DEVELOPMENT OF GAME-BASED LEARNING MODELS AS AN EFFORT TO INCREASE STUDENTS' LEARNING MOTIVATION IN ENTREPRENEURSHIP LEARNING SUBJECTS FOR CLASS XI STUDENTS OF SMK NEGERI 1 BANGKO

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ABSTRACT
This paper is development research that aims to determine the process, feasibility, and students' response to game-based learning models as an effort to increase learning motivation in entrepreneurship learning subjects for class XI students of SMK Negeri 1 Bangko. The instruments used in the research were validation sheets and questionnaires, and the data that had been collected were analyzed. Data analysis used descriptive statistical analysis obtained from data collection of material expert validation and model experts sheets, while data collected from questionnaires were used to analyze as an effort to increase students' learning motivation. The results of the research in the first stage were validated by material experts at 3.00 with a good category of content aspects and at 3.66 with a very good category of several revisions and not feasible testing presentation. In the second stage of material expert validation, the content aspect was 3.5 with a very good category and presenting several suggestions and feasible testing aspects was 3.83 with a very good category. In the first stage of validation by model experts, there were 2.8 with a good category of several revisions and not feasible testing, In stage II, the validation average by model experts was 3.3 with a very good category and feasible testing. Based on the results of the game-based learning model development, the result indicates that it was feasible to be tested in order to find out how students respond to game-based learning models as an effort to increase student learning motivation, which involved 32 students of class XI at SMK Negeri 1 Bangko as research subjects. An assessment score of 2.54 indicates that aspects of students' learning motivation before applying the game-based learning model are in a high category. The assessment score of 3.02 indicates that the aspect of students' learning motivation after applying the game-based learning model is in the very high category.

Keywords: game-based learning models, students' learning motivation, entrepreneurship learning subject

PENGEMBANGAN MODEL PEMBELAJARAN BERBASIS GAME DALAM UPAYA MENINGKATKAN MOTIVASI BELAJAR SISWA PADA MATA PELAJARAN KEWIRAUSAHAAN SISWA KELAS XI SMK NEGERI 1 BANGKO

ABSTRAK
Tulisan ini merupakan penelitian pengembangan yang bertujuan untuk mengetahui proses, kelayakan dan respon siswa terhadap model pembelajaran berbasis *game* dalam upaya meningkatkan motivasi belajar pada mata pelajaran kewirausahaan siswa kelas XI SMK Negeri 1 Bangko. Instrumen yang digunakan dalam penelitian lembar validasi dan angket, data yang sudah dikumpulkan dilakukan analisis data. Analisis data menggunakan analisis statistik deskriptif yang diperoleh dari data pengumpulan lembar validasi ahli materi dan ahli model, sedangkan data yang dikumpulkan dari angket digunakan untuk menganalisa dalam upaya meningkatkan motivasi belajar siswa. Hasil penelitian pada tahap I validasi oleh ahli materi 3,00 kategori baik aspek isi dan 3,66 kategori sangat baik aspek penyajian beberapa revisi dan belum layak diuji coba. Pada tahap II validasi ahli materi validasi 3,5 kategori sangat baik aspek isi dan 3,83 kategori sangat baik aspek penyajian beberapa saran dan layak diuji coba. Pada tahap I validasi oleh ahli model 2,8 kategori baik beberapa revisi dan belum layak diuji coba, Pada tahap II validasi oleh ahli model rata-rata 3,3 kategori sangat baik dan layak diuji coba. Berdasarkan hasil pengembangan model pembelajaran berbasis *game* dinyatakan layak untuk diuji coba, untuk mengetahui bagaimana respon siswa terhadap model pembelajaran berbasis *game* dalam upaya meningkatkan motivasi belajar siswa melibatkan 32 siswa kelas XI di SMK Negeri 1 Bangko sebagai subjek penelitian. Skor penilaian 2,54 menunjukkan bahwa aspek motivasi belajar siswa sebelum menggunakan model pembelajaran berbasis *game* dengan kategori tinggi. Skor penilaian 3,02 menunjukkan bahwa aspek motivasi belajar siswa sesudah menggunakan model pembelajaran berbasis *game* dengan kategori sangat tinggi.

