BACHELOR OF CULTURE AND ARTS STUDENT'S ATTITUDE TOWARD USING DIGITAL GAMES FOR LEARNING

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ABSTRACT. *Games are a comprehensive factor with the experience of humans in their improvement in all characteristics structure and a component as the oldest approach where people interact and help promote their learning. Digital games are a prime example of innovative learning tools. Digital games are highly attractive for gamers of different ages most especially for the younger ones. At their age, they have spent more time playing a game for fun and satisfaction. There has been no major study undertaken about BCAED students' attitudes toward utilizing digital games in the classrooms. This study aimed to determine BCAED students' perceptions of using digital games. The questions are as follows to address the following: What is the attitude of BCAED students toward implementing digital game-based learning? Is gender related to the attitude toward implementing DGBL for learning? To answer these questions, a questionnaire online survey was implemented of 73 BCAED students in total, but only 50 responded. The design implemented in the recent study was descriptive-quantitative. The result showed that a student's attitude to gender differences was not affected. The attitude of males and females towards using digital games for learning revealed no significant difference.*

Keywords: Digital games, Learning, student's attitudes, Culture, and arts learners

I. INTRODUCTION

Activities such as Digital games aspire learners throughout their lives to engage in a significant and interactive way of learning. Engaging learners in instructional activities is very important to understand by providing them with an experience like games. According to research, one of the earliest purposeful interactions that promote learning is by including games during class discussions [1]. Accordingly, there are five characteristics noted in learning and playing games which include meaning, involvement, joy, and interaction. Digital games would help the learners to get their attention and motivate them to engage during discussion and expand their knowledge and abilities [2]. Due to the increasing of digital technology, there are several learning solutions have arisen, which include the use of blended learning and mobile learning. Imparting or transferring skills and knowledge is an impressive way to apply them during a discussion.

Furthermore, the successful way of utilizing games was the reason why games that involve training do not give assurance of their effectiveness due to their failure of giving attention to their ability because a variety of games targeted in a diverse classroom [3]. The result of no proper placement of implementing digital games in the classroom is, because of its lesser importance in introducing more techniques in giving instructions like lectures [4]. However, it was established that there are several obstacles with the implementation of digital games, including the failure of providing appropriate games, lack of experience of the teachers, and financial support of the school.

The attitudes of the instructor or the teachers about the new way of method teaching are one the elements of motivating the learners to absorb knowledge [5]. Establishing educational games learning in the educational system was imaginable and most of the teachers lack the abilities in the utilization of digital games in the educational system. The authors, on the other hand, focused on the perspectives of learners, along with the importance of the integration in the classroom setting of digital games about its possible

challenges in incorporating digital games in terms of delivering instructions.

As they would soon start working on the actual educational setting, the Bachelor of Culture and Arts students were the ones chosen as a research target group in this study. Since they will likely ask in the future to implement Digital games and utilizing technology is the typical construction of fun and enjoyment at this age. It is also important to know their preparedness for integrating digital games and their perceptions [5]. Digital gaming as a tool for imparting knowledge is an important part of educational progress. Believing in the integration of digital games will help the learners to get their attention during discussions. This will also help the learners to improve their skills through academics and social interaction.

According to [5], learners have positive perceptions and attitudes associated with gaining knowledge and understanding through utilizing computer games in the educational system. Digital game-based learning (DGBL), of instructing a specific educational objective is the new method in the educational system [6]. According to [7], games that control the training cognitively include games that do not give assurance of their effectiveness, instantly to lack of experience in the process of giving acknowledgment on different games to address a variety of skills. However, including digital games in the educational context with the expectation to achieve their goal is not enough to gain knowledge and disregard digital games as an educational one. Today's generation of learners is accustomed to technology. Numerous specialists are studying this matter and in some cases, it was noticeable that the younger ones in this generation usually speak through digital language, which makes their behavioral patterns [8].

