

RESEARCH REPORT



A Qualitative Study on Teachers' Perception of Technology Adoption in Japan

Dra. Cecilia Titiek Murniati, MA., Ph.D
NIDN 0622096701
NPP 058.1.1996.204

FACULTY OF LANGUAGE AND ARTS
SOEGIJAPRANATA CATHOLIC UNIVERSITY

2018

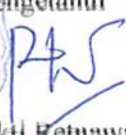
HALAMAN PENGESAHAN
PENELITIAN INTERNAL UNIKA SOEGLJAPRANATA


1. Judul Penelitian	:	A Qualitative Study of Teacher's Perception of Technology Adoption in Japan	
2. Kode>Nama Rumpun Ilmu	:	798/Teknologi Pendidikan	/
3. Ketua Peneliti			
a. Nama Lengkap	:	Dra. Cecilia Titiek Murniati, MA., Ph.D	L/P
b. NIDN	:	0622096701	
c. Jabatan Fungsional	:	Lektor	
d. Program Studi	:	Sastra Inggris	
e. Nomor HP	:	081391325263	
f. Alamat surel (e-mail)	:	c_murniati@unika.ac.id	
4. Anggota Peneliti (1)			
a. Nama Lengkap	:		
b. NIDN	:		
c. Perguruan Tinggi	:		
5. Anggota Peneliti (2)			
a. Nama Lengkap	:		
b. NIDN	:		
c. Perguruan Tinggi	:		
6. Anggota Peneliti (ke-3)			
a. Nama Lengkap	:		
b. NIDN	:		
c. Perguruan Tinggi	:		
7. Lama Penelitian Keseluruhan	:	7 bulan/tahun	
8. Biaya Penelitian Keseluruhan	:	Rp. 1.350.000,-	
9. Biaya Penelitian			
- dana internal PT	:	Rp. 1.350.000,-	
- dana institusi lain	:	Rp.	/ in kind tuliskan :


Dekan/Ketua Progdi

Angelika Riyandari, Ph.D
NPP. 058.1.1996.201


FAKULTAS BAHASA DAN SENI

Mengetahui

Dr. Berta Bekt Retnawati, M.Si
NPP. 058.1.1998.219


LEMBAGA PENELITIAN
PENGABDIAN KEPADA MASYARAKAT

Ketua Peneliti

Dr. Cecilia Titiek Murniati, MA., Ph.D
NPP. 058.1.1996.204

**BERITA ACARA
REVIEW PENELITIAN FAKULTAS BAHASA DAN SENI**

Pada hari ini Senin tanggal 2 bulan Juli tahun 2018 telah dilaksanakan review (I/II/III *) penelitian Fakultas.

Judul : A Qualitative Study of Teacher's Perception of Technology Adoption in Japan

Ketua Peneliti : Cecilia Titiek Murniati, Ph.D
Reviewer : Dr. Heny Hartono, SS, M.Pd

RUBRIK PENILAIAN PROPOSAL

POIN PENILAIAN	PROSEN TASE	NILAI*	CATATAN
Perumusan Masalah	20%	81	
Metodologi	20%	82	
Urgensi Penelitian	20%	82	
Kaitan Penelitian Dengan Rekam Jejak	25%	80	
Kaitan dengan penelitian mahasiswa	15%	70	
TOTAL		79.5	

* Skala penilaian 60 – 100

Berdasarkan hasil review perlu / tidak perlu *) adanya perbaikan sesuai dengan catatan terlampir.

Usulan perbaikan

Penelitian sudah terlaksana dengan baik. Untuk pelaporan mohon untuk lebih konsisten dalam penggunaan kata ganti "I", atau "we" yang merujuk pada peneliti.