Kata Kunci: model pembelajaran berbasis game, motivasi belajar siswa, mata pelajaran kewirausahaan

INTRODUCTION

Education is very important for society, every community has its own ideals, one of which is to realize their dreams by learning. Learning is an activity where students gain knowledge in the form of theory and practice. However, educational problems continue to emerge, one of the factors of these problems is the low motivation of students in learning. Motivation is divided into two elements, Zahroh (2015), explains that these two elements are intrinsic motivation that comes from within the student and extrinsic motivation that comes from outside the student. One of the factors causing low learning motivation is extrinsic motivation that comes from outside the student's self, extrinsic motivation can be in the form of teaching from the teacher, class conditions in learning and interesting activities in learning. The teacher plays a very important role in the process of teaching and learning activities. To motivate students to learn, the teacher must be as creative as possible. Suprihatin (2015), said that teachers who are creative in implementing teaching and learning activities will inspire students' learning enthusiasm so that students are encouraged to carry out a learning activity.

Teachers who use conventional learning systems that only use the lecture method will make students feel bored, as revealed by Hamdayama (2016) that teachers who use the lecture method mostly do not have the skills needed to use the lecture method, so students become bored. Conventional learning is one of the common factors in low motivation in addition to factors that influence student learning motivation, namely the teacher's efforts to teach students are the efforts of teachers in preparing themselves to teach students starting from mastery of the material, how to convey material, attract students' attention, and evaluate learning outcomes students, if the teacher's efforts are just teaching, it means that the success of the teacher is the starting point, it is likely that students are not interested in learning so that student motivation becomes weak and lacking (Mudjiono, 2015).

Based on a needs analysis at SMK Negeri 1 Bangko class XI from the results of an interview with one of the creative and entrepreneurship product subject teachers on September 8 2021, the information obtained is that the use of a learning system that is carried out is still conventional so that it has not been able to fully solve the problems that exist in the subject creative product lessons and entrepreneurship marketing promotion media materials. In the teaching and learning process students feel unenthusiastic in following the lesson and tend to be passive when the teacher asks questions. The low student learning motivation can be seen from the many students who do not pay attention to the teacher when explaining the material, and the large number of students who do not submit assignments on time. Motivation itself is defined as the basic impetus that moves a person to behave, (Uno 2012). Learning motivation is one of the factors that influence learning achievement apart from the school environment and learning discipline, (Basri 2016).

The ability of a teacher to choose a learning model will affect the success of students in learning, the teacher can choose the right learning model for each material that will be given in learning activities in class. According to some students, so far the learning model used by the teacher is less attractive so that there is a feeling of boredom in the lesson, this can be seen from the low motivation of students to work on practice questions, this is reinforced by the few students who ask questions when the teacher has finished explaining the material. This is in line with one of the indicators of learning motivation according to Uno (2017) the existence of interesting activities in learning, simulations and games are one of the interesting activities in learning, an interesting atmosphere causes the learning process to become meaningful which will always be remembered and understood by the activities What's interesting is that it can motivate and encourage students to learn so that they become active in class. Therefore, it is necessary to approach an innovative learning

model. By taking an innovative model approach in learning, it can increase student activity in the classroom and increase student learning motivation. The innovative learning model approach is a game-based learning model.

The game-based learning model is a system that is implemented in the educational process, where teachers can adopt a game for the needs of cognitive interest and learning motivation, (Vusic, 2018). Recent research also states that game integration in learning can attract students' interest in understanding material (Luhsasi & Permatasari, 2020). According to Hidayat (2018) games contain four main features in the educational aspect, including: (1) goals or results to be obtained by students from their activities in the game, (2) Rules are restrictions on how players can achieve their goals in the game. game, (3) feedback system shows students how close they are to the goals to be achieved in the game, and (4) voluntary participation, everyone is involved in a game on the basis of the understanding that they voluntarily accept the existence of goals, rules, and the feedback system that has been implemented. These four features are the main reasons underlying the selection of game-based learning models in learning.

In this study, researchers developed the learning model used by teachers from conventional learning models to innovative learning models, namely game-based based on the phenomenon of the problems that occur. The game used is implemented in a learning model that is developed so that interesting activities are formed in learning. This game learning model is the result of the development of a character literacy cooperative learning model with the game Who Am I which was researched by Agung Prihatmojo and Rohmani (2020). This game was modified by researchers in order to improve the shortcomings of previous products.

