



Development of a *Nasi Kotak* E-Book to Support Learning in *Manajemen Usaha Boga*

Titis Budi Rahayu

Universitas Negeri Medan, Indonesia

*Corresponding author: titisbr@unimed.ac.id

ABSTRACT - This study aimed to (1) develop an e-book on *Nasi Kotak* materials, (2) evaluate its feasibility, and (3) assess student satisfaction with its use. The research employed a Research and Development (R&D) approach using the 4-D model, which includes the stages of Define, Design, Develop, and Disseminate. Data were collected through needs analysis observations, feasibility assessment questionnaires, and student satisfaction surveys. The e-book development process involved identifying learning needs, designing content structure and layout, producing and validating the e-book through expert review, and distributing it via the LMS platform. The results indicated that the e-book met the required standards of feasibility with average score 3.33, and received highly positive feedback from students with average score 3.38, demonstrating its effectiveness as an engaging and accessible learning resource.

Keywords: E-book, *Nasi Kotak*, culinary business management, culinary education program.

INTRODUCTION

Higher education plays an essential role in fostering future entrepreneurs. The 2022 Business Characteristics Statistics report shows that 44.13% of entrepreneurs in Indonesia are graduates of D4/S1 programs (BPS, 2022), highlighting the potential of university graduates in entrepreneurship. Therefore, universities hold a significant responsibility to instill entrepreneurial competencies and values to stimulate the development of new ventures within campuses.

Entrepreneurial spirit is one of the main assets in cultivating students' interest in entrepreneurship (Farrell, 2018), as it can open employment opportunities after graduation. The experiences gained from entrepreneurial practice in schools also contribute to enhancing students' interest, courage, and motivation to start their own businesses (Mohd Yusuf et al., 2021). One of the platforms for realizing this is through the *Manajemen Usaha Boga* (MUB) course. The MUB course in the Bachelor's Program of Culinary Education is a core competency designed to equip students to become entrepreneurs and professionals in the food industry, in addition to pursuing careers as educators. The MUB course offers hands-on learning opportunities that allow students to collaboratively manage campus-based culinary ventures. In this course, students learn to manage culinary businesses such as *nasi kotak* (meal boxes), snack boxes, one-dish meals, snacks, beverages, as well as pastries and bakery products.

However, based on a preliminary survey conducted in the Culinary Education Study Program at Universitas Negeri Medan (Unimed), several challenges faced by students were identified. These include difficulties in selecting appropriate menu items and determining selling prices particularly for *nasi kotak* products, low motivation to engage in entrepreneurship, a lack of initiative to apply modern marketing techniques, and low confidence in processing and promoting their products. Difficulties in practicing food preparation for sales purposes lead to low motivation among students to experiment (Andriana & Fourqoniah, 2020). Furthermore, some students perceive that running a business while studying may hinder their academic progress, which reduces their interest in entrepreneurship, while limited

capital is another inhibiting factor (Ahmad, 2018). Interviews with several campus consumers also revealed inconsistencies in the taste quality of *nasi kotak*, such as being too salty, bland, or overly sweet, along with other complaints regarding menu quality.

One of the key factors contributing to these challenges is the absence of compatible and specific learning materials that address *nasi kotak* business topics. So far, students have relied only on general entrepreneurship materials, lecturer presentations using outdated PowerPoint slides, and recipe books designed for home-scale portions. In contrast, students need learning materials that align with the competencies taught in the course. Praspita (2021) emphasizes that learning materials play a crucial role in assisting educators and learners throughout the teaching and learning process. However, many educators still rely on ready-made learning media downloaded from the internet. According to Ayu & Pahlevi (2019), the quality of the learning process decreases when educators rely solely on conventional teaching materials. Choosing inappropriate learning materials for a specific learning environment also leads to poor understanding of course content, resulting in unsatisfactory learning outcomes (Lisa & Wedyawati, 2020). Therefore, lecturers are expected to be able to design and develop learning materials that determine the success of the teaching and learning process (Munandar & Rizki, 2019). The main goal of developing instructional materials is to make the learning process more effective and efficient in achieving competency standards while improving students' cognitive, affective, and psychomotor skills (Maksum & Purwanto, 2022). Similarly, Noviyanita (2018) emphasizes that the development of teaching materials plays a crucial role in the success of the learning process in higher education.