Demikian Berita Acara ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Semarang, 2 Juli 2018
Reviewer,



SURAT-TUGAS

Nomor : 0174/B.7/FBS/VII/2018

Dekan Fakultas Bahasa dan Seni Universitas Katolik Soegijapranata Semarang dengan ini memberikan tugas kepada :

- Nama** : Cecilia Titiek Murniati, Ph.D.
- Status** : Tenaga Edukatif Fakultas Bahasa dan Seni Universitas Katolik Soegijapranata Semarang
- Tugas** : Melakukan Penelitian dengan judul " **Qualitative Study Of Teacher's Perception of Technology Adoption in Japan** ".
- Waktu** : Tahun Genap 2017/2018
- Tempat** : Indonesia dan Jepang.
- Lain-lain** : Harap melaksanakan tugas dengan sebaik-baiknya dan penuh tanggung jawab.

Semarang, 11 Juli 2018
Dekan

Angelika Riyandari, Ph.D
NPP. 058.1.1996.201



Telah melaksanakan tugas,

(_____)

ABSTRACT

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Technology is indeed a powerful tool for teaching and learning a subject matter. Many studies have found that technology is beneficial for students' learning process. Younger generations nowadays are more technology savvy than their predecessors. Thus, the opportunities of the integration of technology in teaching and learning process are abundant. Technology often serves as a catalyst for learning.

This study is a qualitative study on teachers' perception of technology adoption. The participants of this study were English teachers in a Japanese university and a high school. The purposes of this study are to examine how teachers use technology for language learning, the perceived benefits and downsides of technology for language learning and what the challenges are in adapting technology in language classrooms. To collect data, the writer interviewed five English teachers.

The findings of the study suggest that teachers used various forms of digital technology, mobile applications, and gadgets to teach in their language classrooms. The participants of this study Technology provides several benefits for learners. It can make students independent, creative, and fluent. On the contrary, technology has downsides. It is time consuming and costly. In Japan, lack of internet access in schools and confidentiality were some of the biggest concerns for teachers when they would like to adopt technology in their classrooms.

Keywords: ICT, technology, adoption, perception, English-skill-related activities

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CHAPTER 1

INTRODUCTION

1.1 Background

Scholars mostly agree that technology is a powerful tool for teaching and learning a subject matter (Robin, 2008). Despite the inconclusive evidence on the effectiveness of technology for academic achievement, young generations, especially Z generations or the centennials continue to use technology in their daily life. This trend is likely to increase in the near future as more and more people have access to cheaper and various technological tools to help them accomplish their goals.

Literature on the impact of technology for learning suggested that technology is a tool that teachers and students can use to increase motivation, arouse interest, and increase student engagement. In addition, Hoban et al. (2011) stated that technology often serves as a catalyst for learning. Technology makes it possible for learners to create content and become a producer of knowledge. Instead of using technology to obtain information, students have more opportunities to use technology collaboratively or individually to create and share their knowledge.

Digital technology makes it possible for teachers and students to integrate a range of modes to visualize a concept. Some examples of such modes of representations are models, simulations, digital storytelling, and games. In the classroom, the key to the successful implementation of technology is the teachers. Teachers have to be familiar with the latest technology and be skillful in using the latest technology. They have to be confident and motivated in order to be able to find ways to implement technology in their classroom. However, not many teachers receive sufficient trainings on technology as well as support (Van Horne et. al. 2016).

Considering the important role of teachers in the integration of technology for language learning, this study will investigate teachers' perception of the use of technology to learn a language in Japan. Japan is considered as one of the most developed countries. Technological development in Japan surpasses technological development in other Asian countries. To date, many studies on technology were conducted in the West. However, there is a lack of studies conducted in Asian countries including Japan. Therefore, this study is necessary to better understand how Japanese teachers use technology in teaching and learning.

1.2 Research Questions

This study intends to address the following research questions:

- a. How do teachers use technology for language learning?
- b. What are the perceived benefits and downsides of technology for language learning?
- c. What are the challenges in adapting technology in language classrooms?