The learning model developed is as follows:

a. Cognitive aspect

The learning model before being developed in the process of making questions was still at C1 level, namely remembering. Meanwhile, the learning model that has been developed in the process of making questions is at C4 level, namely analyzing.

b. Literacy Activities

Before the learning model was developed, reading time was given to students 10 minutes before starting the game. While the learning model after being developed students are directed to read at home before starting the game so that students have more time to read and students can answer questions well later.

c. Games step

The learning model before it was developed used 1 round, namely the scramble question. While the learning model after being developed uses 2 rounds, namely group questions and scramble questions.

From several aspects modified by the researcher, it is expected to be able to improve the initial product so that it becomes an even better product.

Based on the phenomenon of these problems, it is necessary to conduct research with the title "Development of a Game-Based Learning Model in an Effort to Increase Learning Motivation in Entrepreneurship Subjects of Class XI Students of SMK Negeri 1 Bangko" with development objectives including:

1. To find out the process of developing game-based learning models in an effort to increase learning motivation in entrepreneurship subjects in class XI students of SMK Negeri 1 Bangko.
2. To determine the feasibility of developing a game-based learning model in an effort to increase learning motivation in entrepreneurship subjects in class XI students of SMK Negeri 1 Bangko.
3. To find out student responses to the development of game-based learning models in an effort to increase learning motivation in entrepreneurship subjects in class XI students of SMK Negeri 1 Bangko.

LITERATURE REVIEW
Game Based Learning Model

According to Musfiroh (2014) the game-based learning model is the use of games with serious goals, namely educational goals, as a tool that significantly supports the learning process.

According to Azan (2009) a game-based learning model is a game-based learning model that engages and engages users with specific end goals, such as developing knowledge and skills.

The game-based learning model is a learning model using games in this case students are required to learn, but with a play approach, because the game has a goal, which is to have fun (Liu, 2013).

From several expert opinions, it can be concluded that the game-based learning model is a learning model that applies and integrates educational, fun, and game components in the learning process so as to create a comfortable, fun, and active learning atmosphere.

Motivation to learn

Motivation comes from the Latin word, namely "movere" which means encouragement or driving force. According to Fillmore H. Standford in Mangkunegara's book (2017) says that "motivation as an energizing condition of the organism that services to direct that organism toward the goal of a certain class" (motivation as a condition that moves humans towards a certain goal).

The definition of learning motivation according to Sardiman (2018) is "the overall driving force within students that generates learning activities, which guarantees the continuity of learning activities and provides direction to learning activities, so that the goals desired by the learning subjects can be achieved". Uno (2017), said that learning motivation is an internal and external encouragement to students who are learning to make changes in behavior in general with several supporting indicators or elements.

From several definitions of motivation to learn according to the experts above, it can be concluded that motivation to learn is an impulse that appears both inside and outside of students which can cause enthusiasm and eagerness to learn and provide direction in learning activities in order to achieve the desired goals.

Factors Influencing Learning Motivation

Learning motivation is a psychological aspect that experiences development, meaning that it is influenced by the physiological conditions and psychological maturity of students. According to Syamsu Yusuf in Rima Rahmawati's thesis (2016), learning motivation can arise due to several factors, namely:

a. Internal factors

1. Physical factors

Physical factors are factors that influence the body and individual appearance. Physical factors include nutrition (nutrition), health and physical functions, especially the senses.

2. Psychological factors

Psychological factors are intrinsic factors related to aspects that encourage or inhibit learning activities in students. This factor concerns the spiritual students.

b. External Factors

1. Social factors

It is a factor that comes from humans around the student environment. Includes teachers, peers, parents, neighbors and so on.

2. Non-social factors

Non-social factors are factors that come from the physical conditions around students. Includes weather conditions (hot or cold weather), time (morning, afternoon or evening), place (quiet, noisy, or the quality of the school where students study), and learning facilities.

Meanwhile, according to Dimyati and Mudjiono (2015), the elements that influence learning motivation are:

a) The ideals and aspirations of students. Ideals will strengthen intrinsic and extrinsic learning motivation, because achieving an ideal will create self-actualization.

b) Student ability. A child's desire needs to be accompanied by the ability or skill to achieve it. In short it can be said that the ability will strengthen the child's motivation to carry out developmental tasks.

c) Student condition. Students' conditions which include physical and spiritual conditions affect learning motivation. A student who is sick, hungry or angry will disrupt learning attention. Conversely, a student who is healthy, full and happy will focus on the explanation of the lesson. Thus, the physical and spiritual conditions of students affect the learning motivation.

d) Environmental conditions of students. Student environment can be in the form of natural conditions, living environment, peer relations and social life. As members of society, students can be influenced by the surrounding environment. Natural disasters, slum housing, fights between students will interfere with the seriousness of learning. Conversely, a beautiful school campus, friendly student association will strengthen learning motivation. With a safe, peaceful, orderly and beautiful environment, the enthusiasm and motivation to learn is easily strengthened.

e) Dynamic elements in learning and learning. The learning environment and student association has changed, the cultural environment of students in the form of television and films is increasingly reaching students. All these environments dynamize learning motivation. Professional teachers are expected to be able to utilize learning resources around the school to motivate student learning.

