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Development of Entrepreneurial BMC (Business Model Canvas) Game to Improve Numeracy Literacy of High School Students

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ABSTRACT

This research is motivated by several high school level schools in Kediri city there are still those who get a red report card, based on data from the Kediri City Education Office in 2024 SMA Sultan Agung and SMA Al Anwar is one of them. The purpose of this study was to determine the feasibility of entrepreneurial BMC games to improve literacy and numeracy in students. The research method used is development research (Research and Development / R&D), with the Borg and Gall model. Where the development stages carried out are Information Gathering, Planning, Model Development, Limited Group Trial, Product Revision, and Finalization. The results showed that the BMC game was effective in deepening students' understanding of entrepreneurship and improving their numeracy literacy. Students responded positively to the use of the game as a learning method, felt more interested and motivated to learn entrepreneurship, and were able to apply the concepts learned in a real-world context. In addition, the game also helps develop students' skills in decision-making, problem-solving and collaboration. Overall, the development of this BMC game contributes significantly to improving students' numeracy literacy in high school and can be an innovative and fun learning alternative in entrepreneurship education.

Keywords: BMC Game; Entrepreneurship; Literacy; Numeracy

INTRODUCTION

The development of a country cannot be separated from the role of education, as globally competitive human resources are supported by quality education (1). A good education can improve individual opportunities and contribute greatly to economic growth and social development, emphasizing the importance of skill enhancement as the key to individual and economic success (2). Although Indonesia has launched various policies to improve the quality of education, many schools still face challenges, especially in areas with low academic performance, often referred to as “red report card schools”. These schools are generally characterized by low national exam results, limited facilities and low student participation in learning activities (3).

One of the main focuses in education is numeracy literacy, which refers to students' ability to understand and apply mathematical concepts and numbers in solving everyday problems. Low numeracy

literacy among students in red-ranked schools often becomes an obstacle for them to achieve success in education and life in the future. The results of the PISA (Program for International Student Assessment) study show that the numeracy skills of Indonesian students are still far from international standards, which illustrates their low understanding of basic mathematical concepts and their application in real situations (4).The low numeracy literacy among students is not only due to the fact that mathematics teaching in Indonesia still uses many traditional methods that rarely involve active interaction or the use of technology, which has an impact on the low numeracy skills of students (5). Therefore, a more creative and fun approach to teaching mathematics and numeracy literacy is needed, especially in schools with red report cards (6).

Game-based learning is an effective alternative to overcome this problem. Games can provide a learning experience that is interactive, fun, and emphasizes the development of practical skills (7). Educational games can improve students' numeracy and critical thinking skills (8). In this case, the Business Model Canvas (BMC) game for entrepreneurship has great potential to teach numeracy literacy to students. Through this game, students can learn economic and numeracy concepts in a more applicable way, namely through simulating the creation and management of business models (9). This game-based learning teaches students to understand cost calculation, revenue projection, market analysis, and financial decision making related to entrepreneurship.

The Business Model Canvas (BMC) is a commonly used tool in the business world to visually and systematically design, describe, and analyze business models (10). Turning BMC into a game format for students allows them to learn through practical experience rather than just theory. Students can learn how to calculate numbers related to costs, profits, and investments in a context that is more practical and relevant to their lives (11). With this approach, students not only learn mathematical theory, but also develop practical skills that are useful in everyday life as well as the professional world.

On the other hand, technology-based games have great potential to increase student participation and motivation, which is often a challenge in traditional learning. Previous research shows that the application of gamification in education can increase student engagement and support the achievement of better learning outcomes, especially in subjects considered difficult, such as math and economics (12). By utilizing interactive and engaging technology, entrepreneurial BMC games can create a more enjoyable and immersive learning experience, which in turn can improve the numeracy literacy of students in schools with red report cards.

