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EXPLORING THE IMPLEMENTATION OF HIGH SCHOOL STUDENTS IN USING GAME-BASED LEARNING PLATFORM REGARDING FLOW THEORY: A QUALITATIVE STUDY AT SMP ISLAM AL-FATH PLANTUNGAN

Abstrak

Pembelajaran Berbasis Permainan (GBL) telah diakui sebagai alat penting untuk memotivasi siswa agar terlibat dalam pembelajaran aktif dan konstruktif. Meskipun ada hubungan antara GBL dan hasil pembelajaran, bukti penelitian saat ini cenderung melemahkan hubungan antar konsep dan terlalu menyederhanakan pengalaman aliran dalam konteks GBL. Bukti penelitian saat ini memperkuat semakin meningkatnya hubungan antara konsep aliran dan pengalaman dalam konteks GBL. Penelitian ini bertujuan untuk menganalisis pembelajaran berbasis permainan mengenai Teori Aliran yang digunakan guru dalam pembelajaran bahasa Inggris di SMP Islam Al-Fath Plantungan. Metodologi kualitatif deskriptif dan pendekatan kualitatif digunakan dalam penyelidikan ini. Dua orang guru dan 20 orang siswa yang dipilih oleh peneliti berperan sebagai informan penelitian. Metode wawancara dan observasi digunakan sebagai strategi pengumpulan data. Analisis data menggunakan teori Miles & Huberman, untuk keabsahan data menggunakan triangulasi. Hasil penelitian ini menunjukkan bahwa penerapan pembelajaran berbasis permainan mengenai Teori Aliran dapat memudahkan guru dalam menyampaikan informasi dan juga dapat memudahkan siswa dalam menerima informasi. Temuan penelitian ini mencakup penggunaan pembelajaran berbasis permainan oleh Guru seperti duolingo, quizziz, kahoot dan lain-lain untuk mengajar pembelajaran bahasa Inggris di kelas digital.

Kata Kunci: Game Based Learning, Flow Theory, Game, Platform.

Abstract

Game-Based Learning (GBL) has been recognized as an essential tool for motivating students to engage in active and constructive learning. While there is a link between GBL and learning outcomes, current research evidence tends to undermine the interrelationships of concepts and oversimplify flow experience in the context of GBL. Current research evidence strengthens the increasing connection between flow concepts and experiences in the context of GBL. This study aims to analyze teaching game based learning regarding Flow Theory teachers use in English language learning at SMP Islam Al-Fath Plantungan. A descriptive qualitative methodology and a qualitative approach were both employed in this investigation. Two teachers and 20 students chosen by the researcher served as the study's informants. Interviews and observation methods were employed as data-gathering strategies. Data analysis used Miles & Huberman's theory, for data validity uses triangulation. The results of this study show that implementing teaching game based learning regarding Flow Theory can make it easier for teachers to deliver information and can also make it easier for students to receive information. This study's findings include Teacher's use of game based learning like duolingo, quizziz, kahoot, wisc- online and others for teaching English learning in the digital class.

Keywords: Game Based Learning, Flow Theory, Game, Platform.

INTRODUCTION

Modern project management requires skills for dealing with complexity and uncertainty together with constantly changing organizations and technologies. Ramazani and Jergeas (2015) point out three vital competence areas for project managers in addition to developing just technical skills: critical

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thinking, interpersonal skills, leadership and engagement with real-life projects (Ramazani & Jergeas, 2015). Van der Hoorn and Killen (2021) Human aspects of project work require particular attention from education design to enable fostering sensemaking abilities or project managers (van der Hoorn & Killen, 2021).

Csikszentmihalyi (1975) conceptualised the flow as an experience that occurs when the challenge of the task and the skill of the performer are balanced. A person in such a state can make full use of whatever skills are required and receives clear feedback on his/her action. At the same time, there is no time to get bored or to worry about what may or may not happen. In essence, flow theory is a set of intercorrelated constructs, with their definitions and propositions, that systematically describe the relationships among the constructs to explain and predict a set of measurable outcomes. Thus, flow cannot be reduced to a single component, and all attempts to take one component of flow as the definitional aspect of flow will consequently disregard essential parts. Six components of flow experience based on interviews, including merging of action and awareness, centring of attention, loss of self-consciousness, the feeling of control, coherent and noncontradictory demands, and autotelic nature. In the sports context, proposed nine dimensions of flow experience based on the original flow theory clear goals, unambiguous feed-back, challenge-skill balance, concentration, action-awareness merging, sense of control, loss of self-consciousness, transformation of time, and autotelic experience. In the video game context, Sweetser and Wyeth proposed an eight-dimension flow framework (GameFlow), which challenge and skill were separated into two distinct dimensions, while immersion and social Interaction were incorporated as two new dimensions (Cai et al., 2022).