The teacher's efforts to teach students. Is the teacher's effort in preparing to teach students starting from mastery of the material, how to deliver the material, attracting students' attention, and evaluating student learning outcomes, if the teacher's efforts are just teaching, it means that the teacher's success is the starting point, it is likely that students are not interested in learning so that student motivation becomes weak and lacking. According to Sumanto in Senjawati (2015) classifies the factors that influence learning motivation into three types, namely:

a) Learning stimulation factors. What is meant by learning stimulation factors are all things outside the individual to carry out reactions or learning actions.

b) Learning method factor. The learning method used by the teacher greatly influences student learning, interesting methods can cause stimulation from students to imitate and apply in their learning.

c) Individual factors. This factor concerns the following matters, namely: maturity, age factor, gender, experience, mental capacity, physical and psychological health condition, spiritual and motivation.

Based on the explanation of the opinions of the experts above, it can be concluded that many factors can influence learning motivation, these factors can come from within the students themselves such as the physical and spiritual conditions of students, students' abilities and so on. While extrinsic factors that can affect student learning motivation include the condition of the school environment, family, teachers, learning facilities, and association.

REASERCH METHOD

This research took place at SMK Negeri 1 Bangko which is located on the District road, Bagan Punak Village, Bangko District, Rokan Hilir Regency, Riau Province.

Development style

According to Sugiyono (2016) that the research and development model is a research method carried out to produce certain products and test product effectiveness. The development procedure used is the 4D model in the research. According to Trianto (2010) the model consists of 4 stages, namely defining, designing, developing and disseminating. In this 3D research, namely defining, designing, and developing with limited trials which can be explained as follows:
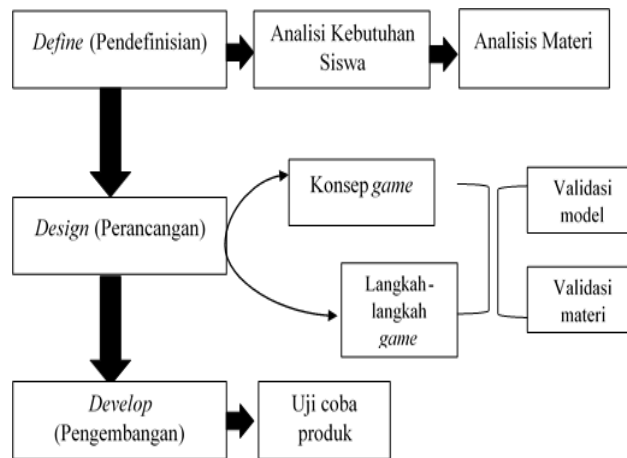
Gambar 1. Model Pengembangan

Prosedur Pengembangan

Adapun prosedur pengembangan yang dilakukan pada penelitian ini sebagai berikut:
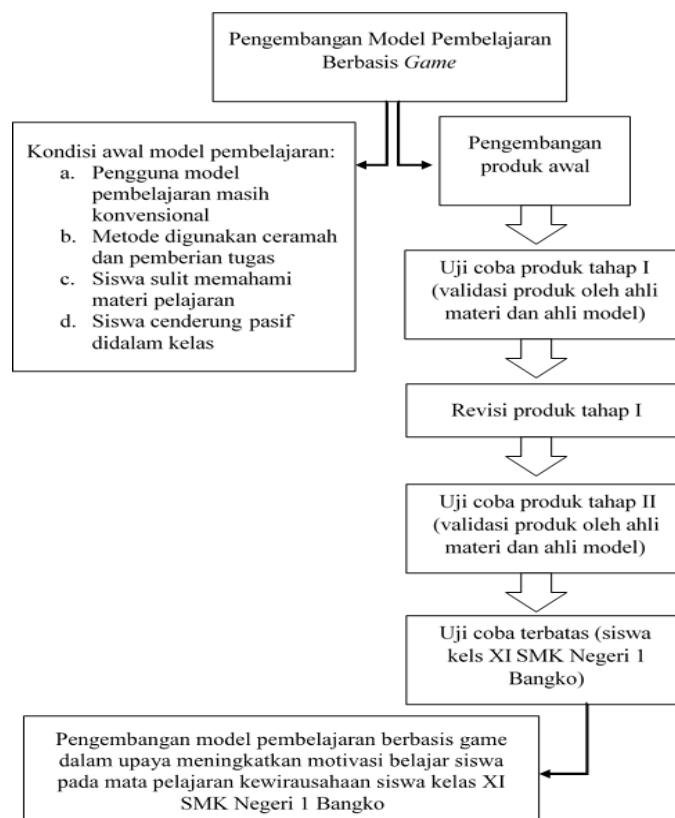
Gambar 2. Prosedur Pengembangan