SMA Sultan Agung is an educational unit located at Jl. Raung No.1, Bandar Kidul, Kec. Mojoroto, Kediri City and SMA Al Anwar Jl. Sersan Bahrun No.100, Mrican, Kec. Kota, Kediri District. Based on data from the Kediri City Education Office in 2024, Sultan Agung High School and Al Anwar High School are one of the schools that received a red report card, where one of the indicators is still low in literacy and numeracy. Based on initial observations made by researchers when accompanying students conducting PLP 2 at SMAS Sultan Agung and SMA Al Anwar, the following results were obtained: 1) teaching and learning activities carried out in these schools are still conventional, meaning that teachers tend to teach using lecture, discussion, question and answer and assignment methods. 2) teachers still very rarely use learning media that is attractive to students so that student learning motivation is very low and student attendance in class is still very lacking, 3) literacy and numeracy skills are also still lacking it is seen when teaching and learning activities in the classroom economics only 20% of students understand and understand when calculating demand and supply, 4) learning

infrastructure facilities are also still lacking support, 5) students will participate in many learning activities in class if it is related to entrepreneurship.

So based on the above problems, the solution that will be given in this research is to develop an entrepreneurial BMC (Business Model Canva) game to improve student literacy and numeracy. Where the hope is that with this BMC game, students of SMAS Sultan Agung and SMA Al Anwar can simulate business management which can help students understand numeracy concepts in a relevant context.

LITERATURE REVIEW

Game BMC (*Business Model Canvas*)

BMC (Business Model Canvas) is an instrument used to facilitate entrepreneurs in planning a business. BMC (Business Model Canvas) consists of nine components, including customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structures (14). BMC (Business Model Canvas) Game is an innovative method of learning designed by adapting the BMC (Business Model Canvas) concept commonly used in business planning, and integrating it into an interactive game. With this approach, the main purpose of developing BMC games is to facilitate learners in understanding the BMC concept more deeply and practically through interactive play experiences.

The implementation of this interactive learning is expected to help students not only in understanding business concepts in a more applicable manner, but also develop their social skills, such as collaborating with classmates, as well as creative problem-solving abilities. In addition, this game-based learning can increase students' motivation to more actively participate in learning activities, as they can experience first-hand the benefits and challenges involved in the BMC concept, which in turn will strengthen their understanding and engagement in the learning process (15). Based on research conducted by (16) that the use of interactive methods, especially games, can improve students' understanding and experience of the material. Research with a development approach shows that BMC (Business Model Canvas) games make it easier for participants to understand BMC topics, especially the elements in the concept.

Entrepreneurship

Entrepreneurship, as the oldest activity of mankind, arises from the desire to live a more prosperous life. Entrepreneurship can be defined as the process of creating products or services to achieve that goal through profit. The entrepreneurial process involves identifying markets, developing new ideas, and realizing them (17). Several factors influence an individual's entrepreneurial interest, namely (1) basic understanding of entrepreneurship, interest is built with understanding as a foundation for realizing it. (2) the emergence of curiosity from the understanding gained to try it. (3) the desire to take risks. Someone with a high entrepreneurial spirit will not be afraid of any risks obtained. When the realized business is not as desired, someone with a high entrepreneurial spirit will consider it as learning. The real failure is not daring to try is the principle of someone with a high entrepreneurial spirit. Understanding entrepreneurship material at the secondary education level is becoming increasingly important to prepare students to face the challenges of an increasingly complex world (18).

Numeracy Literacy

The culture of literacy and numeracy has always been an interesting topic to discuss. According to the Financial Services Authority (OJK), numeracy literacy is defined as a person's understanding and skills in making decisions and managing finances. In the context of education, numeracy literacy has an urgency in helping students understand mathematical concepts related to everyday life. Seeing that the

numeracy literacy skills of students in Indonesia are still relatively low, a more interactive learning model is needed to improve students' numeracy literacy skills. One of them is using the Game Based Learning (GBL) learning model (19), the statement is reinforced by the results of research conducted by (20). Based on this research, it shows that numeracy literacy skills can be improved more effectively through game-based learning models. In the context of BMC (Business Model Canvas) games, numeracy literacy can be strengthened through data processing and financial analysis needed in designing sustainable business models. Thus, the development of BMC-based games is expected to improve students' numeracy literacy, especially to solve problems involving numerical elements, such as the calculation of costs, revenues, and profits in business simulations.