Based on the description above, it is necessary to develop compatible teaching materials to support the learning process in the MUB course, particularly for the *Nasi Kotak* topic. The required teaching material should include explanations of *Nasi Kotak*, menu composition, ingredient selection, processing techniques, standardized recipes, selling price calculations, various packaging types, and marketing strategies. A standardized recipe is essential to ensure that the taste and quality of the food remain consistent (Nuringsih & Edalmen, 2021). However, to date, there has been no digital-based teaching material that specifically focuses on *Nasi Kotak* culinary business content integrated with entrepreneurial learning in higher education, especially in the Culinary Education Study Program. Most previous studies have concentrated on developing general or conventional teaching materials without emphasizing the entrepreneurial aspects of real project-based culinary practices such as *Nasi Kotak*. Therefore, this study introduces a novelty by developing an interactive *Nasi Kotak* e-book using a Flip Book format, which not only provides technical content on food processing and pricing calculations but also integrates entrepreneurial values, marketing strategies, and the application of standardized recipes. Hence, this e-book development is expected to serve as an innovative, contextual, and engaging learning resource to enhance students' entrepreneurial competence in the MUB course.

METHOD

The development model employed in this study is the 4-D model, developed by Thiagarajan et al. (1974). This model consists of four stages: Define, Design, Develop, and Disseminate. The data collection techniques used in this study included: (1) observation with direct interview and needs analysis questionnaires; (2) Story board to design the structure of the media, display flow, navigation, color scheme, font, and content layout; (3) feasibility questionnaires with 60 questions, evaluated by material experts and media experts; and (4) satisfaction questionnaires, completed by 34 students to assess their responses toward the *Nasi Kotak* e-book.

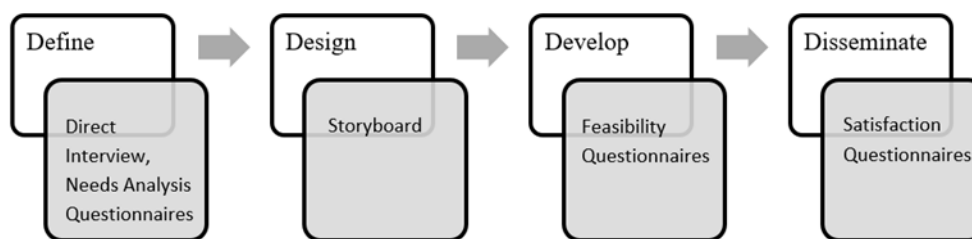


FIGURE 1. Stages of 4D model.

The questionnaires used were closed-ended with a rating scale format, where respondents rated their satisfaction by filling in the provided options based on a Likert scale (Sugiyono, 2009). Data were analyzed using the mean score analysis (Yulianto, 2016) to calculate the feasibility test results and student satisfaction scores for the *Nasi Kotak* e-

book. The feasibility criteria for the e-book are presented in Table 1, and the student satisfaction criteria are presented in Table 2.

TABLE 1. Flip book feasibility criteria.

Feasibility Score	Classification
$3.25 < \bar{x} \leq 4.00$	Highly Feasible
$2.50 < \bar{x} \leq 3.25$	Feasible
$1.75 < \bar{x} \leq 2.50$	Less Feasible
$1.00 < \bar{x} \leq 1.75$	Not Feasible

TABLE 2. Student satisfaction criteria for the flip book.

Satisfaction Score	Classification
$3.25 < \bar{x} \leq 4.00$	Very Satisfied
$2.50 < \bar{x} \leq 3.25$	Satisfied
$1.75 < \bar{x} \leq 2.50$	Less Satisfied
$1.00 < \bar{x} \leq 1.75$	Not Satisfied

RESULTS AND DISCUSSION

Defining Stage

The first step taken by the researcher was to analyze the semester learning plan. Second, the researcher conducted a needs analysis for students in the Culinary Education Study Program at Universitas Negeri Medan (Unimed) through classroom discussions and practical project assignments. The results of the analysis revealed that 52% of 70 students understood the types of foods that could be used for *Nasi Kotak*, but 63% of students were still unable to determine the ideal *Nasi Kotak* menu composition and selling price. Students often confused *Nasi Kotak* menus with *one-dish meal* menus, even though the two differ significantly in terms of type, purpose, and portion size. Students also experienced difficulties in determining portion quantities for large-scale production and in calculating selling prices, as *Nasi Kotak* typically consists of more than two food components.

