Integrated Technology for Classroom Management Strategies in a Computer-Assisted

Language Learning

Submitted 2 June 2022 Revised 26 July 2022 Accepted 28 July 2022

Christian Bernard Nichols Djami1*

¹Universitas Kristen Satya Wacana, Salatiga, Indonesia Corresponding Email: *christian.djami@uksw.edu

Abstract

This study was carried out to investigate the integrated technology in Computer-Assisted Language Learning (CALL) class support classroom management strategies. The study employed mixed-methods and involved 27 students and a lecturer of a CALL class in an English Language Education Study Program. The data collection instruments were a questionnaire, interview guide, and observation notes. The data analysis was processed using descriptive statistics, particularly for the questionnaire results. Meanwhile qualitative analyses were conducted to process the interview results and observation notes. The results of the study showed that necessary relevant technology was integrated in the CALL class and it could support classroom management strategies by engaging students in learning, delivering materials efficiently, and creating an immersive learning environment using gamification through internet. Using computer to support learning is effective to create an immersive environment and to manage classroom. The use of computer in language learning is able to support classroom management for a lecturer inside or outside the classroom.

Keywords: Integrated Technology, CALL, Online, Classroom Management, Gamification

INTRODUCTION

Classroom management strategy is considered as an important aspect for teachers to monitor their students' progress. It is important because classroom management is related to teachers' actions to set order and time allocation during learning process (Doyle, 1986). Walber & Paik (2000) found that classroom management strategies have been considered as an important factor that affects students' learning achievement. Therefore, the teachers are demanded to establish effective classroom management strategies that offer clear explanation and applicable knowledge for students.

Evertson and Weinstein (2006) described classroom management as teachers' actions to establish a supportive learning environment for the students' academic and social-emotional skills development. They describe four practical effective classroom management strategies for the teachers, the strategies are establishing compassionate and supportive interaction with students, giving a clear instruction to maximize students' comprehension, motivating students to become active during the learning process, and fostering students' social skills and self-regulation. Marzano et al. (2003) also pointed out that the teachers also have the responsibility to give appropriate actions to discipline the students with behaviour problems. Furthermore, McCaslin and Good (1998) defined classroom management as the teachers' instrument to control students. The current views of curriculum emphasize on critical thinking and the students' active participation in a classroom. It means that the teachers should not become an

authoritarian leader in the classroom. The teachers are expected to establish positive relationships with the students and supportive learning environment (Bowers & Flinders, 1990). The teachers should involve students during the lesson to become active learner instead of passive listener. Moreover, Brophy (1988) describes classroom management as a "bag of tricks" which becomes legacy from teacher to teacher rather than a set of professional research-based principles, concepts, and skills. It becomes a culture which is being passed along the older to the younger generation of teachers. Emmer and Stough (2001) also argued the bag-of-tricks originates from the absence of national standards that instructs preparation in the area of classroom management. Therefore, the teachers are creating their own standard of classroom management which cause each education department has their own classroom management strategies.

Classroom management strategies can be conceptualized as structures that promote the adjustment of cause and effect of events that facilitate learning (Shores, Gunter, Jack, 1993). Effective classroom management strategies demand teachers to support students' learning by establishing a learning environment where effective instruction can happen with minimum disruptions (Jack, Shores, Denny, Gunter, DeBriere, DePaepe, 1996). The teachers are expected to be able to control the students' disruptive behavior, so the classroom can be a conducive learning environment that can enhance students' comprehension. Classroom management strategies provide the approach of behavior management strategies to reduce students' disruptive behaviors, Jack, Gunter, Ellis, DeBriere, Wehby, 1993).

Larrivee (2005) found that classroom management strategies consist of the three combination of effective teaching strategies which includes meaningful learning material, powerful teaching strategies, and clear learning syllabus to support productive learning. The teachers are expected able to employ strategies to establish rules and procedures, organize groups, monitor classroom events, and prevent disruptive (Borko & Putnam, 1995). Despite the complex understanding of classroom management strategies, the teacher is the main protagonist in creating the conducive learning behaviour. Moreover, Chandra (2015) pointed out that teaching is not controlling, but rather working together with the students to learn, grow, and succeed. Teacher should build a good relationship with the students, so the students may get better learning results. Classroom management strategies focuses on establishing a supportive learning environment to create positive achievement and behavior for student.

Research on classroom management strategies finds that the time the students spend to learn and work on the tasks given by the teacher is one of the main factors that can predict students' learning achievement (Walberg & Paik, 2000). Learning time is not always allocated simply to learning activities in regular classrooms. Frequently, the learning time is also spent on other non-academic activities, for example on organizational matters, disciplinary problems, technical problems, and other interruptions. Consequently, the teachers are expected to use the available time efficiently to maximize students' opportunities to learn in the classroom. (Brophy, 1999; Wang, Haertel, & Walberg, 1993). Those strategies are usually referred to as effective classroom management strategies (Brophy, 1999; Doyle, 1986).

Studies on the elements of effective classroom management strategies have found two essential features for creating and maintaining order in the classroom which are the identification of desirable and the prevention of undesirable behavior (Emmer & Stough, 2001). In order to identify desirable behaviors, clear regulations and fixed routines need to be established, maintained, and communicated. Furthermore, the teachers need to be aware to the events that are happening in the classroom to prevent the undesirable behavior (Kounin, 1970). The teachers are expected to give constant supervision to covers students' behavior in the classroom. The teachers should be able to provide interesting learning activities to make sure that their students are actively engaged during the learning process (Brophy, 1999). If the teachers could implementation the essential features above, it can give students positive effects on their achievement (Freiberg, Stein, & Huang, 1995; Wang et al., 1993).

In this modern era, there has been a rapid development in Information and Communication Technology (ICT) for education and its function whether it is inside or outside the classrooms (Vrasidas, Zembylas, Glass, 2009). ICT changes the way people's perspective at education in terms of problem-solving strategies that now can be equipped using new sets of tools provided by technology. (Bracey & Culver, 2005). The technology can be in a form of internet services, software, or hardware. According to Prensky (2012), people who were born on 1980s are born in a world where technology rapidly growing and therefore it is appropriate to classify them as "digital natives". in contrast to people who were born before 1980s, they had to adjust to the technology in their lives in a latter period in their time and become "digital immigrants".