RESULTS AND DISCUSSION
1. Game-Based Learning Model Development Process

In this research, the development model used is a 4-D development model that has been modified to 3D, which contains 3 stages: define,

design, and develop. The development stage can be explained as follows:

Defining stage (define)

In this research, the defining stage serves to determine and define learning needs by analyzing the objectives and limitations of the material. A more detailed explanation of the steps in the define stage is as follows:

a. Student Needs Analysis

According to some students, so far the learning model used by teachers is less attractive so that the emergence of boredom in this lesson can be seen from the low motivation of students to work on practice questions. This was reinforced by the few students who asked questions when the teacher had finished explaining the material, if the teacher was allowed to leave the classroom for a while the students would make a fuss. After making observations in class XI at SMK Negeri 1 Bangko, the researcher conducted interviews with the creative and entrepreneurship product subject teacher, namely Mrs. Sri Fatimah, S.Pd, the researcher obtained information namely: (1) class XI students have so far not liked creative product subjects and entrepreneurship, (2) Lack of enthusiasm for student learning in the learning process is marked by the number of students who do not submit assignments on time and there are even students who do not submit assignments at all, (3) teachers and students only use textbooks provided by the school in the learning process in class, (4) the learning model used in creative product learning and conventional entrepreneurship learning models where students only listen to the teacher's explanation and are not actively involved in the learning process.

b. Material Analysis

When conducting research on the game-based learning model that you want to develop, the selected material has been validated so that the material is stated to be in accordance with the needs of the learning model used. The material used in this study is marketing promotion media with basic competencies: Applying marketing promotion media.

Based on the analysis of student needs and analysis of the material above, the researcher chose to develop a game-based learning model to assist students in increasing their motivation to learn in creative and entrepreneurial product subjects. With this game-based learning model, it is hoped that students can become more active and have high learning motivation in the learning process in class. Design Stage (Design)

At this design stage includes the creation of game concepts and game steps. There is a game that is used, namely the game who am I, the concept of the game itself is a game by abbreviating or abbreviating letters and guessing words. For example, in the subject of creative products and entrepreneurship with marketing promotion media material, letter abbreviations and guessing the word are used by the teacher to become a question who am I. Questions can be in the form of descriptions and watching videos that have been made. Apart from the game concept, game steps are also needed at this stage such as teacher presentations, group formation, who am I game, and group recognition (reward and punishment). After the initial design is made, it needs to be validated by a validator who is an expert in their field to get suggestions and improvements so that it can be declared feasible to be tested in the field.

Learning Model Development Stage

The learning model developed is as follows:

Table 1. Development Stage

Learning models before being developed	The learning model after being developed
The learning model step only uses 1 round, namely the scramble question	The learning model step uses 2 rounds, namely questions for each group and questions for scramble
before starting learning by using the cooperative model with the character of the game students are given 10 minutes to read in order to win the game in learning	Before starting the lesson, students are directed to read at home so that they have more reading time and can win games in learning
In the process of making questions, the cognitive level is still C1, namely remembering	In the process of making questions, the cognitive level is C4, namely analyzing

a. Data Validation of Learning Model Development by Material Experts

The initial model that has been made is then validated. This validation aims to obtain acknowledgment of feasibility and input and suggestions for improvement related to the learning model that has been developed by researchers. The validation stage I and the second validation stage were carried out by 1 material expert, namely Dr. Gimin, M.Pd (Lecturer in Economics Education FKIP UNRI) and 1 model expert namely Prof. Dr. Suarman, M.Pd (Lecturer in Economics Education FKIP UNRI). Input and suggestions provided by material experts and model experts are used as the basis for model revision so that the learning model developed becomes better.

