Game Based Learning: Alternative 21st Century Innovative Learning Models in Improving Student Learning Activeness

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Abstract: This study aims to provide alternative solutions for 21st century learning innovations in increasing student learning activity. Where the 21st century requires students to have skills and critical thinking skills, communication, collaboration, and creativity. Relevant learning to increase student learning activity is learning that is based on constructivist understanding through a student-centered learning approach, one of which is the game-based learning model. The research method used in this research is descriptive qualitative research method. The data collected in this study include: observation results, interview results, documentation, and field notes. Data analysis refers to analytical techniques according to Miles, Huberman & Saldana (2014), namely using four stages of data analysis, namely data collection, data reduction, data presentation, and data verification or drawing conclusions. The results of this study indicate that the use of game-based learning models as innovative learning models of the 21st century provides a major role in increasing student learning activity. The potential for using games that can be integrated into the learning process is enormous. The activeness of student learning by using the game-based learning model applied in class X *MAS Al-Khairiyah Pipitan Serang* can be seen from the active involvement of students in the game, the courage to answer questions, express opinions, and meet the challenges of the game by collaborating with their team groups, being involved in activities solving problems both individually and in groups, constructing understanding independently, and reflecting on the learning activities that have been implemented. Based on these findings it can be understood that integrating games into a learning process through game-based learning is able to prepare students to face the challenges and skills needs of the 21st century.

Keywords: Game Based Learning, Learning Innovation, 21st Century Learning

Abstrak: Penelitian ini bertujuan untuk memberikan solusi alternatif inovasi pembelajaran abad 21 dalam meningkatkan keaktifan belajar siswa. Dimana abad 21 menuntut peserta didik untuk memiliki kecakapan dan keterampilan critical thinking, communication, colaboration, dan creativity. Pembelajaran yang relevan untuk meningkatkan keaktifan belajar siswa ialah pembelajaran yang dilandasi oleh paham konstruktivistik melalui pendekatan student centred learning salah satunya ialah model pembelajaran game based learning. Metode penelitian yang digunakan dalam penelitian ini ialah metode penelitian kualitatif deskriptif. Data yang dikumpulkan dalam penelitian ini meliputi: hasil observasi, hasil wawancara, dokumentasi, dan catatan lapangan. Analisis data mengacu pada teknik analisis menurut Miles, Huberman & Saldana (2014) yakni menggunakan empat tahap analisis data yaitu pengumpulan data, reduksi data, penyajian data, dan verifikasi data atau penarikan kesimpulan. Hasil penelitian ini menunjukan bahwa Penggunaan model pembelajaran game based learning sebagai model pembelajaran inovatif abad 21 memberikan peran besar dalam meningkatkan keaktifan belajar siswa. Potensi pemanfaatan game yang dapat diintegrasikan ke dalam proses pembelajaran sangatlah besar. Keaktifan belajar siswa dengan menggunakan model pembelajaan game based learning yang diterapkan di kelas X MAS Al-Khairiyah Pipitan Serang dapat dilihat dari keterlibatan aktif siswa dalam permainan, keberanian menjawab pertanyaan, mengemukakan pendapat, dan memenuhi tantangan permainan dengan berkolaborasi bersama tim kelompoknya, terlibat dalam kegiatan pemecahan masalah baik secara invidu

maupun kelompok, mengkontruksi pemahaman secara mandiri, dan merefleksi kegiatan pembelajaran yang telah dilaksanakan.Berdasarkan temuan ini dapat dipahami bahwa mengintegrasikan permainan dalam sebuah proses pembelajaran melalui game based learning mampu menyiapkan peserta didik menghadapi tantangan dan kebutuhan keterampilan abad 21.
Keywords: Game Based Learning, Inovasi Pembelajaran, Pembelajaran abad 21

INTRODUCTION

In 21st century learning, teachers play an important role in creating innovative learning designs with 21st century learning elements. Puspitarini (2022, p.1) reveals that "in carrying out the teaching process for students of the 21st century generation, teachers must be able to adapt strategies, models and teaching methods based on the characteristics of that generation. The 21st century generation, which it called the "gamers generation", has a cognitive characterized by multitasking abilities while learning, short attention when learning, and an exploratory approach to learning. This generation prefers to learn through experimentation compared to direct instruction. They move easily and quickly from one information to another activity, respond quickly and demand fast responses, they expect learning interactivity, interaction, active and interactive visualization, and kinesthetics (Wibawanto, 2020).