The internet has been a major catalyst for change in every aspect in human life (Jaafar, Aziz, Ramayah, Saad, 2007). A survey of the most frequently used social media platforms by internet users in 2014 revealed the following as the top five: Facebook (95.8%), Google+ (24.7%), PIXNET (20.7%), Xuite (12.7%), and Plurk (8%) (Lin, Lin, Lee, 2015). It has been shown that in daily life, internet is closely related to education (Mazman and Usluel, 2010). In education, it is important for the teachers to have the ability of to utilize ICT and the internet

(Subrahmanyam and Greenfield, 2008). According to Pai and Yeh (2014), encouraging the teachers to use ICT and internet can enhance teacher-student sense of belonging and improve knowledge sharing with the students. The students in this era are digital natives that have great mastery upon technology. Therefore, using learning platforms in internet can improve the interaction between the teachers and the students. It can also extend the learning process beyond classroom, so students can participate in interaction, collaboration, and information and resource sharing beyond their lesson time in the classroom (Ateş, 2013).

Research on technology readiness (TR) has shown notable differences across teachers' genders, nationalities, and the number of students for which they are responsible to teach (Badri et al., 2014; Summak and Baglibel, 2012; Caison et al., 2008). The TR model has been applied to a variety of contexts including the consumer adoption of high technology products (Ferreira et al., 2014), self-service technologies (Meuter et al., 2005), healthcare services (Borrero et al., 2014; Caison et al., 2008), and online insurance (Taylor et al., 2002). The studies have highlighted the effectiveness of the TR model in studying respondents' liability to use new technologies. The TR research on teachers found that the teachers 21st century are ready to integrate technology in their classroom. Currently, ICT is inevitably on of the main aspects of education, from its broader context in education to a more specific field of language learning, ICT becomes an ever-growing part of language learning (Tan and Zhang, 2018). Starting from the development of computer assisted language learning (CALL) and then moving to internet or web-based language learning, ICT in language learning can be accessed by everyone using the digital tools our devices. The teachers in this modern era are expected to have the ability to use technology and also integrate it in their classrooms. The teachers should be able to digitalize their classroom to make it become more effective for teaching and monitoring their students' progress.

According to Stanley (2013), technology is classified as internet, software, and hardware. In order to answer the first research question, the technology that is used in the CALL will be classified using this theory. Below are the examples of technology under every classification.

No.	Internet	Software	Hardware
1	Automatic translators	Apps	CD-ROMs
2	Blogs	Authoring software	Computer room
3	Comic-creator websites	Concordances	Data projectors
4	Image-creator websites	E-books	Digital cameras

Table 1. Technology Classification

No.	Internet	Software	Hardware
5	Instant messaging	Electronic dictionaries	DVDs
6	News website	Email	Interactive
			whiteboards
7	Online games	Interactive fiction	Laptops
8	Podcasts	Mind-mapping	Mobile phones
		software	
9	Poster websites	Music software	MP3 players
10	Social networks	Presentation software	Netbooks
11	Survey websites	Quiz-making software	Pen or flash drives
12	Text and voice chat	Screen-capture tools	Tablets
13	Text and voice forums	Social bookmarking	Video cameras
14	Video-sharing websites	Sound-editing	Voice recorders
		software	
15	Wikis	Word processors	Webcams

The immense improvement of technology will create the possibility for the teachers to use technology as part of their classroom management strategies. Effective classroom management need to include establishing and maintaining order, designing effective learning instruction, dealing with students, and effectively handling the progress of each student in classroom which is not impossible to be implemented using technology. Most research on classroom management has attempted to identify teacher strategies that can optimize one or more of the goals of management in traditional classroom that did not integrate technology. However, it becomes a common practice nowadays that teachers use technology to make students become engage during the learning process because the students use technology in their daily basis. Thus, it is believed that using technology can make students become engaged to the lesson and it can make the students to have better comprehension and learning result.

This study has an attempt to answer these questions:

RQ 1: What technology can be integrated in a Computer Assisted Language Learning class for preservice English teacher students?

RQ 2: How can the integration of technology be implemented as part of classroom management strategies in the CALL class?

The study may assist the preservice teachers to find out how to integrate technology as part of classroom management strategies, especially in CALL class. The teachers in a CALL class are demanded to be able integrate technology and learning, while also managing the students in classroom to be on task by designing teaching-learning activities to engage students in.

The immense improvement in technology demands both the teachers and the students to be able to use technology during the learning process. The students in this digital era are skilled to harness the power of technology effectively for their learning sources. Therefore, teachers are expected to be creative in using technology to make their teaching engaging for the students. Thus, this study may help teachers to find out what kind of technology that can be used in a classroom that can keep students engaged during the learning process.

Finally, the result of this study can also help students to find out the language learning application and programs that can be used to acquire the language or for their future teaching career. It can also help them how they to be wise in using technology as learning sources because each learning source has different function. Hopefully, this study will help them to decide which technology that they can use as their learning sources.

Evertson and Weinstein (2006) defines classroom management as teachers' actions to establish a supportive learning environment for the academic and social-emotional learning of students. Teachers need to create environment that can encourage the students to learn. By creating supportive learning environment, the students will have better engagement during the learning process. They would have the willingness and motivation to learn in the classroom. Meanwhile, McCaslin and Good (1998) point out that classroom management is similar to the idea of controlling students. Teachers are expected to be able to control the students in their class to maintain the students focus to be on task. During the learning process, teachers should be ready to anticipate students' disrupting behavior that could disturb the learning process.

In addition, Larrivee (2005) note that classroom management is a mixture between effective teaching strategies that encompass meaningful content, powerful teaching strategies, and clear syllabus to support productive learning. Teachers are expected to be able to give meaningful knowledge for students that can be applied not only inside the classroom, but also outside the classroom.