According to the students, these challenges arose because the learning process relied heavily on PowerPoint presentations, where the materials had not been updated to reflect current culinary developments. The content presented was insufficiently specific, forcing students to search for recipes independently—most of which were designed for home-scale portions. In addition, PowerPoint-based learning media require relatively large storage space, especially on mobile devices, whereas students need learning materials that are practical, easy to review at any time, and accessible anywhere. Therefore, students expressed the need for more practical and compatible learning materials.

This finding is not consistent with the results of studies by Mardiana et al. (2025) and Nugroho et al. (2024), which reported that the use of Canva-based PowerPoint presentations in physics subjects and the use of PowerPoint integrated with Problem-Based Learning models in vocational mechanical engineering programs were able to improve students' motivation and learning outcomes. However, field observations revealed that the use of PowerPoint was not aligned with the learning style of students in the Culinary Education program. Therefore, lecturers need to be more creative in designing learning media that are relevant to the characteristics and learning needs of their students.

Design Stage

This stage represents the design phase in the development of the e-book, which includes compiling the scope of the material from various references and designing the overall appearance of the e-book. The front cover design contains information such as the e-book title *Nasi Kotak*, the course name *Culinary Business Management*, the author's name, and an illustration of *Nasi Kotak*.

The content covered in the *Nasi Kotak* e-book includes definition, function, production concept, equipment, packaging, menu management, standardized recipes, pricing calculation, and marketing strategies for *Nasi Kotak*. Each subtopic in the e-book is accompanied by illustrative images to clarify the content and make it more engaging. This aligns with the statement of Sudarwan (2016) that the presence of images in learning media can enhance memory

retention and improve learners' understanding of the material presented. Similarly, Anggraini (2024) found that the use of visual images in learning media for introducing Indonesian cuisine helps increase students' learning interest and assists them in understanding and remembering the material more effectively. Furthermore, Starke et al. (2021) stated that recipes accompanied by appealing photographs tend to be more frequently chosen by the public and can influence healthier food choices. This is important to consider when the goal of developing a book is to increase students' interest in trying recipes or selecting menus. Based on these findings, it can be concluded that the learning process can be made more effective by incorporating visual elements that clarify and reinforce the information presented in the learning media.

Students also expressed that they prefer worksheet-based exercises over written test questions. According to the students, they are more focused on the practical aspects of preparing *Nasi Kotak*, which involves planning activities such as determining the menu, verifying recipes, preparing shopping lists, selecting packaging, and calculating selling prices. They must also manage the *Nasi Kotak* production process efficiently within the limited class time available for each session. At the end of the learning process, students are required to submit a production and sales report of their *Nasi Kotak* as an evaluation of the overall learning activity.

Development Stage

The stage following the design phase is the development phase. This stage began with a review of the initial e-book design by media experts and material experts. The initial review provided feedback and suggestions, which were then used to make revisions and further improvements, resulting in the final version of the *Nasi Kotak* e-book. Subsequently, the e-book was revalidated by both experts to obtain a feasibility assessment. The results of the e-book feasibility test are presented in Table 3.

TABLE 3. Feasibility test results of the snack box flip book by media and subject matter experts.

No	Aspect	Validator		Average Score	Description
		Media Experts	Subject Matter Experts		
1.	Presentation Feasibility	3.31		3.31	highly feasible
2.	Content Feasibility		3.42	3.42	highly feasible
3.	Language Feasibility		3.27	3.27	highly feasible
Overall Average Score				3.33	highly feasible

After revisions were made and the final version of the e-book was produced, the experts conducted an evaluation to determine its feasibility in terms of content coverage and usability. The evaluation results showed that the *Nasi Kotak* e-book achieved a "highly feasible" category ($3.33 < \bar{x} \leq 4.00$). Among the assessed components, the content feasibility aspect received the highest score, followed by presentation feasibility and language feasibility. The media expert concluded that the size, cover design, content layout, color scheme, typography, and images in the e-book were appropriate, with an average score of 3.31. The material expert stated that the content of the *Nasi Kotak* e-book aligned with the curriculum, was presented in a logical and coherent sequence, and used clear and communicative language that supports the development of students' reasoning skills. The inclusion of worksheet components was also highly appreciated as it addressed the practical needs of students. These findings indicate that the *Nasi Kotak* e-book is feasible for use as a learning medium for students.