A good teacher is a teacher who try to build the best learning. A teacher must be good at designing effective learning models in order to create the best learning. But in reality, there are still many obstacles faced by teachers in carrying out the learning process. Based on the results of the situation analysis and initial observations conducted by researchers at MAS Al-Khairiyah Pipitan, several problems were found in the learning process including: first, in the learning process the teacher was limited to conveying material explanations, providing relevant examples and questions for practice. Second, the delivery of material in a way that is less attractive, as well as the lack of the role of the media used by the teacher, causes students to be less active and students do not play much of a role in learning activities. Third, the teacher's dominance in the learning process makes students unmotivated and unwilling to be actively involved in the learning process. Fourth, the number of students who are less enthusiastic during the learning process takes place. Fifth, the activeness of student learning is relatively low which is characterized by students who tend to be passive, students who lack the courage to express opinions, and group work activities that are less than optimal.

Based on the problems above, it can be concluded that the main cause of low student learning activity is the learning process which is still dominated by the teacher (Teacher centered learning) so that students are not actively involved in learning activities. Thus, teachers need to apply learning that involves interaction between teachers and students in an active and fun way. In essence, learning is a process of two-way interaction between teachers and students either directly or indirectly through the learning experiences. Active student on a learning process is the most important element, because student activity will affect the success of the learning process. According to Winarti (2013, p. 125) the activeness of students in the learning process will lead to high interaction between

teachers and students or with the students themselves. Student learning activity is optimal when students' involvement in the teaching and learning process both physically and non-physically to create an effective class.

Astuti and Kristin (2017, p. 156) reveal that the success or failure of learning at school depends on student involvement and the use of learning models in the teaching and learning process. The use of learning models is very necessary in the learning process. In this case is to attract students' attention, interest and involvement of students, so that students are able to participate actively. The learning model is a conceptual framework or pattern that is used as a guide in carrying out learning (Siddik, 2018). The learning model directs teachers in designing learning to help students achieve learning goals.

Game based learning (GBL) is one of the innovative learning models that can be used in the 21st century. As expressed by Winatha and Setiawan (2020, p.204) Game-based learning is an innovative learning model that involves students in problem-solving activities and provides opportunities to work autonomously to construct their own way of learning. This learning model helps students construct meaningful learning and stimulates their development by providing a fun learning experience. Game based learning (GBL) is a learning model with a student centered learning approach that provides opportunities for students to collaborate, communicate, explore, be active, and creative. The game-based learning model is a learning design that refers to the use and application of game or game principles in the learning process to increase student engagement or interaction. GBL allows students to be involved in the learning process in a fun and more dynamic way.

Game-based learning is a form of teaching activity in which students play a more dominant role with the help of games to achieve learning objectives (Wijaya, 2020 ; Candra & Rahayu, 2021). Game-based learning can also increase students' learning motivation in contrast to other learning models (Ekowati et al., 2019). Winatha and Setiawan (2020) explain that Game Based Learning as a learning model can improve students' ability to understand, know and also evaluate learning material. Game based learning is a game that is deliberately made for educational purposes as a support for learning media that is considered more interesting than conventional teaching and learning processes. Game based learning is proven to increase achievement and support the educational process (Huang and Tsai, 2017; Hsu and Lin, 2017). This is related to the design used in educational games consisting of animation, color selection and interesting illustrations (objects) at each learning stage or each learning topic that is applied to educational games (Dewi and Listowarni, 2019).