Furthermore, the teachers are also expected to have their genuine teaching strategies that can keep their students' engagement and motivation during the learning process. Thus, classroom management strategies may be conceptualized as physical, temporal, and, social structure that arrange the events during the learning process (Gunter and Deny, 1996), and effective classroom management strategies can be defined as strategies that organize the classroom in such an effective way by using the available time efficiently and involving

students during the learning process to maximize students' opportunities to learn (Brophy, 1999; Wang, Haertel, & Walberg, 1993).

The classroom management strategies in this research refer to the strategies that the teacher of the CALL class uses to create supportive learning environment, monitor students' behavior, and keep students' engagement during the learning process. Meanwhile, the effective classroom management strategies in this study focus on how the teacher establish the effective rules in classroom to provide a good learning environment for the students.

In CALL class, the integration between technology and classroom management is a must because CALL is related to how to use computer to assist language learning. Technology in CALL class is used to make classroom management becomes easier for teachers. Stanley (2013) defined technology in the CALL class as internet, software, and hardware. He said the internet can change the learning process alongside the development of hardware and the software of computer.

The Internet becomes a major catalyst for the change (Jaafar et al., 2007). Internet provides a lot of learning sources for teachers and students. It has been shown that in daily life, internet is closely related to education (Mazman and Usluel, 2010). Therefore, both teachers and students should be able to harness the power of internet for education effectively. Encouraging teachers to use internet can enhance a sense of belonging and improve knowledge sharing through social media (Pai and Yeh, 2014). Using learning platforms in internet can continually improve the communication between the teachers and students and extend learning beyond school hours so that learners can engage in interaction, collaboration, active participation, and information and resource sharing (Ates, 2013).

Therefore, this study defines the integrated technology, especially computer and internet, as tools that can support classroom management in a CALL class. The use of integrated technology is meant to provide supportive learning environment that can help the teacher to manage their classrooms and keep the students' engagement during the learning process. Specifically, the study portrayed how integrated technology in the CALL class could support the lecturer's classroom management strategies.

METHOD

The setting of the study was conducted in CALL class of English Language Education Study Program (ELESP) at Sanata Dharma University, Yogyakarta. The research has an attempt to investigate the technology used and how to utilize the technology as a part of classroom management strategies in the CALL class of the ELESP. Furthermore, the participants of the study were 27 students and a lecturer in a CALL class of ELESP. The research focused on the integrated technology used in the classroom and how to use the technology for classroom management strategies. The research used semi-structured interview and direct observation.

This research used mixed methods to collect and analyze the data. According to Creswell (2013), mixed methods study is a study that collects, analyzes, and integrates quantitative and qualitative data to answer research questions. Quantitative data is defined as numeric data for groups' comparison. The numeric data in this study is in a form of average percentage based on the questionnaire about technology acceptance. Meanwhile, qualitative data is defined as text data based on interviews and observation notes.

Moreover, Creswell and Plano Clark (2011) mixed method included steps where researchers collect and analyze both qualitative and quantitative data sequentially and/or simultaneously that integrates the two forms of data. The way in which this data is combined would depend upon the nature of the inquiry and the philosophical outlook of the person who carried out the study. The method enabled a better degree of understanding to be formulated rather than using only one research method.

Furthermore, Johnson and Onwuegbuzie (2007) also defined mixed methods as a research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study or set of related studies. Mixed method allowed the researcher to formulate wider findings using numeric and text. The combination between quantitative and qualitative data would create better understanding on the topic of the study.

The study used three data collection instruments. The data collection instruments were questionnaire, semi-structured interview, and direct observation. A questionnaire was chosen to obtain an overall measure of the attitudes and opinions of the participants. The questionnaire used 20 Likert scale questions (Appendix 1) to find out students' general view upon the CALL class. Semi-structured interview (Appendix 2 & Appendix 3) was selected since its imparted flexibility and provided rooms for generating questions. Next, direct observation was used to limit the distraction of the students and the lecture in the classroom.

The data collection procedures took several steps. First, the English students filled the questionnaire to find out the general information. Second, the lecturer and five students (called as P1, P2, P3, P4, and P5) were interviewed to discover their point of view in using technology in their classroom. Third, the lecturer and the students were observed to validate their answers on the interview. The observation can support and may give some addition to the data from the interview.

The data analysis involved counting the percentage for the questionnaire by means of descriptive statistics and also interpreting the transcripts as well field-notes generated from the observation. The interview transcripts and the observation notes were gathered and classified into categories. The purpose was to identify the integrated technology and classroom management strategies using the technology. The study used thematic analysis because it is a flexible method to conclude the result from the study. According to Braun and Clarke (2012), thematic analysis is a systematic method to identify, organize, and offer insight into themes across a data set. It is also a flexible method to focus on the data in numerous different ways. Since the data were in form of percentages and text, a flexibility to analyze the data was needed.

RESULTS AND DISCUSSION

Integrated Technology in the CALL Class

Computer Assisted language Learning (CALL) is a teaching and learning method in which the computer and computer-based resources such as the internet are used to present, reinforce, and assess material to be learned. It usually includes a substantial interactive element and the search for and the investigation of applications in language teaching and learning. CALL is meant to supplement face-to-face language instruction instead of replacing it.

The technologies which are used in the CALL class are classified into hardware, software, and internet (Table 1). Hardware is the physical parts of computer system which is used for input, output, and data storage. Software is the programs and other operating information which are installed in a computer. Internet is a global computer network that provides various information and communication facilities which consists of interconnected networks using standardized communication protocols.

Hardware

The hardware provided in the CALL class was a computer room, an LCD projector, and two loudspeakers. The students were allowed to use their own electronic devices such as laptops and mobile phones to support their learning. The lecturer also used two cameras for assessment and documentation. The first camera was for recording the students' presentation which later would be used as assessment and evaluation. The second camera was used to take pictures of the students for his documentation for teaching a CALL class.