The results of this study are consistent with the findings of Rahmagandi et al. (2024), who developed a Flip Book for vocational students in mechanical engineering, demonstrating a very high level of feasibility—91.16% for the design aspect and 97.33% for the material aspect. Similarly, Rahmawati et al. (2017) developed a Flip Book for the topic of motion/dynamics in junior high school physics, obtaining an expert validation score of 86.47%, categorized as very valid. Furthermore, Hidayati et al. (2020) developed a science e-book for sixth-grade elementary students and found that the developed e-book contained appropriate content, clear linguistic presentation, and good graphic quality, making it suitable for instructional use. These findings collectively support that e-books are feasible and effective as learning media across various educational levels.

Disseminate Stage

The final *Nasi Kotak* e-book product, which had been declared feasible by the experts, was then distributed to students of the Bachelor's Program in Culinary Education by uploading it to Unimed's SIPDA Learning Management

System (LMS). Students independently studied the *Nasi Kotak* e-book prior to the scheduled MUB class on *Nasi Kotak* material, following the lecturer's prior instructions on how to use the e-book autonomously. During the *Nasi Kotak* theory session, the lecturer facilitated class discussions on *Nasi Kotak* based on the material presented in the e-book, while also conducting consultation sessions to guide students in preparing menu compositions, recipes, portion sizes, packaging, and target markets for their *Nasi Kotak* products. In addition, each student was assigned an individual task to calculate the selling price of their *Nasi Kotak* and present their calculations in class. These selling price analyses were discussed collectively using Microsoft Excel presentations.

In the subsequent meeting, students were required to conduct practical product trials to evaluate the taste, portion size, and visual appearance of their *Nasi Kotak*. This trial aimed to verify the suitability of the recipe and shopping list in relation to the previously planned selling price. Once the product and pricing were deemed appropriate, the *Nasi Kotak* could be produced on a larger scale and sold in the following class session. In the next meeting, students were required to present their practice reports, explaining the level of consistency between their planning, production, and sales outcomes. They also reflected on the benefits and challenges encountered throughout the *Nasi Kotak* learning process.

After the *Nasi Kotak* learning activities were successfully carried out in both the theoretical and practical sessions, students were asked to provide satisfaction assessments regarding their experience with the *Nasi Kotak* e-book. The results of the satisfaction assessment are presented in Table 4.

TABLE 4. Student satisfaction results for the snack box flip book.

No	Aspect	Score	Description
1.	Ease of Use	3.59	Very Satisfied
2.	Visual Appeal	3.19	Very Satisfied
3.	Content Clarity	3.47	Very Satisfied
4.	Learning Motivation	3.30	Very Satisfied
Average Student Satisfaction Score		3.38	Very Satisfied

Based on Table 4, it is shown that students were very satisfied ($3.38 < \bar{x} \leq 4.00$) with the *Nasi Kotak* e-book. The ease of use aspect ranked the highest ($3.59 < \bar{x} \leq 4.00$), followed by content clarity, learning motivation, and visual attractiveness aspects.

In the digital era, the integration of technology in higher education has become not only a trend but also an urgent necessity to enhance the quality of learning. The use of technology-based learning media, such as interactive e-modules, Learning Management Systems (LMS), and mobile learning applications, enables students to learn anytime and anywhere. This aligns with the 21st-century learning paradigm, which emphasizes independent learning, collaboration, and technology integration in the teaching and learning process. Therefore, the development of digital-based teaching materials in universities is a strategic step toward creating adaptive, relevant, and competency-oriented learning.