Based on the explanation above, the researcher found that education should prepare project managers with a more practical approach to project complexity and skills development instead of theory. Using game concepts like Game based learning and simulations as teaching methods in project management education provides students with an opportunity to apply and practice their knowledge in simulative setups.

Semerci and Goularas (2021), Nowadays, online learning platforms offer an educational atmosphere to learners and individuals concerned with enhancing their knowledge about the current advancements in certain disciplines. These online platforms are utilized by a huge number of individuals simultaneously, not including any time, or location limitations. An evolving question rising from offering learning opportunities to various types of learners is the model of an online platform that can explain the activities of its users to adjust its content corresponding to user conduct and requirements. Preferably, an online learning platform will maintain a track of the activities that its users produce while using it and present recommendations to the learner to attain the education results in a well-programmed approach. Therefore, learner modeling is particularly vital to enhance the learning power of an online learning platform (Semerci & Goularas, 2021).

The researcher has conducted pre-research at SMP Islam Al-Fath Plantungan on Thursday, 20th July 2023 to find out the state of learning using game-based learning there. The researcher found that the students were very enthusiastic about participating in English learning which took place in the school's computer laboratory using game-based learning, this made the researcher interested in studying further the use of game-based learning based on flow theory at SMP Islam Al-Fath Plantungan. The aims of this study was to examine the implementation of the high school students in using Game Based Learning's platform regarding Flow Theory. The novelty of this research is that it discusses Game Based Learning's platform regarding Flow Theory, and the object of the study focuses on the use of game based learning platform regarding flow theory in the digital class.

METHOD

This study employed a qualitative research design with a descriptive qualitative methodology. Qualitative research design with a descriptive qualitative methodology is a commonly used approach to gain in-depth understanding and insights into a specific phenomenon. This research setting was conducted at SMP Islam Al-Fath Plantungan. The subjects in this study were two English teachers and 20 students in the digital class. This study uses the researcher as the vital instrument, observation checklist, and interview guidelines as data collection instruments. An observation checklist is a tool used to systematically record and document observations made during data collection. Interview guidelines provide a framework for conducting interviews and ensure that consistent and relevant information is obtained from participants. Data analysis is involving data reduction; data presentation; and drawing and verifying findings (Miles et al., 2018). The researcher employed the triangulation

approach to validate the data. The triangulation method involves using multiple data collection methods about the same phenomenon. It aims to enhance the validity and reliability of findings by seeking convergence or collaboration of results from different data collection methods. Triangulation can provide a more comprehensive and robust understanding of the research topic by mitigating the limitations associated with a single method.

RESULT AND DISCUSSION

The Implementation of the High School Students in Using Game Based Learning's Platform Regarding Flow Theory.

Jääskä, Elina Aaltonen, Kirsi (2022), Cognitive learning theories suggest that play-like activities foster deep learning because learners want to spend effort and time with assignments that they feel are interesting and motivating (Jääskä & Aaltonen, 2022). Shernoff (2013), Student engagement is commonly believed to affect learning and motivation. Engagement is defined as the “heightened, simultaneous experience of concentration, interest, and enjoyment in the task at hand” (Shernoff, 2013). Plass et al (2015), Games are claimed to facilitate learning engagement on the cognitive, affective and sociocultural levels, unlike other media providing a playful learning experience (Plass et al., 2015).

Subhash and Cudney (2018), In existing systematic literature review papers, the benefits of gaming in the education context are relatively aligned, and similar findings are reported. Collaborative play, competition and role-play have been identified in several studies as gameplay elements that engage students cognitively and emotionally. The most significant benefits in the higher education context are improved student attitudes, engagement and performance (Subhash & Cudney, 2018). Vlachopoulos and Makri (2017) discuss the effects of GBL on cognitive learning, such as knowledge acquisition, conceptual application and understanding theoretical concepts. They also emphasize the nature of games as learning tools that activate learners, require collaboration and contribute to generic skills development (Vlachopoulos & Makri, 2017). GBL promotes the collaborative construction of knowledge, which can be achieved with learner-game, learner-learner and learner-instructor interactions together with meaningful feedback. As one example, de Freitas (2018) has found games to be effective learning tools that positively affect student motivation and behavioral change, and sees potential in embedding GBL into education (De Freitas, 2018).

A positive impact of GBL on students' activation, motivation and emotional behavior has been repeatedly. Hamari et al., (2016) Challenges posed by games may promote student engagement and learning because working at the limits of one's abilities and skills causes continued interest and feelings of immersion (Liu, 2013). Sousa and Rocha (2019), In addition, leadership skills such as motivation, facilitation, coaching, mindset changing and communication can be developed with GBL (Zhao & Khan, 2022).