Therefore, integrating computer games would help the learners captivate their attention and their progress in developing their skills academically and socially. Students often have a favorable attitude toward using computer games in their educational practices [9]. Additionally, it was emphasized in the study that their experiences such as

creativity, cooperation, and critical thinking are some of the significant training in the context of education, most especially in 21st-century education. The reason for choosing the BCAED students as a target in this study is to determine their readiness and their attitude in the classroom on the integration of computer games for entertainment.

Research Questions

This examination primarily intended to determine the attitude of Bachelor of Culture and Arts students towards learning using Digital game-based particularly intends to answer the questions below:

1. What is the attitude of BCAED students on using DGBL?
2. Is gender related to the attitude toward the use of DGBL?

II. METHODOLOGY

Research Design

A descriptive-quantitative design in this study was implemented. To conduct an organized inquiry into a phenomenon a quantitative research plan gathers, numerical data for statistical analysis was used [10]. The goal of a descriptive study design is to gather data that will enable an objective analysis of a particular occurrence [11]. Additionally, gathering the data was carried out through online survey questionnaires.

Respondents of the study

The Bachelor of Culture and Arts Education program at Western Mindanao State University are respondents in this study. The respondent's age range is 18–22 with a mean (M) of 19.30, Standard Deviation (SD)- 1.28. Most of the respondents were 19 years old (50%). This study corresponded with a total sample of 50 students, of whom 25 were female (50%).

Instrument

The questionnaire in the study was divided into two online sections. Participants had to fill out first their gender, age, and year level in the first portion of the survey, which asked for demographic data in the second segment. The questionnaires consisted of 8 items in total, with a score of 0.93 in Cronbach's alpha.

Furthermore, on a 5-point Likert scale, the items are answerable ranging from (strongly disagree to strongly agree). The instrument in this study is heterogenous that contains four positive statements and four negative statements.

Data Gathering Procedure

Samples in the study are 50 BCAED students from Western Mindanao State University. The research study was administered in January, throughout the second semester of the academic year 2022-2023. Participants were also guaranteed confidentiality and encouraged to reply honestly. Overall, 73 students received the link, but only 50 students responded.

Data Analysis Procedure

Through the research instrument, the analysis of the gathered data and responses were coded. For the demographics, gender (1 for the male, 2 for the female), and for the year level (1 for the 1st year, 2 for the 2nd year, 3 for the 3rd year, and 4 for the 4th year).

The research instrument contains four positive statements (1, 2, 3, and 4), and four negative statements (1, 2, 3, and 4). Responses to positive statements were coded as 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agree. Responses to negative statements are coded as 1 for strongly agree, 2 for agree, 3 for neutral, 4 for disagree, and 5 for strongly disagree.

The coders' reliability was assessed throughout the coding of the complete data set. The instruments in the study have negative statements and the reverse coding was performed.

III. RESULTS AND DISCUSSION

The attitude of the learners toward the implementation of Digital game-based learning

To determine if the Bachelor of Culture and Arts learners had a positive or negative attitude toward digital games in this study questionnaire was implemented. Questions in this study were divided into two parts. The introductory part involves evaluating their positive views, namely: do BCAED students have a favorable attitude regarding utilizing digital games in their learning? To address this matter, items 1, 2, 3, 4, 5, 6, 7, and 8 were analyzed through the mean score (M) and standard deviation (SD) in Table 1 and Table 2.

Table 1.0
Overall Means and Standard Deviations of BCAED Students'
Attitude Toward Digital Games

Variable	N	M	SD
Overall Attitude	50	4.24	0.29

Scale: Very positive (4.0-5.0), positive (3.25-3.9), neutral (3.5-3.24), negative (1.75-2.4), very negative (1.0-1.74)

it could be noted on the overall attitude of the BCAED students toward the implementation of computerized games for learning is very positive, with a mean of 4.24. It also shows that the top three statements shown in Table 2 are Item 5 (M-4.35, SD-0.57), Item 1 (M-4.32, SD-0.52), and Item 6 (M-4.45, SD-0.54), and the last statement is Item 2 (M-3.12, SD-0.40). Based on the description, respondents strongly agree with the three statements (item 1, item 3, and item 4), and on the other hand, it shows that the two statements (item 2) are neutral, which is the last statement.