Material Validation Results Data by Material Expert Phase I

The validation carried out by material experts is in terms of content and presentation aspects. The feasibility of the material in the learning model was assessed using a validation sheet compiled using a Likert scale with 4 alternative answers, namely not good, not good, good and very good. After being assessed by the validator, the initial model developed is still not suitable for use

Table 1. Phase 1 validation data (content aspect) by material experts

No	Indicator	Score	Category
1	The suitability of the material with basic competence	3	Well
2	Material suitability with indicators	3	Well
3	The suitability of the material with the learning objectives	3	Well
4	Completeness of contents which includes material and in-game quizzes	3	Well
	Amount	12	
	Average	3,00	Well

Based on Table 1, it is known that the total validation score on the content aspect according to the material expert validator stage 1 is 12 with 4 indicators, so that the average validation score is 3.00 with a good category. So it can be concluded that the content aspect of the game-based learning model is categorized as very good with several revisions and not yet feasible to be tested.

Table 2. Phase I validation data (Aspect Presentation) by material experts

No	Indicator	Score	Category
1	The delivery of material is systematic and easy to follow	4	Very Well
2	Clarity of the material presented	3	Well
3	The actuality of the material presented in the game	3	Very Well
4	The material is in the form of in-game quiz questions	4	Very Well
5	The material in the video is easy to understand	4	Very Well
6	Availability of conclusions	4	Very Well
	Amount	22	
	Average	3,66	Very Well

Based on Table 2, it is known that the total validation score on the presentation aspect according to the material expert validator stage 1 is 22 with 6 indicators, so that the average validation score is 3.66 with a very good category. Based on this, it can be concluded that the presentation aspect of the game-based learning model is categorized as very good with several revisions and is not yet feasible to try out.

b. Material Validation Result Data by Material Expert Phase II

**Table 3. Phase II Validation Data (content aspect)
by material experts**

No	Indicator	Score	Category
1	The suitability of the material with basic competence	4	Very Well
2	Material suitability with indicators	3	Well
3	The suitability of the material with the learning objectives	3	Well
4	Completeness of contents which includes material and in-game quizzes	4	Very Well
	Amount	14	
	Average	3,5	Very Well

Based on Table 3, it is known that the total validation score on the content aspect according to the material expert validator stage II is 14 with 4 indicators, so that the average validation score is 3.5 with a very good category.

Based on this, it can be concluded that the content aspects of the game-based learning model are categorized as very good with several suggestions and are feasible to try out.

**Table 4. Phase II validation data (Aspect
Presentation) by material experts**

No	Indicator	Skor	Kategori
1	The delivery of material is systematic and easy to follow	4	Very Well
2	Clarity of the material presented	4	Very Well
3	The actuality of the material presented in the game	3	Well
4	The material is in the form of in-game quiz questions	4	Very Well
5	The material in the video is easy to understand	4	Very Well
6	Availability of conclusions	4	Very Well
	Amount	23	
	Average	3,83	Very Well

Based on Table 4. It is known that the total validation score on the presentation aspect according to the material expert validator stage II is 23 with 6 indicators, so that the average validation score is 3.83 with a very good category. Based on this, it can be concluded that the presentation aspect of the game-based learning model is categorized as very good with several suggestions and is feasible to try out.

Data Validation of Learning Model Development by Model Experts

a. Data Validation Results by Model Experts Phase I

Table 5. Model expert validation data (stage I)

No	Indicator	Score	Category
1	The model's ability to achieve learning objectives	3	Well
2	The model's ability to activate students in learning	3	Well
3	The model's ability to motivate students in learning	3	Well
4	Model ability to support characters	3	Well
5	The ability of the model to facilitate the delivery of material	3	Well
6	Learning model syntax	2	weak
7	The model's ability to liven things up is fun	2	weak
8	The ease of the model to be applied by teachers	3	Well
9	Ease of model steps	3	Well
10	Adjustment of the model with limited facilities and infrastructure	3	Well
	Amount	28	
	Average	2,8	Well

Based on Table 5, it is known that the total score on the model according to the expert validator of the stage 1 model is 28 with 10 indicators, so that the average validation score is 2.8 with a good category. Based on this, it can be concluded that the game-based learning model is categorized as good with several revisions and is not yet feasible to try out.

b. **Model Validation Results Data by Phase II Model Experts**

Table 6. Expert model validation data (stage II)