Software

The main software used in the CALL class is Microsoft Word, Microsoft PowerPoint, Adobe Acrobat Reader, and web browser (Google Chrome & Mozilla Firefox). Every computer in the classroom was installed with Microsoft Office 2016 that includes Word, Excel, PowerPoint, and Outlook. However, most of the time, the CALL class only used Word (Table 1, No. 15) and PowerPoint (Table 1, No. 10) to support learning. Microsoft Word is a word processing software that allows users to type and save documents. The documents were used as learning materials, exercises, and assignments. Meanwhile, Microsoft PowerPoint is a presentation software that allows user to create and show slides to support a presentation. The user can combine text, graphics and multi-media content to create professional presentations. However, the CALL class did not restrict the students only to use PowerPoint. The lecturer gave the opportunity for students to use any other presentation programs, such as Prezi, Canva, Keynote, Visme and many more.

The computers were also installed with Adobe Acrobat Reader to read PDF (Portable Document Format) files (Table 1, No. 4). PDF is a file format that provides an electronic image of text or text and graphics that looks like a printed document and can be viewed, printed, and electronically transmitted. The students in the CALL class were required to use research journals or e-books for their presentation which are available in PDF files. However, PDF can also use web browser to be read with or without internet connection.

Furthermore, the CALL class emphasis on the use of internet to support. Therefore, web browser (Table 1, No. 1) is a compulsory installed software in the computers. Web browser is a software for accessing information on the World Wide Web. The web browser installed in the computers in the classroom were Internet Explorer, Google Chrome, and Mozilla Firefox. Both Google Chrome and Mozilla Firefox were preferred rather than Internet Explorer due to its faster loading time to open sites.

Internet

The CALL class focused on the usage free online websites in the internet to support learning. There were plenty websites used in the CALL classroom which revolved around cloud-based services like online quizzes, games, tests, comic-maker, presentation, and assignment submission platform. The websites were Padlet, Canva, Quizlet, Quizziz, Kahoot, Storyjumper, StoryboardThat, Kahoot!, Socrative, Mentimeter, and Edmodo.

Padlet (Table 1. No. 4, No. 9, No. 10) is an online bulletin board that allows teachers to make and share learning materials to students. There are plenty of templates that can be used to make the learning materials become more engaging. The free users could get 30-day free trial and they have to pay afterwards for monthly or yearly subscription. Padlet allows students to respond to teachers' prompt in real-time during the learning process. The students can read through their friends' responses on the bulletin board that can later be used for comparison.

Canva (Table 1, No. 9) is a graphic design platform that allows users to create social media graphics, presentations, posters and other visual contents for free and it is available on

web and mobile app. The platform integrates dozens of images, fonts, templates and illustrations which makes the designing process of visual contents easier. It can be used both for teachers and students to make visual contents to make the learning process becomes more engaging. During the class, Canva was mainly used to make posters. The students only needed to choose the template on Canva and their posters were done.

Online quizzes (Table 1, No. 7) websites that were used in the class were Quizlet and Quizzizz. Quizlet is an online study application that allows students to study information via learning tools and games. It can be used to teach students using flashcards, various games, and tests. Quizizz is an online learning tool that helps teachers to make interesting review, and assessment to support students. Basically, both websites were free gamified quizzes that can be used inside and outside the classroom. The teacher can pick an existing quiz or create their own quiz for the students.

Furthermore, there is also a well-known website for interactive online quiz called Kahoot. Kahoot is a game-based learning platform, used as educational technology in classrooms. It is a user-generated multiple-choice quizzes that can be accessed via a web browser or mobile phone app. However, it did not have feature like flashcards and tests. The app focuses on During the class, Kahoot was used as an example of gamification tool to teach students.

Storyjumper (Table 1, No. 3) is a website that offers students the chance to write, create and publish their own stories. This site offers simple creating tools that can be used to develop students' creative skills. Students are able to illustrate and write a book, whether it be imaginative, informational or a narrative. It is a tool that promotes fun writing for students which may grab their attention for successful and efficient learning. Another similar website, StoryboardThat is a website that lets users to create storyboards or comic for learning or fun. It provides innovative tools to describe ideas and processes that can be used by teachers and students for learning purposes. Both teachers and students can easily create their own comics by clicking the provided panels, backgrounds, and characters.

Socrative (Table 1, No. 11) is a cloud-based student response system or an online tests platform. It allows teachers to create simple tests that students can take quickly on computer or their own smartphones. The website allows teacher to choose different kinds of questions and set the duration of the test. The questions types are multiple choice, true/false, or short answer, and the questions order can be shuffled for each student. The results of the tests will be given to the teacher via website and email. The teacher does not need to do manual correction on the students' tests.

Mentimeter (Table 1, No. 11, No. 13) is a cloud-based presentation service that allows presenter to engage and interact with audience in real-time. It is a polling tool wherein teachers and students can set the questions and give their input using a mobile phone or any other device connected to the Internet. The service focuses on online collaboration that enables users to share knowledge and real-time feedback with presentations, polls, or brainstorming sessions in classes. During the class the lecturer used Mentimeter for direct responses and polling. It helped the passive students to express their opinions without pressure because they only needed to write it down instead of talked about it in front of the class.

Edmodo (Table 1, No. 10, No. 13) is an educational technology offering a communication, collaboration, and coaching platform for teachers and students. The website can become a social network for teachers and students. The Edmodo network enables teachers to share content, distribute quizzes, assignments, and manage communication with students. During the class, the teacher used Edmodo to share learning materials and assignments submission.

CALL and Classroom Management Strategies

This section is intended to discuss how integrated technology in the CALL class support classroom management strategies. The data in this section is presented in charts and interview transcriptions. The charts' percentage was obtained from the average number on the questionnaire (Appendix 1).



General Responses Toward CALL

Figure 1. Computer Assisted Language Learning

There are 55% students in favor for computerized language learning. Based on the observation, the students in the classroom enjoyed the computerized learning. Meanwhile, 29% students disagreed for computerized language learning. This group of students are the students who still

like the traditional learning where they take notes when the lecturer is teaching instead of typing the notes in the computer. However, they still agreed on the use of computer to do tests and exercises. In addition, only 16% students who are neutral about computerized language learning.