The clarity of content in the e-book helps students quickly understand the material and easily determine the menu, portion size, shopping list, and selling price for their practical project design. Meanwhile, the attractive yet simple visual design, featuring illustrative images such as the presentation of dishes in the *Nasi Kotak* menu, stimulates students' creativity in designing *Nasi Kotak* products that are more appealing to consumers. The presence of worksheets within the e-book also facilitates student engagement and reinforces understanding. Overall, students expressed that they were satisfied and motivated to learn the *Nasi Kotak* material.

This finding is consistent with several previous studies. For instance, students reported being highly satisfied (92.3%) with the use of a Flip Book in learning *Indonesian Cake and Pastry Products* (Dinanti et al., 2024). Similarly, Flip Book-based e-modules provided interactive and engaging learning experiences, thereby increasing motivation and mastery of learning materials (Maulina & Shofiyah, 2021). According to (Ayuardini, 2023), digital media such as Flip Book-based e-modules can enhance learning outcomes and support independent study. Students found the learning atmosphere to be more engaging, communicative, and interactive, and they were able to understand the material more easily with the use of the flipbook (Amanullah, 2020). Furthermore, (Sari et al., 2024) concluded that the use of Flip Book-based e-modules offers several benefits, including increased learning motivation, improved interaction between students and content, and greater concept mastery.

In addition to being motivated to study independently, students also expressed that through the learning process—which included class discussions, direct price calculation exercises, product trials, food production practice, and on-campus sales activities—they became more motivated and confident to start their own entrepreneurial ventures, either

during their studies or after graduation. This aligns with Setyawati (2020), who found that the implementation of the Production-Based Learning method resulted in a very high level of entrepreneurial interest among students taking entrepreneurship courses.

The material presented in the *Nasi Kotak* e-book and the entrepreneurial experience gained during the learning process helped students build greater confidence in managing culinary businesses with a broader market target. This is consistent with Sandra, (2014), who reported that students tend to have higher entrepreneurial motivation when they possess a strong understanding of entrepreneurship. Furthermore, Hariyono (2019) emphasized that quality learning is essential for producing productive and competitive graduates capable of applying their knowledge in real life.

Research by (Aulia et al., 2025) indicates that the use of e-books is widely preferred by university students due to their flexibility and accessibility. However, challenges such as eye strain, difficulty in finding high-quality content, and limited reading comfort are still encountered. Students tend to choose free e-books, which raises issues related to content quality and legality. In addition, they prefer learning methods that combine e-books and printed books, suggesting that printed materials remain essential.

Overall, the development of the *Nasi Kotak* e-book, supported by findings from previous studies, demonstrates that e-book development has a highly positive impact on the student learning process, provided that it is designed according to students' needs, meets standardized criteria, and has been validated for feasibility by experts.

CONCLUSION

The findings of this study can be summarized as follows: (1) The *Nasi Kotak* e-book was developed using the 4-D development model, which includes four main stages: (a) Define, focusing on analyzing student needs and the learning environment; (b) Design, involving the preparation of material content, as well as the layout and cover design; (c) Develop, encompassing the creation, revision, and validation process by material and media experts; and (d) Disseminate, which includes distributing the finalized e-book through the LMS platform and gathering student feedback on satisfaction. The expert validation results showed an average score of 3.33, categorized as *appropriate for use*, while the student satisfaction survey produced an average score of 3.38, categorized as *very satisfactory*. The presence of the *Nasi Kotak* e-book has positive implications for the student learning process, including increased motivation, enhanced ability to learn independently, and better understanding of the material, as the e-book is presented in a practical, engaging, and easily accessible format.

It is recommended that the development of similar instructional media be implemented in other courses within the Culinary Education Study Program as well as in other related disciplines. Regular evaluation of the e-book is essential to ensure its sustained relevance to curriculum developments and learners' evolving needs, as well as to maintain its quality and long-term effectiveness. Future studies are encouraged to design e-books with enhanced interactivity by integrating video components and gamification features, thereby fostering greater student engagement and active participation in the learning process. Higher education institutions also need to play an active role in providing e-books that are legal, relevant, and user-friendly, as well as in strengthening digital learning infrastructure to enhance the effectiveness of their use.