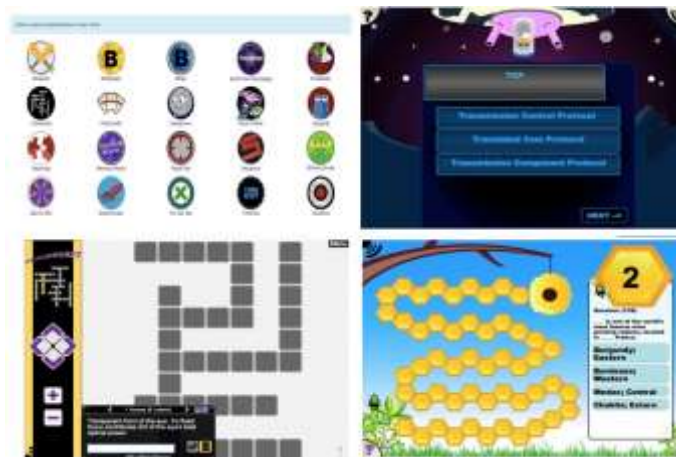
Anastasiadis et al. (2018) have studied the potential of digital GBL and serious games in education. They mention several benefits for both learning and generic skills development. Learning from experience in a positively competitive environment together with a rewarding feeling of achievement were pointed out. Furthermore, GBL settings promote the enhancement of generic skills, such as decision-making, critical thinking, problem-solving, collaboration and communication. Studies of GBL's impact on skills and competence development indicate a positive effect on student communication skills and adaptability (Anastasiadis et al., 2018).

The implementation of game based learning is directly dependent upon school administration, and if a school's policy does not allow it, the teachers should not be blamed. Additionally, teachers' sex can play a role in their attitude toward game based learning. Marti-Parreno et al. (2016) suggested that male teachers exhibit more positive attitudes toward game-based learning approaches than do their female counterparts. Teachers' age is another factor that can determine their attitude toward the gamification of learning; according to Li (2017), older teachers exhibit reservations regarding using games in education, while younger teachers are generally enthusiastic regarding its implementation. Can and Cagiltay (2006) examined attitudes toward game-based learning among teachers in Turkey, and established that most teachers felt that game based learning enhanced students' cognitive abilities. (Nalman et al., 2023)

Using game in the teaching and learning process has significant implications. Because using game as an intermediary in this activity can help understand the information offered. What a teacher cannot communicate verbally or in specific terms, the game can do. With the help of game, even the

abstractness of the subject matter can be made simple. In this game there are instructions that can be used by students in digital class. An online questionnaire was used to collect self-reported GBL artefact usage and ratings on constructs related to its use. Participants submitted the questionnaire through an online platform. Six educational games covering topics at the introductory level of psychology were built for learners and release each game per week. These games cover a wide range types of game genres such as puzzle games, memory card games, win a million and shooting Games. A background description of the different indicators in flow tested in the study with the game design is provided below, along with a mapped process(Pendidikan et al., 2022).

1. In games, students can only focus on one task at a time (concentration).
2. The student was shown how to start the game on a landing page (goal clarity).
3. A pop-up window would appear, informing students whether they had correctly or incorrectly answered
4. the questions (feedback).
5. In the game, provide questions with varying levels of difficulty and, similar to a shooting game, allow the
6. player to select the target moving speed (challenge).
7. Learners who participate in the shooting game may have a more immersive experience because shooting
8. the correct target in a limited amount of time requires intense focus (e.g., 4 seconds) (immersion)
9. Because the games were MCQ-based, some of them, such as Win a Million, could be played by multiple
10. students at the same time. The answers can be discussed among the students. (social interaction)
11. These games include the course content (knowledge improvement).



Picture 1. Game Based Learning Regarding Flow Theory Wisc- online.

The Teacher's Perceptions about the Use of High School Students in Using Game Based Learning's Platform Regarding Flow Theory.

The perception means acquiring information or meaning. Perception is the process of interpreting information about others. From our understanding of perception, it is clear that all perceptions can depend on the information received. How you interpret information as correct information refers to how sensory information is governed, interpreted, and applied consciously. Perception is a process when we realize much stimulation that affects our senses.

As a result, we can understand perception is the information we receive from our environment, our actions, and the process of understanding something. Perception can help one who needs information about something that one would like to know. As Hanna et al., (2017) that three concepts are closely linked to perception: exposure, attention, and sensation. Exposure is deliberate action comes into contact with ward stimulation (their view of the environment in online learning), attention: the allocation of individual mental capacity for stimulus or duty (increased student understanding), sensation: one's sensory receptor responses to environmental stimuli and transmission this information to the brain through the nervous system (student feelings or responses in performing online learning).