1.3 Purposes of the Study

The purposes of this study are to

- a. Examine how teachers use technology for language learning
- b. To investigate the perceived benefits and downsides of technology for language learning?
- c. To find out to what the challenges are in adapting technology in language classrooms.

1.4 Scope of the Study

This study will discuss to use of various forms of digital technology in language classrooms in a Japanese university and in a high school.

1.5 Significance of the Study

The study will contribute to the scholarly discussion of the integration of technology to learn a foreign language. Given that this study will focus on teachers' perception of technology, it will add some knowledge of the potential implementation of technology in the school curriculum.

CHAPTER 2

REVIEW OF LITERATURE

2.1 The role of technology in learning

In the field of foreign language learning a lot of research on the role technology in language learning has been done. Many experts are doing research to investigate the extent to which technology is effective in assisting foreign language learners. The study shows that technology has little effect of learning. However, many studies show that the use of technology has many advantages, especially if the material is designed in such a way that there is a match between the objectives of the subject, the learning style of the students, the technology used, and the situation in which the learning was done (Alessi & Trollip, 2001). For example, technology will greatly help the subjects in need simulation (flight school), individual learning (language learning), eyes lessons requiring special logistics (physical or chemical experiments), or lessons which requires a high interest and motivation (world history) because of technology generates interest and a positive attitude to the material being studied. Furthermore they said "Multimedia technology has the potential and functionality to hold enjoyment for the users compared to that of a standard textbook. Any learning or teaching should be associated with the feelings of pleasure and enjoyment instead of boredom or fear "(page 10). Proponents of constructive learning theory say that to keep in mind in the use of multimedia in learning is that technology is used as a tool for learning, "where its role is to provide a" space "in which learning takes places, to store the results of learner's activity, and to take care of the time-consuming tasks that detract from learning ... "(Alessi & Trollip, 2001, p. 6).

2.2 The adoption of technology in classroom

The adoption of technology in classrooms are extremely varied and limited. Many factors account for the successful adoption of technology in the classroom. These barriers can be categorized as internal and external factors. Internal factors affecting the adoption of technology come from students and teachers themselves. Many studies indicate that one of the most crucial factors in the adoption of technology is teachers' pedagogical beliefs (Chen, 2008; Christensen, 2002; Deng et al. 2014; Inan and Lowther 2010). Teachers are willing to integrate technology in their classroom if they believe in the effectiveness and the usefulness of technology. Teachers' conception of what is considered 'good' teaching practice will be key in determining whether technology is adopted as an integral part in the curriculum. Teachers and students' lack of basic knowledge of ICT integration is key in the adoption of technology (Özdemir, 2017)

The external factors influencing the integration of technology include lack of support, lack of training, insufficient managerial support, and lack of infrastructure are the most frequently cited factors determining the successful adoption of technology in classrooms (Özdemir, 2017; Tondeur et al., 2016). This is particularly true in many developing countries since many schools do not have access to internet connection or access to technology.

CHAPTER 3

METHODOLOGY

3.1 Population and Sample

The population of this study was teachers in a Japanese university and high school. The participants were selected based on convenient sampling. The researcher contacted some English teachers who agreed to participate in the study. There were five teachers who agreed to be interviewed.

3.2 Instrument

This study is a qualitative study. The data for this study were collected through interviews. The researcher used an interview guide to help guide the direction of the interviews. She used structured interviews. In order to ensure that the interview questions are good, she tested the questions by asking several students in her department.

3.3 Data collection

This study focuses on teacher's perception of the use of technology in language classrooms. To obtain responses from teachers, the researcher asked permission from the Dean of the English Department and the language coordinator of Nagoya High School.

3.4 Data analysis

After we completed the interviews, we downloaded and transcribed the audio files. To make transcribing easier we used Express Scribe, a free transcription software program, to facilitate transcription of the audio files. The program allowed us to use foot pedals and a headset in transcribing several hours of interviews easily and quickly. When we finished gathering the data

for our study, we coded all interview and looked for emerging patterns in the data such as teachers' perception of the use of technology, the perceived benefits and downsides of the technology, the challenges of technology adoption.