It could be stated that the students agreed with the technology utilization to support their classroom since more than a half of the classroom were in favor for computer-assisted learning. This finding is in line with Tan and Zhang (2018) research on TR and ICT utilization as a tool to help teaching and learning so teachers and students in 21st century should be able to integrate technology in their classroom.

Specifically, P2 argued that technology made the teaching process easier and more engaging rather than the traditional classroom. The traditional classroom meant by the student was a classroom where a teacher only explained the learning materials using a whiteboard and/or PowerPoint slides and the students were sitting and listening. The student wanted to have engaging activities in the learning process.

In a modern classroom, everything becomes easier and engaging when you use technology because you can create more a competitive classroom using technology instead of a traditional classroom that only uses a whiteboard. You can use Kahoot and Quizshow.io to make the classroom fun and competitive. - P2

The utilization of interaction online quiz during the learning process can promote fun engagement. During the class, the online quiz made the students very active, even the passive students became active. Interactive online quiz could become the solution for active interaction during the learning process. It is similar to Kubiatko's (2010) findings that students were more interested to learn using technology. The study found that the use of technology can enhance students' learning engagement and computer skill.

I am totally in favor of a modern or computerized classroom. Everything becomes easier and engaging. If you don't understand you can just search it online. Also, I like the immersion from gamification method during the class. - P4

Similar to the previous student, P4 agreed that his computer assisted classroom was more engaging. He referred to the modern classroom as an interactive classroom that combined technology and interaction between a teacher and students. He also liked the fun immersion by using gamification in the classroom. Gamification is the application of typical elements of game playing such as players, points, and leaderboards to other areas of activity (Nicholson, 2015). Thus, a teacher should be able to provide interesting learning activities to make sure that their students are actively engaged during the learning process (Brophy, 1999). The teacher used

interactive online quiz to gamify his class. Based on the observation, the students were enjoying the competitive environment created by the teacher. This strategy was used to make immersive lessons for the students. The students become active to compete with their friends. The students can have fun while learning in the class.



CALL and Making Students Engaged in Learning Process

Figure 2. CALL Advantages

The 39% of the students agree to the advantages of CALL. The students agreed that computer can support learning in the classroom. Moreover, 27% of the students disagree to the CALL advantages. The students argued that traditional language classes that did not use computer also gave adequate input similar to CALL. Finally, 34% students are neutral to the CALL advantages.

The utilization of computer in language learning can promote better immersion. However, it can also become a distraction for students during the learning process. The technology is not meant to be to replace the existence of teacher in the classroom, it is just a tool to support learning (Thomas, 2009). A teacher presence in a classroom is still needed for learning materials explanation.

I'd prefer a combination between the computerized and traditional learning, sometimes technology can become a distraction for students. I want the students to pay attention on the teacher's explanation without being distracted. Without a clear instruction, I feel that the students in this call class usually doing everything on their own. The lecturer's role to explain learning materials in the classroom is replaced with the students' groups presentation. In my opinion, the lecturer role is a little bit lost during the learning process. -P1

P1 agreed that technology could become a distraction if it was not used wisely. He said that teacher presence in the classroom was still needed to manage and explain learning materials to students. The students in the classroom sometimes opened websites unrelated to the learning materials. It was the teacher's responsibility to warn the students to pay attention during the learning process.

A lecturer needs to combine traditional and modern teaching method. Students want everything becomes instant using technology, but still the lecturer needs to explain the material. The lecturers can't just upload the learning materials on a website and force the students to understand it, they need to explain it. If the just upload the materials without explanation, the students may not understand and less comprehensive. -P5

P5 also agreed that teacher's presence was compulsory in learning process. The student argued that the teacher should explain the materials face-to-face instead of using online assignments. Sometimes, the students were given learning materials and had to learn by themselves. After that, they had to do assignment given by the teacher and submit it without clear explanation.

Teacher in the classroom have power to manage and control the students to establish an engaging learning environment (Knitzer, Steinberg, & Fleisch, 1990). During the class, the teacher was moving around the class to check their students. He wanted to check that the students were on task. The teachers need to take into account that they have to use their power positively in interacting with the students in classrooms (Denny, Epstein, & Rose, 1992; Gunter, Denny, Jack, Shores, & Nelson, 1993; White, 1975). Positive interactions between teachers and students can make the classroom enjoyable to learn and the students become active, motivated, and engaged during the learning process.



CALL and Its Learning Environment

Figure 3. CALL Classroom Learning Environment

There are 53% students who enjoyed to learn in the CALL classroom. The students enjoyed the user-friendliness of using computer to support the learning process in the classroom. Furthermore, 30% students choose to be neutral. This group of students actually enjoyed learning using computer, but they said it was similar to any courses in the faculty. Only 17% of the students did not really enjoy to learn in the CALL classroom.

The learning environment in the CALL class was revolved around the utilization of computer and internet (technology) as tools to support learning. The presence of the technology in the classroom is meant to make the learning process become easier and engaging for students. The integration between Web 2.0 technologies and language learning has been recognized as the future goal for CALL (Wang & Vásquez, 2012). Web 2.0 technologies has brought changes and innovations that make CALL 2.0 emerges (Levy & Caws, 2016).

I like the learning vibes in CALL classroom. It is very interesting because we use computer and all those online services which very relatable for millennial like us. Everything becomes easier with the help of computer and internet, that is why I really like CALL class. -P3

P3 agreed that as a millennial the use of computer and internet was relatable because she used it every day. The students were used to use computer and internet to do their assignments, so CALL was enjoyable for them and easy to understand. The effective classroom management is derived from the fundamental of constructing a supportive classroom environment which encompasses mutual teacher and student relationships (Brekelmans, Wubbles, & Den Brok, 2002).

Unal and Unal (2017) also did a study related to technology integration in a flipped classroom. It is one of recent technology integration teaching models where students learn a new learning material at home and then implement the learning material in the classroom. The study showed that the students got more input compared to the traditional teaching approach that made the teacher had higher satisfaction in teaching their students.