MATERIALS & METHODS

This research uses the type of development research (Research and Development/ R&D). This study aims to develop an entrepreneurial BMC game that can be used to improve numeracy literacy in students of SMAS Sultan Agung Kediri. The implementation stage of the development procedure in this study uses the 4D Holistic model, namely the Define stage, Design stage, Develop stage and Deploy stage. The stages carried out at each stage are as follows: 1) Stage 1 information gathering and needs analysis, activities are carried out in the form of problem identification and gathering information. 2) The 2nd stage of the planning stage is to design the BMC game. 3) Stage 3 of BMC game development, at this stage product validation is also carried out by media experts and material experts, and trials in limited groups, carried out to determine the weaknesses and shortcomings of the BMC game developed. 4) The last 4th stage is product finalization and implementation.

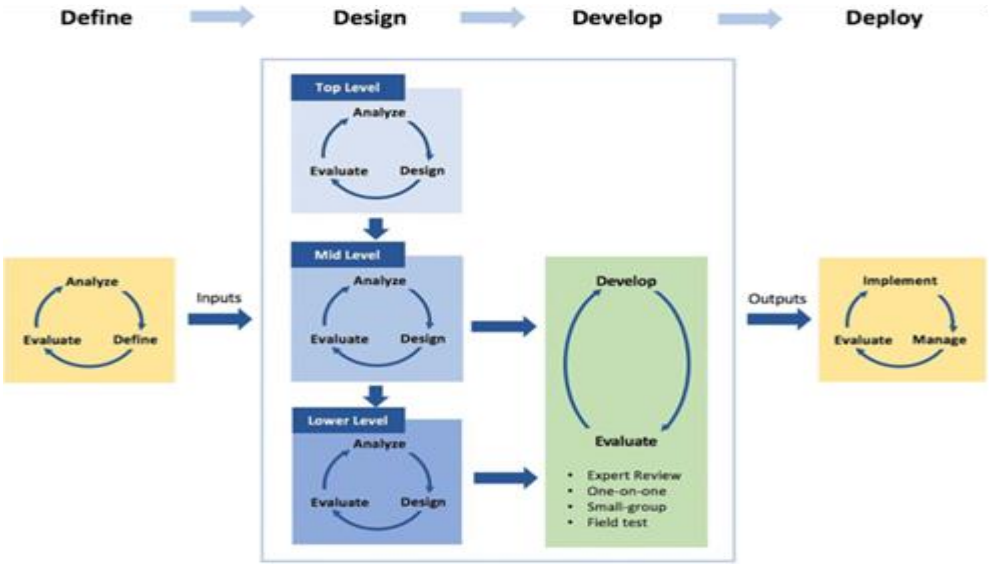

Figure 1. Research flow diagram (13)

RESULT

Define stage

In the define stage, what is done is to explore information related to needs analysis, some specific steps taken by researchers are Problem Identification; Researchers based on initial observations in the field identify and formulate existing problems in the context of developing BMC games to improve numeracy literacy. Problems related to students' lack of understanding of the BMC concept or challenges in integrating numeracy literacy in entrepreneurial learning. Researchers also

see a gap in learning that tends towards the conventional, where these conditions can be overcome with BMC games. The next step is to collect data through interviews or surveys to students, teachers to find out their needs and expectations of the game to be developed. With the information collected from the steps above, researchers can analyze the existing needs and formulate the right game development strategy to achieve the goal of improving numeracy literacy through interactive methods.

Design Stage

At this stage what the researcher does is to design the basic structure of the game, which includes the game rules, game objectives and game flow. In this context, the game should be designed to create an experience that allows learners to learn about the Business Model Canvas (BMC) while improving numeracy literacy. Where, the elements in the BMC are combined with challenges or tasks that involve the use of numbers, calculations, or data analysis relevant to numeracy literacy in the form of activities to plan costs and calculate revenue.