Item number 5 shows as the first in the rank that BCAED students were uncertain regarding the advantage of utilizing digital game-based in the tertiary level of education for learning. As shown in Table 2, the top ranking suggests that most of the respondents strongly agree, and they are undecided regarding the advantage of utilizing digital games for students in tertiary education. Item number 1, which is in the second rank, implies that the respondents strongly agree that digital game-based learning is applicable for learners, especially in tertiary education. Third in the ranking is item number 6 which supports the conclusion considering the possibility that several learners learning in tertiary education of digital games. This means that respondents strongly agree that utilizing education for learning digitally is a total loss of time.

However, item number 2 which is the least in the ranking and implies that many of the respondents are neutral in terms of utilizing a classroom for learning the digital games, fails to provide a student-centered learning environment for the learners. The second-least item ranking number 4 which is

Table 2.0

Means and Standard Deviations of BCAED Students' Attitude toward Digital Games Item No.	Statement	M	SD	Rank
Q5	I am doubtful about the benefits of using digital games-based learning in higher education.	4.35	0.57	1
Q1	I think using digital games is useful for students in higher education.	4.32	0.52	2
Q6	I consider using digital games for education is a waste of time.	4.25	0.54	3
Q3	I believe that game-based learning in higher education will be an important tool in years to come.	4.25	0.49	4
Q8	I feel the usage of digital games is only useful in primary/secondary education not in higher education.	4.25	0.49	5
Q7	I think learning should not have fun as a requirement.	4.20	0.51	6
Q4	I think digital games can be applied in many learning contexts.	4.20	0.40	7
Q2	I believe that using digital games with learning creates students centered learning environment.	4.12	0.40	8

Scale: Very positive (4.0-5.0), positive (3.25-3.9), neutral (3.5-3.24), negative (1.75-2.4), very negative (1.0-1.74)

From the descriptive analysis shown in Table 1,

the least in the ranking implies that most of the students are neutral about the idea that digital games can be appropriate in different contexts of learning.

The results in the table above show that learners agree that using digital games for learning is very useful, especially for higher education learners. Based on the top statements, we find that respondents doubt the significance of utilizing learning digital games in higher education. However, in terms of deployment, respondents are neutral. Digital games can be used in many learning situations. It also indicates that many respondents are neutral about using digital games to provide a student-centered learning environment for educational practices.

After the investigation of learners' negative and positive attitudes towards digital games, knowing if their attitude is affected by external factors such as their gender, is important when using digital games for learning through examination. The T-test was used for this purpose.

Learners' attitude toward using digital games for learning across gender

Independent means t-tests were utilized of examining whether there was a significant difference in attitude among learners, as they are suitable for measuring the relationship between variables or components of the sample and two subgroups, like male and female. As it may be recognized, in reporting the results a 0.05 level of statistical significance is normally used [12]. It was found in Table 2, in the overall attitude of culture and art students towards digital games between males (M-4.26, SD-0.33) and females (M-4.20, SD-0.23) that no significant difference between male and female attitudes could be observed.

Table 3.0
Learners' Attitude towards Digital Games and the Difference in Gender

Variable	Gender	M	SD	p-value
Overall Attitude	Male	4.26	0.33	0.529
	Female	4.20	0.23	

Scale: Very positive (4.0-5.0), positive (3.25-3.9), neutral (3.5-3.24), negative (1.75-2.4), very negative (1.0-1.74)

Tale 4.0
Learners' Attitude towards Digital Games and the Difference in Gender

Item No.	Statement	Gender	M	SD	p-value
Q1	I think using digital games is useful for students and teachers in higher education.	Male	4.34	0.57	0.182
		Female	4.29	0.46	
Q2	I believe that using digital games with learning/teaching creates students centered learning environment.	Male	4.13	0.45	0.337
		Female	4.11	0.33	
Q3	I believe that game-based learning in higher education will be an important teaching tool in years to come.	Male	4.26	0.54	0.292
		Female	4.23	0.43	