"I always maintain positive interaction with my students. I try to be friendly to them and I trust them." -Lecturer

Based on the observation, the lecturer was kind and friendly to students. During the class, he never scolded the students. He only gave small warning to the students who were off task. Therefore, he used preventive and behavior management strategies rather than reactive strategies. Preventive strategies focus on action to prevent the students' disruptive behavior during the learning process (Brekelmans, Wubbles, & Den Brok, 2002). Instead of setting some rules in his class, he prevented the disruptive behavior by creating a friendly classroom. He liked to mingle around the class and asked the students whether they had any difficulties or not.

He always maintained the positive interaction with the students to make them comfortable to study in his class.

Meanwhile, behavior management strategies are teachers' strategies in managing students' disruptive behavior to increase learning efficiency in the classrooms (Smith, Young, Nelson, & West, 1992). The strategies are related to how the teachers deal with students' behavior during the learning process. Since the teacher was friendly to his students, he could understand every student in his classroom. Therefore, he could easily manage his students' behavior in the classroom. The teacher was able to use his power positively in interacting with the students in classrooms. Positive interactions between teachers and students can make the classroom enjoyable to learn and the students become active, motivated, and engaged during the learning process (Denny, Epstein, & Rose, 1992; Gunter, Denny, Jack, Shores, & Nelson, 1993; White, 1975).



CALL and Technology Acceptance

Figure 4. Teacher's attitude towards CALL

There are 45% students agreed that their lecturer's attitude towards CALL affects their learning motivation. Moreover, 37% students thought that the lecturer's attitude did not affect their learning motivation. Finally, only 18% students chose to be neutral about their lecturer's attitude towards CALL.

They are very interested in using technology, they want to learn and explore the technology. I guess when students come to this area, they won't need much time to cope with new things. This lab has sophisticated technology, but still they need guidance. -Lecturer

The lecturer said that the students in his class did not need much to adapt with the use of technology during the learning process. However, the students still needed the lecturer's guidance so they can use the technology wisely. Technology use for teaching and learning purposes depend on optimistic beliefs in using technology and understanding how to integrate technology into teaching and learning in the classroom (Teo, 2010). Based on the observation, the lecturer was able to use the technology effectively to make an immersive learning environment. The students were active during the learning process and they got good results on their assessments.

Technology acceptance research in this study showed that technology provision of the students was quite high. Based on the technology acceptance model (TAM; Davis, 1989) and the technological pedagogical content knowledge (TPACK) model (Mishra & Koehler, 2006), the teacher did not face any significant challenges to integrate technology into in classrooms. The students were already accustomed to using technology in their daily basis, so it would not be difficult for them to cope with CALL.

CONCLUSION

Classroom management strategy is considered as an important aspect for teachers to monitor their students' progress. Teachers should be able to establish effective classroom management strategies that offer clear explanation and applicable knowledge for students. The rapid development in ICT for education has changed people's perspective at education in terms of problem-solving strategies that now can be equipped using new sets of tools provided by technology whether it is internet services, software, or hardware.

Computer Assisted language Learning (CALL) is a teaching and learning method in which the computer and computer-based resources such as the internet are used to present, reinforce, and assess material to be learned. It usually includes a substantial interactive element and the search for and the investigation of applications in language teaching and learning. CALL is meant to supplement face-to-face language instruction instead of replacing it. CALL has also been known by several other terms such as technology-enhanced language learning, computer-assisted language instruction and computer-aided language learning but the field is the same. CALL exists as a tool to support learning process in way that makes it more engaging.

The technologies which are used in the CALL class are classified into hardware, software, and internet. Hardware is the physical parts of computer system which is used for input, output, and data storage. Software is the programs and other operating information which are installed in a computer. Internet is a global computer network that provides various information and communication facilities which consists of interconnected networks using standardized communication protocols.

The learning environment in the CALL class was revolved around the utilization of computer and internet as tools to support learning. The presence of the technology in the classroom is meant to make the learning process become easier and engaging for students. Most of the students in the CALL class agreed that technology made the learning process became more engaging. The use of technology in language learning can promote immersive learning environment. The technology in CALL class meant to support learning process instead of replacing the presence of a teacher. The lecturer was still needed to manage and control the students during the class.

The lecturer was able to manage and control the students to establish an engaging learning environment. He managed to establish a mutual teacher and student relationships to make the classroom became a supportive learning environment. He was a friendly lecturer that knew the characters of his students. Thus, he was able to use manage the students using preventive and behavior management strategies.

REFERENCES

- Álvarez Valencia, J. A. (2016). Language views on social networking sites for language learning: The case of Busuu. *Computer Assisted Language Learning*, 29(5), 853-867.
- Arslan, R. Ş., & Şahin-Kızıl, A. (2010). How can the use of blog software facilitate the writing process of English language learners?. *Computer assisted language learning*, 23(3), 183-197.
- Ateş, H. (2013). Information technology and the learning environment in primary schools. *Procedia-Social and Behavioral Sciences*, 93, 695-698.
- Badri, M., Al Rashedi, A., Yang, G., Mohaidat, J., Al Hammadi, A., Council, A. D. E., & Dhabi, A. (2014). Technology readiness of school teachers: An empirical study of measurement and segmentation. *Industrial Engineering and Management*, 2(4), 257-275.
- Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *The Elementary School Journal*, *104*(4), 269-287.
- Borko, H., & Putnam, R. T. (1995). Expanding a teacher's knowledge base: A cognitive psychological perspective on professional development. *Professional development in education: New paradigms and practices*, 35-65.
- Borrero, J. D., Yousafzai, S. Y., Javed, U., & Page, K. L. (2014). Expressive participation in Internet social movements: Testing the moderating effect of technology readiness and sex on student SNS use. *Computers in Human Behavior*, 30, 39-49.
- Bowers, C. A., & Flinders, D. J. (1990). Responsive teaching: An ecological approach to classroom patterns of language, culture.
- Bracey, B., & Culver, T. (Eds.). (2005). Harnessing the potential of ICT for education: a multistakeholder approach: proceedings from the Dublin Global Forum of the United Nations ICT Task Force (Vol. 198). United Nations Publications.