1) Determining Competencies and Indicators. Researchers first need to know the appropriate competencies and indicators for numeracy literacy of entrepreneurial activities, especially at the senior high school level.
2) Determining Features and Interactivity. Researchers need to design interactive features in the game that can help learners actively engage in the learning process. This includes selecting attractive visual elements, the use of graphics, or animations to facilitate understanding of the concepts in BMC, as well as features that support collaboration or competition between players to increase engagement.
3) Integrating BMC Materials with Numeracy Literacy. In this design stage, researchers should ensure that the game can connect the elements of BMC with numeracy materials. For example, how learners can calculate costs, revenue or profit in the context of the business model they create. The game design should include ways to challenge learners to use relevant numeracy concepts.
4) Determine the Platform and Technology Used. Researchers need to decide on the platform or medium that will be used to develop the game (for example, desktop, mobile or web-based application). Choosing the right technology is important to ensure that the game runs well and can be accessed by learners easily.
5) Developing Evaluation and Feedback in the Game. In the design stage, researchers should also design an evaluation system that can provide direct feedback to the player. This could be an assessment of the decisions made in the game or a measurement of how well learners understand the concepts of BMC and numeracy literacy.

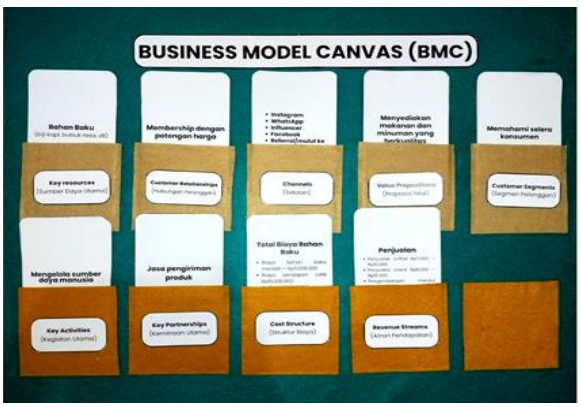

Figure 2. BMC Game Selection 1

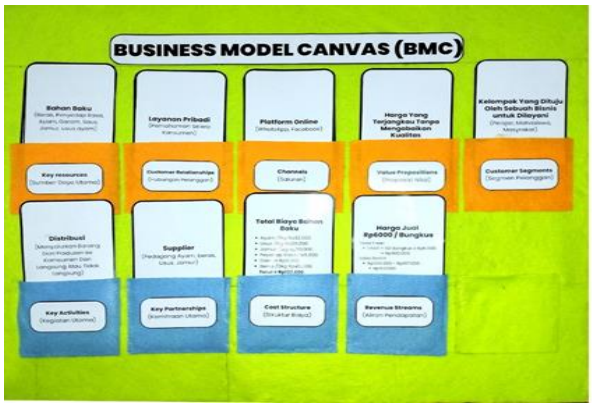

Figure 3. BMC Game Selection 2

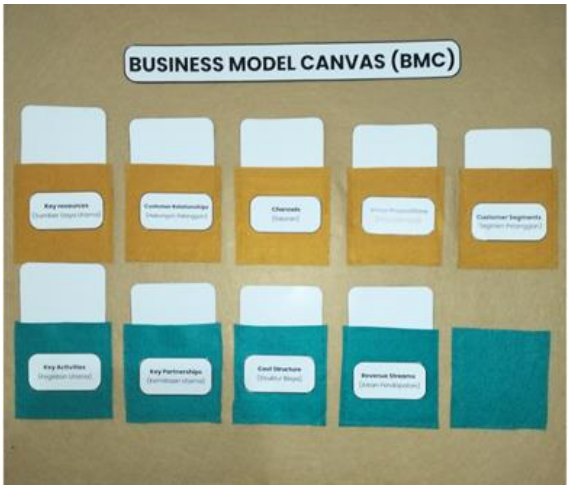

Figure 4. BMC Game Selection 3

This game is played in groups. Representatives from each group are asked to take 1 (one) type of product that will be analyzed using the BMC game. The analysis carried out can be in the form of costs incurred to make the product. The results of the analysis are then mapped in the pockets that have been provided in accordance with the 9 (nine) components that are already available in the BMC game.

Develop Stage

In this stage, the researcher develops the game content in detail, including the elements in the Business Model Canvas (BMC) that will be included in the game, such as customer segments, value propositions, distribution channels, revenue sources, costs, and other elements. Each BMC element is associated with a task or challenge relevant to numeracy literacy, such as calculating costs or determining selling prices.

The next step is for the researcher to start developing the game itself, either by coding the program or using game development software. At this stage, programming and technical implementation of the game is done, including setting up the user interface (UI), integrating graphics, and setting up game mechanics that allow learners to interact with BMC concepts and learn through the game.