REFERENCES

- Ahmad, A. (2018). Evaluasi program mahasiswa wirausaha dengan model cipo di Universitas Brawijaya dan Universitas Negeri Malang. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 22(2), 154–167. <https://doi.org/10.21831/pep.v22i2.16577>
- Amanullah, M. A. (2020). Pengembangan Media Pembelajaran Flipbook Digital Guna Menunjang Proses Pembelajaran Di Era Revolusi Industri 4.0. *Jurnal Dimensi Pendidikan Dan Pembelajaran*, 8(1), 37. <https://doi.org/10.24269/dpp.v0i0.2300>
- Andriana, A. N., & Fourqoniah, F. (2020). Pengembangan Jiwa Entrepreneur Dalam Meningkatkan Jumlah Wirausaha Muda. *PLAKAT (Pelayanan Kepada Masyarakat)*, 2(1), 43. <https://doi.org/10.30872/plakat.v2i1.3823>
- Anggraini, S. (2024). Media Pembelajaran Visual Gambar dalam Pengenalan Kuliner Indonesia bagi Mahasiswa BIPA. *Jurnal Komposisi*, 9(1), 20. <https://doi.org/10.53712/jk.v9i1.2362>
- Aulia, E. N., Azzahra, I. A., Khusna, I., & Sundah, M. A. F. (2025). Analisis Pemanfaatan E-Book Sebagai Media Pembelajaran Mahasiswa di Perguruan Tinggi. *Pediaqu: Jurnal Pendidikan Sosial Humaniora*, 4(2), 4420–4427. <http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng->