The use of games in educational or learning contexts is not a new phenomenon like the use of traditional games as an educational tool (Adi & Muthmainah, 2020; Nurhayati, 2012). Game based learning is defined as innovative learning that integrates education and games. By connecting educational games with teaching content and creating game-based learning situations, students can complete assignments independently in the form of individual or group collaboration in interesting and challenging game scenarios. Thus, students can construct knowledge, improve cooperation skills and problem solving during

the game (Lee, H, et al., 2016). Various studies have proven the effectiveness of games in influencing players to make games useful in the learning process. The content contained in the game can be easily understood by the players. This is caused by the interactivity contained in the game as well as the immersion provided by the game which makes players relaxed and open when receiving material. The speed of the game in influencing the players can be utilized by learning developers to be used in the learning process (Wibawanto, 2020).

The pedagogical advantage of games in learning is that games present situations that are structured as real life situations (Hidayat, 2018). However, learning in games contains fun elements as well as risks of failure or success that can be learned repeatedly (Romero, 2012). Games also have a number of capabilities that are not possessed by other learning methods, namely interactivity, providing direct feedback, virtual representation, and repetition of settings and events in learning (Schrader & McCreery, 2012).

Based on previous research conducted by Nur'Aini (2018) regarding the effect of game-based learning on student interest and learning outcomes, it shows an increase in interest in learning by 63.2% and an increase in learning outcomes by 81%. In addition, research conducted by Astuti, et al (2017) regarding the application of the User Centered Design method to Game based learning on student learning motivation shows an increase in learning motivation. Likewise research conducted by Erfan and Tursina (2017) shows that game-based learning can increase interest and effective learning outcomes. Several previous studies have shown that game-based learning can increase motivation, interest and learning outcomes, but in this study researchers want to know that game-based learning models can increase student learning activity in the 21st century. Based on the phenomena that occur, the researcher views that the game-based learning model can be used to attract students' attention and enthusiasm in participating in the learning process so that it can increase student learning activity at school. Therefore, in this article the author is interested in discussing the Game Based Learning learning model as an alternative to innovative 21st century learning models in increasing student learning activity.

METHOD

This study uses a descriptive qualitative research approach. Qualitative research is research that aims to understand phenomena about what is experienced by research subjects such as perceptions, behaviour, motivation, actions, and so on. As revealed by Moleong (2016) this method can describe real conditions in the field descriptively through observations, interviews, and documentation. When viewed from its scope, qualitative research is divided into two research scopes, namely library research and field research. As for this study, researchers used field research, because this study aims to describe, disclose and present research results objectively in accordance with data and facts regarding Game Based Learning as an alternative 21st century learning model in increasing student learning activity.

This research was conducted at MAS Al-Khairiyah Pipitan which is located at Jl. Ciruas Walantaka KM.2 Pipitan, Walantaka District, Serang Banten City. The data collected in this study included: the results of observations in the form of observation sheets for student learning activity and observation sheets for ongoing learning activities; results of interviews with various research subjects, namely students and teachers; documentation results in the form of documents, archives of teaching and learning activities such as lesson plans, the media used; and results of field notes. The data analysis techniques used are from collecting data, reducing findings data, presenting data to data verification. This data analysis refers to analytical techniques according to Miles, Huberman & Saldana (2014), namely data collection, data reduction, data presentation, and data verification or drawing conclusions.

FINDINGS AND DISCUSSION

Application of the Game Based Learning Model

The game-based learning model is a learning model that combines elements of learning in games. Lee, H. et al., (2016) revealed that combining learning elements in games such as motivation, interest, curiosity, challenges, and feedback with learning materials will make learning feel easier like playing games. Integrating the elements of learning in the game is done by developing the stages of the game in accordance with the stages of the learning model in accordance with the principles of the learning model. The important principles or elements that describe a learning model put forward by Joyce & Weil (1980:14-17), namely (1) Syntax, namely a sequence of learning; (2) The social system, namely the roles and relationships of students and teachers, as well as the norms required when applying the learning model; (3) The principle of reaction, which describes how to view and respond to what students do; (4) Support systems, namely the conditions or requirements needed for the implementation of the model implementation, such as class settings, instructional systems; and (5) Instructional and accompanying impacts.