1) Integration of Interactive Features and Feedback. Researchers need to implement the interactive features that have been designed at the design stage. This could include elements such as quizzes or challenges that allow learners to interact with the game, as well as automated feedback that informs them of progress or mistakes made during the game. These features are important to help learners learn actively.
2) Functionality Testing. Once the game development is complete, the researcher needs to test the functionality of the game to ensure all elements are working properly. This includes checking whether the game runs without glitches, whether the game flow is smooth, and whether all BMC elements have been properly integrated in the numeracy context. This test involves several experts (expert judgment) in entrepreneurship material and experts in the use of game media, especially BMC (Business Model Canvas).
3) Small Scale Trial. This trial involves a small group of learners or target users to test the game. This test aims to get direct feedback from users regarding the playing experience, difficulties encountered, and whether the game is effective in teaching BMC concepts and numeracy literacy. This feedback will help the researcher in improving the game being developed. The pilot test also helps the researcher ensure that the game has met the desired teaching

objectives, which is to improve understanding of BMC and numeracy literacy. The small-scale trial will be conducted at SMA Sultan Agung Kediri.

4) Wide Scale Trial. After small-scale testing, it can be continued with a wider scale trial involving a larger group. Researchers must involve a larger group of learners or targets in order to test the game further. This test also aims to get direct responses from users regarding the playing experience, the difficulties faced, and whether the game is effective in teaching BMC concepts and numeracy literacy. This response can also be used as a guide for researchers in improving and perfecting the game so that it can be disseminated to the wider community.
5) Evaluation and Refinement. Based on the test results and user feedback, the researcher should evaluate the game and make improvements. This could include adjusting game elements, changing difficulty levels, or making improvements to make the game easier to use and more effective in achieving learning objectives.

With the steps above, researchers can ensure that the game developed can run well, provide an interesting and interactive learning experience, and be effective in improving numeracy literacy through the introduction of BMC concepts.

The feasibility assessment at this stage was carried out by 2 (two) material experts and 2 (two) media experts. Expert validation is carried out by evaluating the BMC game developed, namely assessments, suggestions and input that can be used as guidelines for revising the initial game product. The following is presented the lattice of instruments for material and media validation tests.

Table 1. Grid of Validation Test Instruments for Materials and Media

No	Material Validation			Media Validation		
	Indicator	**Many Grains**	**Item No.**	**Indicator**	**Many Grains**	**Item No.**
1	Suitability of material with Learning Outcomes	3	1, 2, and 3	Layout Design View	4	1, 2, 3, and 4
2	Accuracy of the material	4	4, 5, 6, and 7	Ease of use	2	5 and 6
3	Supporting learning materials	2	8 and 9	Consistency	3	7, 8, and 9
4	Recency of material	1	10	Expediency	5	10, 11, 12, 13, and 14
5	Presentation Technique	2	11 and 12	Graphics	4	15, 16, 17, and 18

The results of validation from material and media experts calculated using the V-Aiken formula can be seen in the following table.

Table 2 Material and Media Validation Test Results

Material Validation			Media Validation		
Item	**V-Aiken score**	**Description**	**Item**	**V-Aiken score**	**Description**
Item 1	0,83	Valid	Item 1	1,00	Valid
Item 2	1,00	Valid	Item 2	0,83	Valid
Item 3	0,67	Valid	Item 3	1,00	Valid
Item 4	0,83	Valid	Item 4	0,67	Valid
Item 5	0,83	Valid	Item 5	0,67	Valid
Item 6	1,00	Valid	Item 6	0,67	Valid
Item 7	0,67	Valid	Item 7	1,00	Valid
Item 8	0,83	Valid	Item 8	0,83	Valid
Item 9	0,67	Valid	Item 9	0,67	Valid
Item 10	0,83	Valid	Item 10	0,50	Valid

Item 11	0,67	Valid	Item 11	0,83	Valid
Item 12	0,67	Valid	Item 12	0,83	Valid
			Item 13	0,67	Valid
			Item 14	1,00	Valid
			Item 15	0,50	Valid
			Item 16	0,67	Valid
			Item 17	0,50	Valid
			Item 18	0,67	Valid

Based on the results in table 2, it can be seen that expert assessments for materials and media for BMC games are all valid with all the indicators previously described. Thus it can be said that the material and media in the BMC game are appropriate and feasible to be tested on a predetermined subject.