No	Indikator	Skor	Kategori
1	The model's ability to achieve learning objectives	3	Well
2	The model's ability to activate students in learning	4	Very Well
3	The model's ability to motivate students in learning	3	Well
4	Model ability to support characters	3	Well
5	The ability of the model to facilitate the delivery of material	3	Well
6	Learning model syntax	4	Very Well
7	The model's ability to liven things up is fun	4	Very Well
8	The ease of the model to be applied by teachers	3	Well
9	Ease of model steps	3	Well
10	Adjustment of the model with limited facilities and infrastructure	3	Well
	Amount	33	
	Average	3,3	Very Well

Based on Table 6 it is known that the total score on the model according to the expert validator of the stage II model is 33 with 10 indicators, so that the average validation score is 3.3 with a very good category. Based on this, it can be concluded that the game-based learning model is categorized as very good and feasible to try out.

2. Feasibility of Game-Based Learning Models

a) Feasibility of Game-Based Learning Models Based on Material Experts

The feasibility of the learning model consists of 2 aspects that are assessed, namely aspects of content and aspects of presentation. In the stage I validation assessment from the material expert validator, it can be concluded that the learning model developed is in the very good category with several revisions and is not yet feasible to try out.

Then after the revision, a stage II validation assessment was carried out. In this assessment it can be concluded that the learning model developed is in a very good category with several suggestions and is feasible to try out.

The feasibility assessment of the game-based learning model can be seen in the following graph:
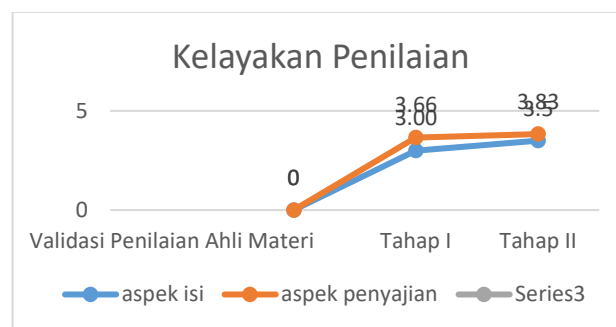

Figure 1. Feasibility of Material Expert Validation Assessment

b) Feasibility of Game-Based Learning Models Based on Model Experts

The feasibility of the learning model can be viewed from the assessment category. In the stage I validation assessment from the model expert validator, it can be concluded that the learning model developed is in the very good category with several suggestions and improvements and is not yet feasible to try out.

After the revision was carried out based on the advice given by the model expert, a stage II validation assessment was carried out. In the second stage of the validation assessment, it can be concluded that the learning model developed is in the very good category so that the level of feasibility of the game-based learning model can be categorized as very good and worth trying out. The feasibility assessment of the game-based learning model can be seen in the following graph:
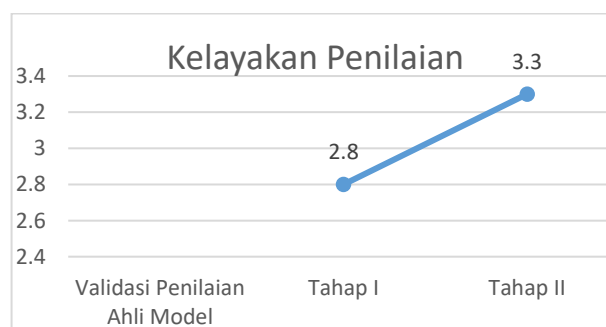

Figure 2. Feasibility of Model Expert Validation Assessment

3. Student responses to game-based learning models in an effort to increase student learning motivation

Based on the results of the development of game-based learning models that have been made declared feasible to be tested, then the next researcher wants to know how students respond to game-based learning models in an effort to increase student motivation. The product trial involved 32 students of class XI PKM (Banking and Microfinance) at SMK Negeri 1 Bangko as research subjects.

Table 7. Assessment data (Aspects of learning motivation) before using game-based learning models by students in product trials

No	Indicator	Average Score	Category
1	There is desire and desire to succeed	2,84	High
2	There is a drive and need for learning	2,66	Highi
3	There is an appreciation in learning	2,69	High
4	There are interesting activities in learning	2,34	Low
5	There is a comfortable and conducive learning environment	2,15	Low
	Total Average Score	12,68	
	Average Score	2,54	High

Based on Table 7, it is known that the total average score of the assessment on aspects of student motivation before using the game-based learning model is 12.68 with 5 indicators and 20 statements, so that the average score of the assessment is 2.54 with the high category. Based on this, it can be concluded that the aspects of student learning motivation before using game-based learning models are in the high category.