From those definitions it may be concluded that perception is an entire capacity of the stimulus process to generate a response and we become aware of something after seeing and understanding

something. Perception helps you to collect data from your environment, process data and understand them, in perception, sometimes difficult to separate information from action, this is essentially a process of gaining mental understanding, and perception guides the receiver in tapping, processing, and delivering relevant information to meet the requirements of the recipient.

Tabel 1. Description of total subject

No.	Total	Description
1.	English teacher	Two teachers
2.	Student in digital class	Twenty students
3.	Interview questions	sixteen questions

From interviews conducted by researchers with 2 teachers at Al-Fath Plantungan Islamic Middle School, it was found that the use of game-based learning has been implemented at the school for a long time, approximately three years starting with the pandemic. AL-Fath Islamic Middle School also has digital classes which provide their own facilities and infrastructure for students which makes it easier for students to access various media provided by teachers in the learning process. From the results of interviews with teachers, it was found that students were very enthusiastic about using the game based learning platform regarding Flow Theory in digital classes, this was proven by the high enthusiasm of students for attending digital classes and the increase in student scores which was very different from classes that did not implement digital classes. As an example of interview text below:

Q1 : Menurut bapak/ibu sebagai guru Bahasa Inggris, apa kelebihan/keuntungan terbesar yang dihadapi ketika mengajar Bahasa Inggris secara digital?

AT1 : siswa lebih termotivasi dalam pembelajaran dan pemahaman lebih meningkat karena menggunakan metode game yang menyenangkan.

AT2 : siswa mengikuti kelas digital dengan sangat baik, motivasi belajar semakin meningkat dan skor jauh berbeda disbanding kelas lain yang tidak menggunakan digital, jika kelas yang tidak berbasis digital antara 60- 65, maka nilai Bahasa Inggris di kelas digital berkisar 80-85.

From the interview above, it can be concluded that this proves that the existence of game based learning regarding Flow Theory can improve students' English skills and increase students' motivation to carry out fun learning in the classroom. Indirectly, students have learned a lot of new vocabulary in the game, remember the material better and don't feel like stopping when accessing game based learning regarding Flow Theory.

Q2 : Bagaimana respond siswa dalam pembelajaran digital menggunakan platform game based learning?

AT1 : siswa sangat antusias dan ingin selalu menanyakan kapan bermain game lagi untuk pembelajaran Bahasa Inggris

AT2 : jika dipresentase 95% siswa sangat senang, bersemangat, dan termotivasi dengan penggunaan game based learning, hanya 5% siswa yang kurang antusias dengan penggunaan game karena kurangnya vocabularies pada siswa.

From the answers above, it can be concluded that student responses in using game based learning in digital classes are very acceptable and help students increase learning motivation and make children active in class and like English.

Q2: Question 1

ST1: Answer Teacher 1

ST2: Answer Teacher 2

DISCUSSION

The implementation of the use of the game based learning platform regarding flow theory was very good and received a positive response from students. Apart from being able to increase students' learning motivation, students also got good scores because without waiting they got a lot of new vocabularies that could be applied. The results of field research show that the use of game based learning by teachers is in a necessary context. The use of game based learning aims to hone abilities and motivate students in learning. So that it can increase students' understanding in receiving information related to the material presented by the teacher. Adequate or well-maintained facilities can help students to focus more on teaching and learning.

Teacher perceptions also prove that students are very enthusiastic about receiving game-based learning in digital classes. students become more motivated to learn English further. This research can provide insight into the appropriate application of learning games in the post-pandemic context of learning English as a Foreign Language. The research results can provide practical recommendations to educators to improve students' learning experiences. In the current situation, the learning context and use of learning games continues to change along with technological and policy developments. This research can contribute to developing appropriate digital learning strategies and the appropriate use of game-based learning in the context of learning English as a Foreign Language. These implications may help educators in dealing with similar situations in the future.

CONCLUSION

Based on research findings and discussion results, game-based learning platforms can help teachers communicate knowledge more easily and help students understand what is being taught well. The findings of this research include other teachers using game-based learning platforms such as Quizzizz, Kahoot, Duolingo and most recently Wisc-Online which is used in the digital class at Al-Fath Plantungan Islamic Middle School. Furthermore, the teacher's opinion in using game-based learning regarding Flow Theory is very positive in the use of games in digital classes, because it really helps students in learning and understanding, apart from that it also produces satisfactory scores for students.

SUGGESTION

with this research, it is hoped that teachers can further increase their knowledge and experience, especially in the use of technology, because in the current era we will be very behind if we are not able to compete in the field of technology. It is also hoped that teachers can use interactive media such as game based learning by utilizing increasingly sophisticated technology. Hopefully this research can provide researchers with further research regarding the use of game based learning regarding flow theory.

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