The application of the game-based learning model at MAS Al-Khairiyah Pipitan is carried out using a talking stick game assisted by folk songs. Game based learning is designed to reinforce subject matter by using talking stick games. The talking stick game is used by the teacher to achieve learning objectives and is used to provide opportunities for students to speak or express opinions in turn or take turns. In the learning process in class, the Game based learning model with talking sticks is oriented towards creating learning conditions through stick games given from one student to another. This model can be said to be a learning model that uses stick media as a tool to determine the turn in answering questions that will be asked by the teacher, while singing folk songs the stick is carried from one student to another until the song is finished or stops being sung. The student whose turn it is to hold the stick must answer a question, express an opinion or solve a challenge. The talking stick game model with the help of folk songs is expected to help teachers create learning that involves active students so as to increase student learning activity.

The stages of learning using a talking stick game-based learning model assisted by folk songs carried out in class X MAS Al-Khairiyah Pipitan Serang will be described in the following table:

Tabel 1. Stages of Application of the Talking Stick-Based Learning Model in Class X MAS Al-Khairiyah Pipitan Serang

Learning stages	activities
Preparation stages Opening Activity (Preparation of students on learning process)	• Prepare students' situations and conditions to participate in learning activities • The teacher chooses games according to the topic to be conveyed as needed. The game chosen is a talking stick with the help of folk songs with the material "The motto of Unity in Diversity" • The teacher facilitates students to explore the material
Game stages Core Activities (Construction of Knowledge and Capability)	• The teacher gives an explanation of the initial material related to "The Motto of Unity in Diversity" • The teacher provides opportunities for students to understand the material that has been explained • The teacher organizes students into several groups and then continues by giving explanations related to the games to be played, goals, rules and challenges that must be completed. • The teacher invites students to use the game media that has been provided, namely sticks and starts the game by giving time limits and playing schedules • The game starts with carrying a stick given from one student to another by singing a folk song. The sticks continue to roll until the song stops being sung, when the song stops, the student holding the stick takes paper in a box containing questions and challenges. • Students can answer questions and challenges individually or in groups depending on the instructions on the paper. • The stick continues to roll until the time specified by the teacher.
Closing Stage Closing Activities (Analyzing and Evaluating learning activities)	The teacher provides opportunities for students to analyze and reflect by connecting games with material topics.

In detail, the learning steps use the talking stick game-based learning model as follows:

Preparation stage

The preparation stage is included in the opening activities in learning activities, at this stage the teacher prepares the situations and conditions of the students as follows: first, checking student attendance, student and class conditions. Second, delivery of basic

competencies and learning objectives. Third, exploration of students' initial abilities with apperception. Fourth, Conditioning students to be ready to participate in class learning

Game Stage

This stage is the core stage in learning activities, at this stage the teacher guides and facilitates students to construct their knowledge and abilities. The description of the activities is as follows: first, the teacher provides an explanation of the initial material related to "The Motto of Unity in Diversity". Second, the teacher provides opportunities for students to understand the material that has been explained. Third, the teacher organizes students in several groups and then continues by giving an explanation related to the game to be played, the goals, rules and challenges that must be completed. Fourth, the teacher invites students to use the game media that has been provided, namely sticks and starts the game by giving time limits and playing schedules. Fifth, the game begins with running a stick given from one student to another by singing folk songs. The sticks keep rolling until the song stops being sung, when the song stops, the student holding the stick takes paper in a box containing questions and challenges. Sixth, students can answer questions and challenges individually or in groups depending on the instructions contained in the paper. Seventh, the stick continues to roll until the time determined by the teacher.

Closing Stage

At this stage the teacher provides opportunities for students to analyze and evaluate the learning activities that have been carried out by connecting the game and the topic of the material being studied. The game-based learning model with talking stick games is built on interactions between teachers and students and interactions between students and students. In its application, students construct their knowledge individually or in groups through questions and challenges that must be completed by students. In this case, the teacher becomes a facilitator and guides the course of the game. This talking stick game has rules that apply such as playing time rules, being responsible for their role, working together in completing challenges and so on. In this model, the teacher acts as a facilitator and mentor who helps the learning process take place, responds to students' thoughts or answers that are correct, provides directions in finding concepts and verifies learning through providing reflection, reinforcement, and moral messages in the lesson.