Q4	I think digital games can be applied in many learning contexts.	Male Female	4.21 4.17	0.42 0.39	0.531
Q5	I am doubtful about the benefits of using digital games-based learning in higher education.	Male Female	4.30 4.35	0.55 0.60	0.557
Q6	I consider using digital games for education is a waste of time.	Male Female	4.30 4.17	0.55 0.52	0.320
Q7	I think learning shouldn't have fun as a requirement.	Male Female	4.21 4.17	0.59 0.39	0.072
Q8	I feel the usage of digital games is only useful in primary/secondary education not in higher education.	Male Female	4.34 4.11	0.48 0.48	0.097

Scale: Very positive (4.0-5.0), positive (3.25-3.9), neutral (3.5-3.24), negative (1.75-2.4), very negative (1.0-1.74)

When data were grouped by gender, the attitudes of Bachelor of Culture and Arts students towards applying digital games to support their learning are seen in Tables 3.0 and 4.0. The t-test analysis results show that the item's probability values are all greater than 0.05: 1 (p-value = 0.182), 2 (p-value = 0.337), 3 (p-value = 0.292), 4 (p-value = 0.531), 5 (p-value = 0.557), 6 (p-value = 0.320), 7 (p-value = 0.072), and 8 (p-value = 0.097). This indicates that no major difference between respondents' males and females in items 1–8 was found, as inferred from the results. Thus, learners' attitudes toward learning about using digital games did not influence or determined by gender. This suggests that learners' attitudes are not considerably different based on their gender.

Investigations on the influence of gender have consistently been carried out by various researchers. This implies that the variable gender has become a concern and has remained a research interest. In this study, the objective of determining whether gender differences exist is rooted in the idea that learning contributes to gender differences. This indicates that learners' attitudes tend to assist the advantage and significance of digital games. The outcome of this is compatible with [13]. In the survey it was revealed that most of the students are capable of determining and realizing digital games and their importance and how their learning is assisted, this explains why many of the children or learners have a favorable attitude toward using digital games for their learning.

This elaboration supports the t-test analysis results showing the attitudes of the students are positive toward digital games. It is also significant to distinguish that student attitude is not affected by the differences of their gender; this conclusion is like [14]. However, no difference significantly was found between male and female learners' attitudes towards implementing digital educational games.

IV. CONCLUSION

This study aimed to determine if the majority of BCAED students in Western Mindanao State University are positive toward the advantage of the use of digital games for learning in the classroom. Variables such as gender did not impact the positive attitude. It was found in the study that those who have favorable attitudes are those who play games.

It is understood how significant it is to include the students in instructional activities by giving or presenting to them real-life experiences kinds of games. After the investigations of the attitude of the learners about utilizing digital games for learning, the items in the research tool ranked from the most to the least positive statements, participants strongly agree that they were having doubts about what benefits they can get in utilizing electronic games for learning in higher education. The respondents also agree that embracing digital games is very applicable, especially among higher education students. However, the investigation also exhibited the fewest answers from the respondents and found that the respondents are neutral in terms of requiring learners to use digital games for learning, which provides a student-centered learning environment. The investigation shows that we used digital games in many settings. It has also been shown in the investigation that the BCAED students possess a very positive attitude toward integrating in the classroom a digital game for learning.

When the data were grouped by gender, no major difference between male and female respondents' attitudes toward the use of digital games for learning was found. Integrating digital games helps learners keep engaged in the classroom. The main conclusion of this survey is that the majority of the BCAED students at Western Mindanao State University showed to have a positive attitude about the advantage of the use of digital games in the classroom for learning. This positive attitude was not affected by variables such as gender. With compelling results in the study, this study underscores BCAED students' attitudes toward using digital education games for learning.

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