Table 8. Assessment data (Aspects of learning motivation) after using game-based learning models by students in product trials.

No	Indikator	Average Score	Category
1	There is desire and desire to succeed	3,19	Very high
2	There is a drive and need for learning	3,15	Very high
3	There is an appreciation in learning	3,04	Very high
4	There are interesting activities in learning	2,69	High
5	There is a comfortable and conducive learning environment	3,02	Very high
	Total Average Score	15,09	
	Average Score	3,02	Very high

Based on Table 8, it is known that the total average score of the assessment on aspects of student learning motivation after using the game-based learning model is 15.09 with 5 indicators and 20 statements, so that the average score of the assessment is 3.02 with a very high category. Based on this, it can be concluded that the aspect of student learning motivation after using a game-based learning model is in a very high category.

4. Difference Test (Paired Sample t-Test)

Table 9. Results of the Paired Sample T-Test on students' learning motivation before and after using a game-based learning model

		Paired Samples Test							
		Paired Differences							
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	Student motivation before using game-based learning models - Student motivation after using game-based learning models	-10.09375	6.28033	1.11022	-12.35805	-7.82945	-9.092	31	.000

Based on Table 9 it is known that the t value is -9.092 with Sig.(2-tailed) of 0.000 <0.05, so there is a significant difference between learning motivation in the data before and after using the game-based learning model. Therefore, it can be concluded that the development of game-based learning models can increase student motivation.

CONCLUSIONS AND RECOMMENDATION

Based on the results of the research and discussion that has been carried out, it can be concluded that:

1) In the process of developing a game-based learning model in an effort to increase learning motivation in the subject of entrepreneurship in class XI students of SMK Negeri 1 Bangko using the 4D development model, namely define, design, develop and disseminate. In this research, 3D was carried out, namely defining, designing, and developing with limited trials. The first stage, namely defining, at this stage an analysis of student needs and material analysis was carried out, so that a game-based learning model was developed to assist students in increasing learning motivation in creative product and entrepreneurship subjects. The second stage is the design (design) includes making the concept of a game-based learning model and steps. After the initial design is made, it needs to be validated by a validator who is an expert in their field to get suggestions and improvements so that it can be declared feasible to be tested in the field. The third stage is development with limited

trials, at this stage an assessment is carried out by 2 experts including a material expert and a model expert. In the stage I assessment by material experts on the game-based learning model it was categorized as good with an average score of 3.00 from the content aspect, while from the presentation aspect it could be categorized as very good with an average score of 3.66. Stage I assessment by model experts can be categorized as good with an average score of 2.8 from the assessment aspect. In the second phase of the assessment by material experts it was categorized as very good with an average score of 3.5 from the content aspect while from the presentation aspect it was categorized as very good with an average score of 3.83. Stage II assessment by model experts can be categorized as very good with an average score of 3.3 on game-based learning models in an effort to increase student learning motivation.

2) The feasibility of developing a game-based learning model in an effort to increase learning motivation in the entrepreneurship subject of class XI students of SMK Negeri 1 Bangko according to material experts and model experts can be categorized as feasible for trials without revision.

3) Student responses to the development of game-based learning models in an effort to increase learning motivation by distributing learning motivation questionnaires to students before and after using the learning model. The results obtained before using the game-based learning model were in the high

category with an average score of 2.54, while student motivation after using the game-based learning model was in the very high category with an average score of 3.02. So it can be concluded that the game-based learning model can increase student motivation.

Based on the results of research in the development of game-based learning models in an effort to increase learning motivation in entrepreneurship class XI subjects at SMK Negeri 1 Bangko, the researchers provide several recommendations that are expected to be useful. The recommendations given by researchers are as follows:

1) For Educators

In an effort to increase student learning motivation, as educators can try new things or new methods in the teaching and learning process in the classroom so it is hoped that the results of this research can be an alternative to innovative and creative learning models that can be used in designing learning in the classroom.

2) For students

By using the learning model developed by the researcher, it can increase students' learning motivation, so that it is hoped that students will no longer feel bored while the lesson is in progress.

3) For Further Researchers

The results of this study can be used as a reference in developing a game-based learning model in an effort to increase student learning motivation. In addition, it is hoped that further researchers can research up to the stage of dissemination (Disseminate) as a learning model that can be used more optimally in the learning process.

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