This talking stick game-based learning model has support systems such as classrooms, learning resources, and sticks as learning media. In applying it, the learning model has an impact that is felt directly or indirectly by students, where students can achieve their learning goals well and are able to increase student involvement actively in the learning process.

Increasing Student Learning Activeness through Game Based Learning as an Innovative 21st Century Learning Model

In using the game-based learning model as an innovative 21st century learning model, the teacher must be able to design learning in accordance with the conditions that must be met so that the game contains elements of immersion or involvement. Elements of immersion or involvement are needed in this game-based learning, so that students can

be directly and comprehensively involved and are able to collaborate in every learning event. Based on the results of observations in the field, the talking stick game-based learning model implemented in class X MAS Pipitan also contains elements of immersion or involvement, that is, there is an element of challenge given by the teacher in a box containing question paper and challenges, having aligned goals for achieved by students as the questions and challenges given are in accordance with the material being taught, building competition between individuals and groups to be able to answer questions and challenges correctly, have an element of motivation, there are rules of play and there is reflection at the end of the game.

As stated by Blessinger and Wankel (2012) that there are various conditions that need to be met in order for a game to trigger immersive learning including the following: (a) the presence of an element of challenge, an element of challenge that stimulates students is necessary so that they can participate actively in game; (b) feasible and congruent goals, there are aligned goals that make it possible to achieve both individual and group goals. (c) there is a relationship between individuals that is competitive or non-competitive, this element is intended so that the game provides motivation for collaboration both between individuals and groups; (d) the existence of a positive and encouraging relationship; (e) there are elements of individual motivation to learn in it, which in designing game-based learning must fulfil learning needs; (f) there is a mechanism that can provide assessment and feedback from the learning outcomes of students for the achievement of a lesson; (g) there is a stimulus to increase student responsibility in achieving goals, so that a positive feeling is created towards the achievements obtained in the learning process.

By integrating the elements of involvement, this game-based learning model can increase student learning activity in class. According to Sudjana (2013, p.72) the activeness of students in participating in the teaching and learning process can be seen in the following terms: 1) Participating in carrying out their learning assignments; 2) Engage in problem solving; 3) Ask other students or the teacher if they don't understand the problem they are facing; 4) Trying to find various information needed to solve the problem; 5) Train yourself in solving problems or questions; 6) Assessing his ability and the results obtained.

The indicators of active learning according to (Sinar 2018: 18-20) in his book are explained as follows: (1) Active learning that occurs with the process of experiencing. This means that the process of experiencing here is that students are guided to do it themselves following learning, which begins with the courage to ask questions, the courage to answer friends' questions, the courage to try to practice the material being studied; (2) Active learning that is formed in transactions or active learning events. Learning events are learning activities that require maximum concentration from students who are studying. Students who are passive, seem to only observe what teachers, friends, or just look around do. So that in following this lesson the student looks less active. The results obtained from these students are limited to only knowing what they see. Then the factors that can be assessed from the learning aspects that are formed in active learning

transactions or events are reviewed in terms of the depth of information they get when studying; (3) Active student learning occurs through the process of solving problems so that there is a process of solving problems. When carrying out the teaching and learning process, especially in practical material, among students, there are those who do not understand the intentions of their colleagues. So that there will be educational interaction between one student and another. The factor that can be assessed is the activeness in expressing new ideas, in order to solve problems that arise at that time.

Based on the indicators above, the teacher can measure the activeness of student learning during the learning process. Even teachers can also see the significant impact of using learning designs on student learning activeness in realizing the achievement of learning objectives. Active student learning in the learning process is in fact influenced by several factors. Syah (2012, p.146) explains that the factors that influence student learning activity are classified into three types, namely internal factors (factors from within the student), external factors (factors from outside the student), and approach to learning factors. Internal factors are factors that come from within the student himself and external factors are factors from outside the student in the form of environmental conditions around the student. The learning approach factors are all methods or strategies used to support the effectiveness of the learning process, in this case including the use of learning models.