CHAPTER 4

FINDINGS AND DISCUSSION

4.1. How teachers use technology for language learning

From the interviews, the writer found that many English teachers used the most common types of digital technology such as videos, images, power point, and other Microsoft Office applications. Not many teachers used mobile applications available in Google Play or App Store. Out of the five teachers, two of them used an application called Study Plan in their Independent Study class. One of the teachers, Kagawa, said that some mobile applications are very useful to keep track of students' learning management. He asked students to download study plan in App Store. In this application, students could record how many hours they spend time studying, reading, having entertainment and other activities. Students had to be very honest because this application is used to make a learning reflection. Kagawa is one of the teachers in this study who seemed very enthusiastic in using technology. He said that he would like to motivate students to be independent learners and to be proud of what their work. In one of his classes, he asked students to create a mobile application. Initially students felt that it was a difficult task but later on they were happy to see their completed product. Students felt proud that they could actually create an application. Even though the applications that the students created were not uploaded in App Store, the students felt encouraged and happy that they learned something new. Many applications related to English language are available for free in Google Play or App Store. One of the teachers, Ben, in a university asked students to download an application to practice TOEIC. Ben wanted students to do independent study at home. The application that students could download was very useful in learning vocabulary in TOEIC test. Many teachers used the

most common digital technology because they are readily available. They did not use mobile applications because of limited Internet connection. One teacher, John, said,

It's very difficult to use technology here, to tell you the truth, because we don't actually have wifi in most classrooms. Yeah, I think it's difficult really. This is the only room in this school where we can get reliable wifi. When we want to use technology, we have to use our own smartphones projected to the TV screen (John, personal interview).

In order to engage students, teachers did use technology such as showing videos or creating interactive power point so that students can showcase their works. Teachers often gave assignments by asking students to do research. Teachers gave students websites to look for information for their particular topics.

Another common type of assignment using technology is the use of videos, emails, and video conferencing. Teachers liked to use these types of technology because they are in control of the substance and levels of English that are appropriate for their students. Video conferencing and emails were used mostly to give language exposure to students. For instance, teachers assigned students to email someone in a company in the Philippines or Taiwan.

Microsoft Office applications such as power point are used mostly in courses where teachers had to deliver a lot of content materials. In language skill classrooms, teachers did not have to use power point because they focused on the development of students' communicative skills. Thus, they gave classrooms assignments where students could interact with one another without having to use various forms of technologies.

4.2. The perceived benefits and downsides of technology for language learning

The interviews with five teachers showed that technology can bring about many advantages and disadvantages for learners if the teachers cannot use it wisely in their classes. All teachers agreed that technology is beneficial if teachers use it properly. The most commonly-cited benefits of technology for teachers are:

Technology can encourage students to become independent learners

Some teachers who taught independent study courses or skill courses used various forms of digital media and social media for independent learning. Aaron, one of the teachers in the university, commented

In my TOEIC classes, I used an application, a free application that can be downloaded from Appstore. Students can use the application to learn vocabulary for their TOEIC test.

Kagawa, who taught Independent Courses, used an application to track students' learning habit. By using the application, he wanted the students to track their activities, especially activities related to learning. He further stated that students needed to manage their time well, especially because in independent study classes the teachers are merely facilitators. Student's success was dependent on their effort in improving their language skills independently.

Technology can encourage students to become more creative.

Some teachers express their agreement that digital technology and social media are powerful tools to make students more creative. Some class assignments made use of technology such as iPads, video conferencing tools, voice recorders, video, audio, or other types of digital technology to encourage students to become a creator. For example, in Aaron's class, students

use iPads to “fruitpicking” activities. In those activities students were required to create a plan for picking fruits across Australia. Aaron said that students often came up with very creative plans. Another teacher, Kawaga, assigned students to create a mobile application. Regardless of their difficulties in writing the codes for the application, the students felt proud that they could create a mobile application.