DISCUSSION

The entrepreneurial BMC game was developed based on a hands-on learning experience. Where it can simulate business management helps students understand numeracy concepts in a relevant context. Components of Business Model Canvas, 1) Market Segmentation, identifying and analyzing target markets using numerical data. 2) Value Proposition, using analytical skills to understand customer needs. 3) Distribution Channels, calculating and planning distribution channels considering cost and efficiency. 4) Cost and revenue structure: develop an understanding of expenses and revenue, and how to calculate profitability. Numeracy skills applied in this game include: 1) Calculation, understanding the basics of numbers and operations to make business decisions. 2) Data analysis, reading and analyzing graphs and tables to gain business insights. 3) Financial planning, creating budgets and financial projections using numerical data.

This research aims to develop an educational game based on Business Model Canvas (BMC) as a learning tool that can improve the numeracy literacy of high school students, especially in the field of entrepreneurship. The research findings show that the BMC game has a significant impact in helping students understand the basic concepts of entrepreneurship in a more practical way. In addition to teaching how to design a business model, the game also introduces numeracy concepts that are important in the business world, such as the calculation of costs, profits, and cash flow.

The main objective of this study, which was to improve students' numeracy literacy, was successfully achieved. The game provides simulations that allow students to apply calculations in more realistic situations, such as determining selling prices, calculating profit margins, and managing company finances. Through various challenges in the game, students are trained to make decisions based on data and numbers, which ultimately deepens their understanding of numeracy in business. For example, students can better understand how changes in production costs affect selling prices and profits.

The students' response to using the game was also very positive. They feel more interested and motivated to learn entrepreneurship, which is important as motivation is a key factor in learning. The game provides a more enjoyable experience compared to traditional learning methods. By learning through the game, students not only acquire knowledge, but also practical skills that are useful in real life, which makes it easier for them to apply the knowledge.

In addition, the game helps students to learn independently and collaborate. BMC games provide opportunities for students to take the initiative in solving challenges, so they learn from hands-on experience, not just theory. Some challenges in the game require students to work together in teams, which can improve their collaboration and communication skills. These skills are essential in entrepreneurship, where the

ability to work in teams and make decisions together is necessary.

Although the results of the study showed a positive impact, there are several things that need to be considered for further development. First, this game must continue to be adjusted to the needs of learning and curriculum development. In addition, to achieve a wider impact, this game needs to be introduced in more schools and supported by training for teachers so that they can utilize it optimally in the learning process. Overall, the development of the BMC game as a learning medium in high schools has proven effective in improving students' numeracy literacy and introducing them to more practical entrepreneurship concepts. In the future, this game can be an interesting and useful learning alternative in the education system, which can prepare the younger generation to face the challenges of the world entrepreneurship.

CONCLUSION

This study successfully created an educational game based on Business Model Canvas (BMC), which aims to improve the numeracy literacy of high school students in the field of entrepreneurship. The findings of the study indicate that the BMC game helps students to better understand the basic concepts in designing a business model in a more interactive and fun way. In addition, this game has proven effective in improving students' numeracy skills, such as understanding the calculation of costs, profits, and cash flows, which are important elements in entrepreneurship. Students' responses to the use of this game were also very positive. They felt more interested and motivated to learn about entrepreneurship, and were able to apply the concepts learned in real-world situations. This game also allows students to learn independently and work together in solving various challenges given, thus helping to improve problem-solving and decision-making skills. Thus, the development of this BMC game makes an important contribution to efforts to improve students' numeracy literacy in entrepreneurship education. In the future, this game has the potential to become one of the innovative and fun learning methods in schools, especially in improving students' numeracy and entrepreneurship competencies.