The learning model based on talking stick games with the help of folk songs applied at MAS Al-Khairiyah Pipitan also shows active student involvement during learning. Active student involvement is an indicator of student learning activeness in class. The activeness of student learning in the application of the base learning game learning model in class X MAS Al-Khairiyah Pipitan can be seen in the following table:

Table 2. Student Activeness in the Application of the Game-Based Learning Model in Class X MAS Al-Khairiyah Pipitan

Learning stages	Indicator	Description
Preparation stages Opening Activity (Preparation of students on learning process)	• Students actively learn by experiencing the process	• Students prepare themselves to take part in learning • Students explore their initial abilities by reading material or reiterating previous material

Game stages Core Activities (Construction of Knowledge and Capability)	• Students are actively involved in learning events • Students experience the process of solving problems	• Students construct their knowledge through the teacher's explanation • Students are involved in grouping • Students understand the condition of themselves and other friends in a group • Disciplined students take turns running the baton in order • Students compete in answering questions and challenges correctly • Students independently answer and explore knowledge from each question or challenge given • Students in groups communicate and determine attitudes in completing game challenges • Students have the courage to answer questions • Students express opinions • Students are responsible for their roles • Students run the game according to the specified time limit
Closing Stage Closing Activities (Analyzing and Evaluating learning activities)		• Students receive all the results achieved in the game • Students deepen the information obtained through learning reflection activities. • Students individually or in groups conclude the material contained in the game • Students finish games and learning in an orderly manner

Based on the description of the findings above, this game-based learning model is an innovative learning model that involves students to construct their own understanding, involves students in problem solving activities, provides a fun and meaningful learning experience. Hussain (2012) revealed that based on constructivist learning theory, learning will be more meaningful when students are involved in constructing their own knowledge. This theory emphasizes providing students with opportunities to make judgments and interpretations of situations that they experience themselves.

Winatha and Setiawan (2020, p.204) explain that learning with a game-based learning model is able to change the learning paradigm from being teacher center to student center. This is of course in line with the 21st century learning paradigm. The 21st century learning paradigm is a new paradigm that is believed to be able to solve and answer problems according to the needs of the 21st century. The 21st century is the century of information, communication, computing, and automation. The 21st century is marked by the abundance of (1) information that is available anywhere and can be accessed at any time; (2) faster computing; (3) automation that replaces routine jobs; and

(4) communication that can be done from anywhere and anywhere (Ministry of Education and Culture Research and Development, 2013). This characteristic is the basis for the shift in the 21st century learning paradigm. The shift in learning based on the characteristics of the 21st century can be seen in the following figure:

Figure 1. Shift in the 21st Century Learning Paradigm

These 21st century skills do not only involve aspects of understanding and skills but aspects of creativity, collaboration, and speaking ability. BNSP also formulates 16 learning principles that must be fulfilled in the 21st century education process. Meanwhile Jennifer Nichols (in Daryanto and Karim, 2017, p. 6) simplifies it into 4 principles, namely: instruction should be student-centred, education should be collaborative, learning should have context, and schools should be integrated with society. The four main principles of 21st century learning initiated by Jennifer Nichols can be explained and developed as follows:

a. Instruction should be student-centred

Learning development should use a student-centered learning approach (student-centered learning). This learning places students as active learning subjects who can develop their interests and potential. Students can explore and construct their knowledge and skills independently in their learning process and contribute to solving problems in real life. Student-centered learning does not mean that learning is completely left to students, but the teacher also acts as a creative facilitator, humanist guide, dynamic mediator, and a wise assessor.

b. Education should be collaborative

21st century learning requires students to be able to collaborate with other people around them with different backgrounds. In exploring their knowledge and skills, students are encouraged to collaborate with friends in class and outside the class. Students are directed to be able to appreciate the abilities of others and participate in adjusting to the people around them. In addition, teachers are also required to be able to collaborate and work together with other educators both in the same institution and other educational institutions to be able to develop better learning.

c. Learning should have context

Learning that is developed must have values that have an impact on the lives of students outside of school. Teachers must be able to develop learning that allows students to connect with real life. Students are directed to be able to find value and meaning for what they learn so that it can be implemented in their daily lives.

d. Schools should be integrated with society

Schools must be able to facilitate students to be directly involved with their social environment. The space for students to move is not only in their school environment but must be able to reach a wider layer of society. In this case, education must help students become responsible citizens. Based on the four main principles of 21st century learning, it can be understood that 21st century learning is emphasized on the ability of students to explore their knowledge and skills independently, formulate problems, think analytically and collaborate in solving problems.