Technology can help students develop various language skills

All teachers expressed their agreement that technology is helpful for students in language classrooms as long as teachers know how to use it well to reach the objectives of the course. Many teachers stated that they were willing to incorporate technology as long it helps students to become a more fluent learner. Many of the applications they used were carefully integrated into the lesson plans so that students can have the utmost benefit. Many of them taught skill courses and they said that the teaching goals are the most important. Technology was a tool to help students reach the goals.

While many teachers reported the benefits of technology, they also suggested that technology can sometimes hinder the flow of the class if not handled and managed ahead of time. Some of the most commonly-cited disadvantages of technology are:

Time consuming

Time consuming is one of the most common responses from the participants. Many of them said that using technology can be time consuming if teachers are not familiar with it. Indeed, everyday many mobile applications, software, and gadgets are available for free. However, teachers and students need to spend time to be familiar with them.

Costly

In Japan, even though its high speed internet connection ranks 4th among Asian countries (Akamai Report, 2017), many schools in Japan have limited internet connections that students and teachers can use. This becomes a big obstacle for teachers and students when they want to use technology because they had to depend on their own internet data. Teachers are reluctant to resort to this because they were wary that parents may not agree if their children spend a lot of money to buy internet data.

4.3. The challenges in adopting technology in language classroom

The findings of this study indicate that Internet connection and confidentiality are some of the barriers in adopting technology in language classrooms. Limited Internet connection was said to be a common problem in schools. Teachers who would like to use technology would have to ask students to use their own Internet data. Even in a classroom where students could enjoy free Internet connection, teachers had to be very careful in implementing technology. One of the high school teachers, Ken, reported that during a video conference event with another high school event, the connection crashed because too many students logged in at the same time,

We had technical difficulties the first few times... First time, we had forty students. Everyone logged on at the same time and then it crashed. And now we had five students logged on and the net another five students logged on and so on (Ken, personal interview).

High school administrators had technicians to help the process of video conferencing go smoothly. Schools also provided laptops that students could use during the video conferencing.

Another barrier in adopting technology is confidentiality. John, a high school teacher, indicated that teachers had to be really careful in giving assignments such as uploading videos in YouTube because high school students are underage.

With high school students we have to be a little bit careful about social media or things like that because they are still children. In Japan you are considered children if you are under twenty one. Social media is always the one that we have to be really careful about. Some of the things that we would like to do are difficult to accomplish because we have to be really careful. They are not adults, you know (John, personal interview).

CHAPTER 5

CONCLUSIONS AND SUGGESTIONS

5.1. Conclusion

This study attempts to examine how teachers use technology for language learning, the perceived benefits and downsides of technology for language learning and what the challenges are in adapting technology in language classrooms. The findings of the interviews indicate the following conclusions:

- a. Teachers have used various forms of digital technology, mobile applications, and gadgets to teach in their language classrooms.
- b. Technology provides several benefits for learners. It can make students independent, creative, and fluent. On the contrary, technology has downsides. It is time consuming and costly.
- c. In Japan, lack of internet access in schools and confidentiality were some of the biggest concerns for teachers when they would like to adopt technology in their classrooms.

5.2 Suggestions

This study is preliminary study attempting to find out the adoption of technology in a Japanese university and high school. This study is limited for a number of reasons. Only five participants agreed to do the interviews. During the data collection, many high school teachers were busy marking students' test. Thus, many of them could not come to the interviews. In the university, most teachers had busy schedules. Only three teachers were willing to do the interviews. Even then, they did not have a lot of time for the interviews. Each interview lasted about one hour. Thus, the data we collected were far from sufficient for a qualitative study. Future studies require longer interviews and more participants in order to yield better findings. In addition, quantitative

study on this topic might be interesting if time and funding permit. Qualitative study might reveal interesting findings related to barriers and challenges for technology adoption in language classrooms.

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