Declaration by Authors

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REFERENCES

1. Bank Dunia. The Role of Education in Economic Development: Insights from Indonesia’s Experience. In 2023.
2. Sukasni A, Efendy H. The Problematic of Education System in Indonesia and Reform Agenda. Int J Educ. 2019;9(3):183.
3. Harvard Kennedy School. Sekolah dengan Rapor Merah: Tantangan dan Solusi dalam Pendidikan Indonesia. In 2023.
4. OECD. PISA 2022 Results: A Journey to Equity in Education itle. Vol. 2023.
5. Suciati I, Tangge LN, Afadil. Profil kemampuan literasi numerasi dan literasi budaya siswa kelas vii smp negeri di kecamatan palu selatan. Guru Tua J Pendidik dan Pembelajaran. 2024;7(1):55–62.
6. Pertiwi KJ, Setyaningsih N. Students Mathematical Literacy Level in Solving PISA- based Problems Shape and Space Content : An Analysis from the Perspective of Self-concept Mathematics Tingkat Literasi Matematika Siswa dalam Menyelesaikan Soal Berbasis PISA Konten Shape and Space : A. 2024;7(2):105–16.
7. Candra KI, Leonia RA, Suyantri E. The Effectiveness of Educational Games in Understanding Learning English for Kindergarten Students Bunga Bangsa School, Indonesia. J Ilm Profesi Pendidik. 2024;9(3):1916–22.
8. Khoiri N, Ristanto S, Kurniawan AF. Project-Based Learning Via Traditional Game in Physics Learning: Its Impact on Critical Thinking, Creative Thinking, and Collaborative Skills. J Pendidik IPA Indones. 2023;12(2):286–92.
9. Jamira A, Agustiningsih N, Febriani Y. the Implementation of Business Model Canvas

(Bmc) To Improve Students' Entrepreneurship Mindset. Dinasti Int J Educ Manag Soc Sci. 2021;2(3):395–403.
10. Fourqoniah F, Setiawan RD, Aransyah MF. Business Roadmap Model: A Review of Research. J Adm Bisnis. 2021;10(2):99–106.
11. Skulmowski A, Xu KM. Understanding Cognitive Load in Digital and Online Learning: a New Perspective on Extraneous Cognitive Load. Educ Psychol Rev. 2022;34(1):171–96.
12. Smiderle R, Rigo SJ, Marques LB, Peçanha de Miranda Coelho JA, Jaques PA. The impact of gamification on students' learning, engagement and behavior based on their personality traits. Smart Learn Environ. 2020;7(1).
13. Charles M Reigeluth dan Yunjo An. Merging the instructional design process with learner-centered theory: the holistic 4D model. London, Routledge; 2021.
14. Rokhmat A, Susanto A, Rosmiati D, Cahyani F. OPTIMASI USAHA MENGGUNAKAN BISNIS MODEL CANVAS. BESIRU. 2024;1(1):372–7.
15. Abdullah MAR, Hussin S, Ismail MZ. TAKARAGASHI: The Educational Treasure Hunt Game Muhammad. In: Innovating Education for a Better Tomorrow (IUCEL 2022). 2022. p. 1.
16. Lange KPH, Korevaar G, Oskam IF, Herder PM. Re-organise: Game-Based Learning of Circular Business Model Innovation. Front Sustain. 2022;3(May).
17. O Mardy christoffel, Mintardjo, W I, Ogi, M G, V, et al. Sejarah Teori Kewirausahaan: Dari Saudagar Sampai KeTeknoprenur Startup. J Ilm Manaj Bisnis Dan Inov Univ Sam Ratulangi [Internet]. 2020;7(SEJARAH TEORI KEWIRAUSAHAAN):187–96. Available from: christoffelmintardjo@unsrat.ac.id
18. Hastuti P, Nurofik A, Purnomo A, Hasibuan A, Ariwibowo H, Faried AI, et al. Kewirausahaan dan UMKM. 1st ed. Yayasan Kita Menulis. Medan; 2021. 2013–2015 p.
19. Nurcahyono NA. Peningkatan Kemampuan Literasi Numerasi Melalui Model Pembelajaran. Hexag J Ilmu dan Pendidik Mat. 2023;1(1):20.
20. Supriyaddin S, Prayudi A, Putra A. Pengembangan Game Edukatif Literasi Numerasi Budaya Lokal Dompu Berbasis Android. Ainara J (Jurnal Penelit dan PKM Bid Ilmu Pendidikan). 2023;4(3):130–5.

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