Based on the discussion above, it can be concluded that the magnitude of the potential for using games can be integrated into the learning process. The effectiveness of integrating games into learning is determined by the teacher's ability to design learning processes that can evoke immersion processes or student involvement in the learning process, so as to bring students as learning subjects into a more in-depth, interactive, and meaningful learning process.

In this case integrating games into a learning process through game-based learning is able to prepare students to face the challenges and skills needs of the 21st century. Moreover, it can be observed that this GBL learning model contains 4 main principles of 21st century learning which include: instruction should be student-centred, education should be collaborative, learning should have context, and schools should be integrated with society. This can be explained as follows: First, the game-based learning model is a learning model that can be used with a student centered learning approach. In the learning process, students are positioned as learning subjects who actively explore their knowledge and skills through educational games. Through game-based learning, students are encouraged to be responsible for their learning process and given opportunities for students to learn according to their learning style. Second, Game-based Learning is a way to provide learning experiences that are able to increase student collaboration and participation to make a contribution. In game-based learning, students are given the opportunity to take roles and adapt themselves according to their position. Third, game-based learning provides opportunities for students to connect with the real world. This learning model can be used to find the meaning and value of life. Fourth, the learning pattern of game-based learning generally uses a learning by doing pattern that can also be used to introduce students to social values that exist in people's lives, providing opportunities for students to make decisions that are in accordance with the values prevailing in society.

The results of this study reinforce the results of research that has been carried out previously by other researchers, including research conducted by Dewi, et al in 2019 entitled "Implementation of Game Based Learning in English Learning

Subjects". This study explains that educational games can present material and questions as an evaluation of student learning, so that they can be alternative means to support learning. Likewise, research conducted by Erfan and Tursina (2017) shows that game-based learning can increase interest and effective learning outcomes. The element of novelty in research conducted by researchers shows that the application of game-based learning models with talking stick games assisted by folk songs can increase student learning activeness through a learning process that involves students to construct their understanding independently, involvement in problem solving, as well as providing experience fun and meaningful learning.

CONCLUSION

Game based learning models as innovative learning models for the 21st century provides a major role in increasing student learning activity. This shows that the potential for using games that can be integrated into the learning process is enormous. The effectiveness of integrating games into learning is determined by the teacher's ability to design learning processes that can generate immersion processes or student involvement in the learning process, so as to bring students as learning subjects into a more in-depth, interactive, and meaningful learning process. The application of the game-based learning model at MAS Al-Khairiyah Pipitan is carried out using a talking stick game assisted by folk songs. Game based learning is designed to reinforce subject matter by using talking stick games. The talking stick game is used by the teacher to achieve learning objectives and is used to provide opportunities for students to speak or express opinions in turn or take turns.

The learning model based on talking stick games assisted by folk songs applied at MAS Al-Khairiyah Pipitan also shows an increase in student learning activeness during learning which can be seen from the active involvement of students in the game, the courage to answer questions, express opinions, and meet game challenges by collaborating with the group team, involved in problem solving activities both individually and in groups, constructing understanding independently, and reflecting on the learning activities that have been carried out. Thus, it can be concluded that integrating games into a learning process through game-based learning is able to prepare students to face the challenges and skills needs of the 21st century. Moreover, it can be observed that this GBL learning model contains 4 basic principles of 21st century learning which include: instruction should be student-centred, education should be collaborative, learning should have context, and schools should be integrated with society. Therefore, the innovation of game-based learning models that integrate educational games in the learning process is an alternative choice to answer the challenges of 21st century learning.

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