Braun, V., & Clarke, V. (2012). Thematic analysis.

- Brekelmans, M., Wubbels, T., & Den Brok, P. (2002). Teacher experience and the teacherstudent relationship in the classroom environment. In *Studies in educational learning environments: An international perspective* (pp. 73-99).
- Brophy, J. (1988). Educating teachers about managing classrooms and students. *Teaching and teacher Education*, 4(1), 1-18.
- Brophy, J. (1999). Toward a model of the value aspects of motivation in education: Developing appreciation for.. *Educational psychologist*, *34*(2), 75-85.
- Caison, A. L., Bulman, D., Pai, S., & Neville, D. (2008). Exploring the technology readiness of nursing and medical students at a Canadian University. *Journal of interprofessional care*, 22(3), 283-294.
- Chandra, S. (2015). Classroom management for effective teaching. *International Journal of Education and Psychological Research*, 4(4), 13-15.
- Chaves, H. V., Maia Filho, O. N., & Melo, A. D. (2016). EDUCATION IN TIMES NET GENERATION: HOW DIGITAL IMMIGRANTS CAN TEACH DIGITAL NATIVES?. *HOLOS*, *2*, 347-356.
- Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management science*, 35(8), 982-1003.
- Denny, R. K., Epstein, M. H., & Rose, E. (1992). Direct observation of adolescents with serious emotional disturbance and their nonhandicapped peers in mainstream vocational education classrooms. *Behavioral Disorders*, 18(1), 33-41.
- Doyle, W. (1986). Classroom organization and management. Handbook of research on teaching, 3, 392-431.
- Ehiobuche, C., & Justus, B. (2016). Digital Natives And Critical Thinking Towards An Understanding Of The Role Of Social Media In Shaping The Essence Of Critical Thinking As A Dimension Of Learning. *Global Education Journal*, 2016(2).
- Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational psychologist*, *36*(2), 103-112.
- Emmer, E. T., Evertson, C. M., & Anderson, L. M. (1980). Effective classroom management at the beginning of the school year. *The elementary school journal*, 80(5), 219-231.
- Evertson, C. M., & Weinstein, C. S. (2006). Handbook of Classroom Management: Research. *Practice and Contemporary Issues. Mahwah NJ*.
- Ferreira, J. B., da Rocha, A., & da Silva, J. F. (2014). Impacts of technology readiness on emotions and cognition in Brazil. *Journal of Business Research*, 67(5), 865-873.

- Freiberg, H. J., Stein, T. A., & Huang, S. Y. (1995). Effects of a classroom management intervention on student achievement in inner-city elementary schools. *Educational Research and Evaluation*, 1(1), 36-66.
- Gunter, P. L., & Denny, R. K. (1996). Research issues and needs regarding teacher use of classroom management strategies. *Behavioral Disorders*, 22(1), 15-20.
- Gunter, P. L., Denny, R. K., Jack, S. L., Shores, R. E., & Nelson, C. M. (1993). Aversive stimuli in academic interactions between students with serious emotional disturbance and their teachers. *Behavioral Disorders*, 18(4), 265-274.
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- He, B., Puakpong, N., & Lian, A. (2015). Factors affecting the normalization of CALL in Chinese senior high schools. *Computer Assisted Language Learning*, 28(3), 189-201.
- Hsu, C. K. (2015). Learning motivation and adaptive video caption filtering for EFL learners using handheld devices. *ReCALL*, 27(1), 84-103.
- Hsu, H. Y., Wang, S. K., & Comac, L. (2008). Using audioblogs to assist English-language learning: An investigation into student perception. *Computer Assisted Language Learning*, 21(2), 181-198.
- Huang, H. C. (2015). From web-based readers to voice bloggers: EFL learners' perspectives. *Computer Assisted Language Learning*, 28(2), 145-170.
- Hubbard, P., & Levy, M. (Eds.). (2006). *Teacher education in CALL* (Vol. 14). John Benjamins Publishing.
- Humble-Thaden, B. (2011). Student reflective perceptions of high school educational cell phone technology usage. *Journal of Technology Studies*, *37*(1), 10.
- Jaafar, M., Aziz, A. R. A., Ramayah, T., & Saad, B. (2007). Integrating information technology in the construction industry: Technology readiness assessment of Malaysian contractors. *International Journal of Project Management*, 25(2), 115-120.
- Jack, S. L., Shores, R. E., Denny, R. K., Gunter, P. L., DeBriere, T., & DePaepe, P. (1996). An analysis of the relationship of teachers' reported use of classroom management strategies on types of classroom interactions. *Journal of Behavioral Education*, 6(1), 67-87.
- Jones, V. F., & Jones, L. S. (2004). Comprehensive classroom management: Creating communities of support and solving problems. Pearson/Allyn and Bacon.
- Knitzer, J., Steinberg, Z. D., & Fleisch, B. (1990). *At the schoolhouse door: An examination of programs and policies for children with behavioral and emotional problems*. Bank Street College of Education.
- Kounin, J. S. (1970). Observing and Delineating Technique of Managing Behavior in Classrooms. *Journal of Research and Development in Education*.
- Kubiatko, M. (2010). CZECH UNIVERSITY STUDENTS'ATTITUDES TOWARDS ICT USED IN SCIENCE EDUCATION. Journal of Technology and Information Education, 2(3), 20.