- 8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELES TARI
- Ayu, R. D., & Pahlevi, T. (2019). Pengembangan Bahan Ajar E-book Berbantuan Kvisoft Flipbook Maker pada Mata Pelajaran OTK Humas & Keprotokolan Kelas XI OTKP SMKN 1 Jombang. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 7(3), 27–34. <https://jurnalmahasiswa.unesa.ac.id/index.php/JPAPUNESA/article/view/29352/26881>
- Ayuardini, M. (2023). Pengembangan E-Modul Interaktif Berbasis Flipbook pada Pembahasan Biologi. *Faktor Exacta*, 15(4), 259. <https://doi.org/10.30998/faktorexacta.v15i4.14924>
- BPS. (2022). Statistik Karakteristik Usaha (2022 - 2023). *Badan Pusat Statistik*, 5(1), 9–15.
- Dinanti, P. Z., Artanti, G. D., & Febriana, R. (2024). Pengembangan Media Pembelajaran Flipbook Digital Pembuatan Chiffon Cake. *Jurnal Ilmiah Wahana Pendidikan*, 10(23), 569–579. <https://doi.org/https://doi.org/10.5281/zenodo.14573564>
- Farrell, K. (2018). Examining Best Practice for a Postgraduate Module on Food Entrepreneurship. *Journal of Research and Innovation*, 13(1), 1–16. <https://doi.org/10.21427/D7QT68>
- Hariyono, H. (2019). Pemanfaatan Teknologi Dalam Pembelajaran Kewirausahaan Di Perguruan Tinggi. *Jurnal Nusantara Aplikasi Manajemen Bisnis*, 4(2), 187–196. <https://doi.org/10.29407/nusamba.v4i2.13834>
- Hidayati, A., Rufi'i, R., & Wiyarno, Y. (2020). Pengembangan Buku Ajar IPA Kelas VI untuk Siswa Sekolah Dasar. *Jurnal Edukasi Matematika Dan Sains*, 8(2), 106. <https://doi.org/10.25273/jems.v8i2.5628>
- Lisa, Y., & Wedyawati, N. (2020). Pengembangan Bahan Ajar E-Book Matematika Dasar Berbasis Metakognisi Menggunakan Flipbook Maker untuk Mahasiswa Pendidikan Biologi Stkip Persada Khatulistiwa Sintang. *Vox Edukasi: Jurnal Ilmiah Ilmu Pendidikan*, 11(April), 68–79.
- Maksum, H., & Purwanto, W. (2022). The Development of Electronic Teaching Module for Implementation of Project-Based Learning during the Pandemic. *International Journal of Education in Mathematics, Science and Technology*, 10(2), 293–307. <https://doi.org/10.46328/ijemst.2247>
- Mardiana, E., Larasati, D., Rohmah, A., Enjelina, D. F., Nisa, M., Putri, isma A., & EllianawatiEllianawati. (2025). *Unnes Physics Education Journal Literatur Review : Pengembangan dan Optimalisasi Media Pembelajaran PowerPoint*. 14(1).
- Maulina, M. I., & Shofiyah, N. (2021). Pengembangan E-Modul Praktikum Untuk Meningkatkan Efisiensi Pembelajaran Jarak Jauh Pada Mata Kuliah Fisika Dasar Di Masa Pandemi. *Prosiding "Ces" (Conference Of Elementary Studies)*, 236–245. <http://journal.um-surabaya.ac.id/index.php/Pro/article/view/7878>
- Mohd Yusuf, B. N., Mohamad, N., & Noor Azman, F. M. (2021). the Need for Entrepreneurship Awareness To Become an Entrepreneur! a Case Study on Empowerment of Entrepreneurial Attributes of Students From a Private Institution of Higher Learning. *International Journal of Education, Psychology and Counseling*, 6(44), 13–29. <https://doi.org/10.35631/ijepc.644002>
- Munandar, A., & Rizki, S. (2019). Pengembangan Bahan Ajar Matematika Berbasis Komputer Menggunakan Flipbook Maker Disertai Nilai Islam Pada Materi Peluang. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 8(1), 262–269. <https://doi.org/10.24127/ajpm.v8i1.1957>
- Noviyanita, W. (2018). Pengembangan Bahan Ajar Elektronik Berbasis Flipbook. *Delta: Jurnal Ilmiah Pendidikan Matematika*, 6(2), 41–49.
- Nugroho, D. R., Khumaedi, M., & Hadromi, H. (2024). Development of Multimedia Based on Advanced Powerpoint and a Problem-Based Learning Model for Reading Workmanship Signs. *Journal of Vocational and Career Education*, 9(1), 69–76. <https://doi.org/10.15294/jvce.v9i1.25528>
- Nuringsih, K., & Edalmen, E. (2021). Local Food Entrepreneurship: Sebagai Model Pengembangan Kewirausahaan Berkelanjutan. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 5(2), 457. <https://doi.org/10.24912/jmie.v5i2.12143>
- Rahmagandi, I. O., Khumaedi, M., & Anis, S. (2024). Development of a Flipbook-Based E-Module to Enhance Learning Outcomes in Manufacturing Design for Vocational High School Students. *Journal of Vocational and Career Education*, 9(1), 62–68. <https://doi.org/10.15294/jvce.v9i1.23623>
- Rahmawati, D., Wahyuni, S., & Yushardi. (2017). View metadata, citation and similar papers at core.ac.uk. *Jurnal Pembelajaran Fisika*, 6, 326–332.
- Sandra, C. (2014). Dampak Kuliah Kewirausahaan Bidang Kesehatan Terhadap Motivasi Mahasiswa Fakultas Kesehatan Masyarakat. *Jurnal IKESMA*, 10(2), 88–97.

- Sari, I. P., Rohmani, R., & Nisa', K. (2024). Analysis of the Effectiveness of Using Flipbook-Based E-Modules in Science Learning in Elementary Schools. *IJORER : International Journal of Recent Educational Research*, 5(6), 1367–1382. <https://doi.org/10.46245/ijorer.v5i6.615>
- Setyawati, E. (2020). Menumbuhkan Minat Berwirausaha Mahasiswa Melalui Metode Production Based Learning. *Jurnal Inovasi Penelitian*, 1(7), 1347–1356. <https://doi.org/https://doi.org/10.47492/jip.v1i7.256>
- Starke, A. D., Willemsen, M. C., & Trattner, C. (2021). Nudging Healthy Choices in Food Search Through Visual Attractiveness. *Frontiers in Artificial Intelligence*, 4(April), 1–18. <https://doi.org/10.3389/frai.2021.621743>
- Sudarwan. (2016). Psikologi Pendidikan Dalam Perspektif Baru. *Remaja Rosdakarya*.
- Sugiyono. (2009). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Penerbit Alfabeta
- Yulianto, Harry. (2016). Statistik 1. Yogyakarta: Lembaga Ladang Kata.