. Rikhsibaev, and H. E. Khalilova. "The Need to Research and Use Advanced Pedagogical Technologies in the Development of Students' creative Research," *Academic research in modern science*, vol. 1, no. 12, pp. 34-40 (2022). Doi: https://doi.org/10.5281/zenodo.7034684
13. A. Alam, "Investigating sustainable education and positive psychology interventions in schools towards achievement of sustainable happiness and wellbeing for 21st century pedagogy and curriculum," *ECS Transactions*, vol. 107, no.1, pp. 19481 (2022).
14. S. Suparno, A. Saptono, S. Febriantina, B.S. Narmaditya, & D. Disman, "Macroeconomics E-Book Development: The Role of Literacies in Blended Learning," *Cypriot Journal of Educational Sciences*, 17(7), pp. 2274-2289 (2022).