- Larrivee, B. (2005). Authentic classroom management: Creating a learning community and building reflective practice. Pearson Allyn and Bacon.
- Lee, L. (2009). Promoting intercultural exchanges with blogs and podcasting: A study of Spanish–American telecollaboration. *Computer Assisted Language Learning*, 22(5), 425-443.
- Levy, M., & Caws, C. (2016). CALL design and research. Language-Learner Computer Interactions, 89.
- Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children*, *31*(6), 1.
- Lin, S. F., Lin, C. L., & Lee, D. C. (2015). THE RELATIONSHIP BETWEEN ELEMENTARY SCHOOL TEACHERS'TECHNOLOGY READINESS AND INTENTION TO USE SOCIAL MEDIA PLATFORMS FOR CLASSROOM MANAGEMENT. International Journal of Organizational Innovation, 8(1).
- Marzano, R. J., Marzano, J. S., & Pickering, D. (2003). *Classroom management that works: Research-based strategies for every teacher*. ASCD.
- Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of Facebook. Computers & Education, 55(2), 444-453.
- McCaslin, M., & Good, T. L. (1998). Moving beyond Management as Sheer Compliance: Helping Students to Develop Goal Coordination Strategies. *Educational Horizons*, 76(4), 169-76.
- McLoughlin, C., & Lee, M. J. (2011). Pedagogy 2.0: Critical challenges and responses to Web 2.0 and social software in tertiary teaching. In Web 2.0-based e-learning: Applying social informatics for tertiary teaching (pp. 43-69). IGI Global.
- Mei, B., Brown, G. T., & Teo, T. (2018). Toward an understanding of preservice English as a Foreign Language teachers' acceptance of computer-assisted language learning 2.0 in the People's Republic of China. *Journal of Educational Computing Research*, *56*(1), 74-104.
- Meuter, M. L., Bitner, M. J., Ostrom, A. L., & Brown, S. W. (2005). Choosing among alternative service delivery modes: An investigation of customer trial of self-service technologies. *Journal of marketing*, 69(2), 61-83.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record*, *108*(6), 1017-1054.
- Neumann, C. (2016). Teaching Digital Natives: Promoting Information Literacy and Addressing Instructional Challenges. *Reading Improvement*, 53(3).
- O'Neill, S., & Stephenson, J. (2012). Does classroom management coursework influence preservice teachers' perceived preparedness or confidence?. *Teaching and teacher education*, 28(8), 1131-1143.
- Pai, F. Y., & Yeh, T. M. (2014). The effects of information sharing and interactivity on the intention to use social networking websites. *Quality & Quantity*, 48(4), 2191-2207.

- Peters, J. H. (2012). Are they ready? Final year pre-service teachers' learning about managing student behaviour. *Australian Journal of Teacher Education*, *37*(9), 2.
- Prensky, M. R. (2012). From digital natives to digital wisdom: Hopeful essays for 21st century *learning*. Corwin Press.
- Rahimi, M. (2011). The impact of computer-based activities on Iranian high-school students' attitudes towards computer-assisted language learning. *Procedia computer science*, *3*, 183-190.
- Rydell, A. M., & Henricsson, L. (2004). Elementary school teachers' strategies to handle externalizing classroom behavior: A study of relations between perceived control, teacher orientation and strategy preferences. *Scandinavian Journal of Psychology*, 45(2), 93-102.
- Shook, A. C. (2012). A study of preservice educators' dispositions to change behavior management strategies. *Preventing School Failure: Alternative Education for Children* and Youth, 56(2), 129-136.
- Shores, R. E., Gunter, P. L., & Jack, S. L. (1993). Classroom management strategies: Are they setting events for coercion?. *Behavioral Disorders*, *18*(2), 92-102.
- Shores, R. E., Jack, S. L., Gunter, P. L., Ellis, D. N., DeBriere, T. J., & Wehby, J. H. (1993). Classroom interactions of children with behavior disorders. *Journal of Emotional and Behavioral Disorders*, 1(1), 27-39.
- Smart, J. B., & Igo, L. B. (2010). A grounded theory of behavior management strategy selection, implementation, and perceived effectiveness reported by first-year elementary teachers. *The Elementary School Journal*, 110(4), 567-584.
- Smith, D. J., Young, K. R., Nelson, J. R., & West, R. P. (1992). The effect of a self-management procedure on the classroom and academic behavior of students with mild handicaps. School Psychology Review.
- Stanley, G. (2013). *Language learning with technology: Ideas for integrating technology in the classroom*. Cambridge University Press.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *The future of children*, *18*(1), 119-146.
- Summak, M. S., & Baglibel, M. (2012). Technology readiness segmentation of teachers: A case from Turkey. *Energy Education Science and Technology Part B-Social and Educational Studies*, 4(2), 857-866.
- Tan, S., & Zhang, F. (2018). Computer-enhanced and mobile-assisted language learning: emerging issues and trends. *Journal of Foreign Language Education and Technology*, 3, 2.
- Taylor, S. A., Celuch, K., & Goodwin, S. (2002). Technology readiness in the e-insurance industry: an exploratory investigation and development of an agent technology e-consumption model. *Journal of Insurance Issues*, 25(2), 142-165.
- Thomas, M. (Ed.). (2009). *Handbook of research on Web 2.0 and second language learning*. IGI Global.

- Unal, Z., & Unal, A. (2017). Comparison of student performance, student perception, and teacher satisfaction with traditional versus flipped classroom models. *International Journal of Instruction*, 10(4), 145-164.
- Vrasidas, C., Zembylas, M., & Glass, G. V. (Eds.). (2009). ICT for education, development, and social justice. IAP.
- Walberg, H. J., & Paik, S. J. (2000). Effective educational practices (Vol. 3). *Genf, Schweiz: International Academy of Education/International Bureau of Education.*
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of educational research*, 63(3), 249-294.
- Wang, S., & Vásquez, C. (2012). Web 2.0 and second language learning: What does the research tell us?. CALICO journal, 29(3), 412-430.
- White, M. A. (1975). Natural rates of teacher approval and disapproval in the classroom. *Journal of Applied Behavior Analysis*, 8(4), 367-372.
- Woodcock, S., & Reupert, A. (2012). A cross-sectional study of student teachers' behaviour management strategies throughout their training years. *The Australian Educational Researcher*, 39(2), 159-172.
- Yusuf, M. O., & Balogun, M. R. (2011). Student-teachers' competence and attitude towards Information and communication technology: A case study in a Nigerian University. *Contemporary educational technology*, 2(1), 18-36.