PRE-SERVICE TEACHERS' COMPUTER LITERACY SKILLS ON TEACHING PRACTICE 1 CLASS IN ENGLISH TEACHER EDUCATION DEPARTMENT AT UIN SUNAN AMPEL SURABAYA

THESIS

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ABSTRACT

Rozi, Fuad Habib Ar. (2018). *Pre-Service Teachers' Computer Literacy Skills on Teaching Practice 1 Class in English Teacher Education Department at Uin Sunan Ampel Surabaya*. A thesis. English Teacher Education Department, Faculty of Tarbiyah and Teacher Training, Universitas Islam Negeri Sunan Ampel Surabaya. Advisor I: Rizka Safriyani, M.pd, Advisor II: H. Mokhamad Syaifudin, M.Ed, Ph.D

Key Words: *computer literacy, teaching practice 1, multimedia presentation*

Computer is a common tool for college students nowadays. They often do the task and assignments with computer. For the students of English Education Department, the utilization of computer has been implemented in some courses. There is a course called teaching practice 1 where the students become pre-service teacher and teach their peer in the classroom. This course required students to make lesson plan and media. Majority of the pre-service teachers are use multimedia presentation as their media or just to support the teaching because it is easy and fast to make. To make multimedia presentation, pre-service teachers need computer literacy skill. There are three levels in computer literacy skill based on *'Maryland Technology Literacy Standards for Student'*, there are: basic, intermediate and proficient. Every level has their own criteria. The participants of this research are pre-service teachers of English teacher Education Department in year 2017/2018. The researcher use two instruments, there are online checklist and interview. Then, the researcher use descriptive qualitative method to describe the results. To analyze the data, the researcher use coding. The results showed that 62.20% of pre-service teachers computer literacy levels in 'creating multimedia presentations' are in intermediate level. Meanwhile, the 20% of pre-service teachers were in basic level and the rest 17.30% pre-service teachers are in the proficient level. In total, there are 45 pre-service teachers who participated in the survey. Thus, the results of the interview of 20 pre-service teachers showed that computer literacy help pre-service teachers in explaining the lesson, help the visual learner and control the class. It also supports them in selecting the suitable picture for their presentation and enhancing their visual literacy.

ABSTRAK

Rozi, Fuad Habib Ar. (2018). *Pre-Service Teachers' Computer Literacy Skills on Teaching Practice 1 Class in English Teacher Education Department at Uin Sunan Ampel Surabaya*. Skripsi. Pendidikan Bahasa Inggris, Fakultas Tarbiyah dan Keguruan, Universitas Islam Negeri Sunan Ampel Surabaya. Pembimbing I: Rizka Safriyani, M.pd, Pembimbing II: H. Mokhamad Syaifudin, M.Ed, Ph.D

Kata Kunci: *computer literasi, PPL 1, multimedia presentsasi*

Komputer adalah barang yang biasa digunakan oleh mahasiswa sekarang ini. mereka sering mengerjakan tugas dan ujian dengan komputer. Pada mata kuliah PPL 1 (Praktik Pengalaman Lapangan 1) dimana mahasiswa menjadi guru dan mengajar teman mereka didalam kelas. Mata kuliah ini mengharuskan mahasiswa untuk membuat RPP dan media pembelajaran. Mayoritas guru menggunakan multimedia presentasi sebagai media mereka atau hanya sebagai pendukung pembelajaran dikarenakan mudah dan cepat. untuk membuat multimedia presentasi, guru memerlukan kemampuan komputer literasi. ada tiga tingkatan dalam kemampuan komputer literasi berdasarkan '*Maryland Technology Literacy Standards for Student*', yaitu:dasar, menengah, ahli. Setiap tingkatan memiliki kriteria masing-masing. Peserta dalam penelitia ini adalah guru PPL 1 jurusan Pendidikan Bahasa Inggris tahun 2017/2018. Peneliti menggunakan dua instrumen penelitian, yaitu ceklis dan interview. Lalu, peneliti menggunakan metode deskripsi kualitatif untuk menuliskan hasilnya. Untuk menganalisa data, peneliti menggunakan koding. Hasil menunjukkan bahwa 62.20% dari kemampuan komputer literasi guru dalam membuat multimedia presentasi berada dalam level dasar. Sementara itu, 20% guru berada dalam level menengah dan sisanya 17.30% guru berada pada level ahli. Total ada sejumlah 45 guru mengikuti survei tersebut. Lalu, hasil dari interview dengan 20 guru menunjukkan bahwa kemampuan komputer literasi membantu guru dalam menjelaskan materi, membantu siswa yang mempunyai gaya belajar visual dan dapat membuat kelas menjadi terkontrol. Hal tersebut juga dapat membantu mereka memilih gambar yang tepat untuk presentasi dan meningkatkan kemampuan visual literasi guru.

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CHAPTER I

INTRODUCTION

A. Background of the Study

Nowaday's computer is a common tools that used by human on their daily lives. According to Elena Silva's journal entitled *Measuring Skills for 21st-Century Learning*, 21st century skills is a real issues for new worker in this century in order to be able acquire a set of skills needed for the requirement of certain job. The essence of 21st century skills is on what students can do with knowledge, rather than what knowledge they have. There are many skills covered on 21st century skills including individual skills, life skills, workforce skills, interpersonal skills, applied skills, and noncognitive skills. Being advanced in computer is part of the individual skill.[1] Therefore, todays computer cannot be apart from humans daily life as it has improved the efficiency and productivity of work. Computer can help them to do their work very fast, efficient and better way, it also help them to share the same knowledge with other people.

Talking about computer, it has a correlation with internet as a provider of various source of authentic materials (e.g. newspaper, magazine articles, radio broadcasts , short videos, movie reviews, book excerpts) and millions of necessary file for EFL. The utilization of internet also provides an environment where students can feel the natural communication through the real experience.[2] This environment makes the students can feel the real-time communication easily. People from different nations can easily communicate with each other, allowing for them the exchange new ideas and views. Students will get the application of language especially English in a context directly. Moreover, they do not have to face each other to communicate and they can do it flexibly anytime and anywhere. College students are heavy users of the internet compared to the general population. The use of the internet is a part of college students daily routine, in part because they have

[1] Elena Silva, *Measuring Skills for 21st-Century Learning*, vol. 90, no. 9 (2009), pp. 630–631, http://journals.sagepub.com/doi/abs/10.1177/003172170909000905?journalCode=pdka.

[2] Soulef Boulmerka, *Internet Use in EFL Classrooms An Investigation of Teachers 'Attitudes and Concerns in The Teacher Training School of Constantine*, p. 19.

grown up with computers. It is integrated into their daily communication habits and has become a technology as ordinary as the telephone or television.[3] Students of English Teacher Education Department are very familiar with computer. On daily basis, students use it for doing assignments related to typing and editing word documents or making presentation files. Moreover, they also read learning resources and reading materials on their computer. However, there is more requirement beyond just be able to operate computer in a basic way. Students' of English Teacher Education Department needs deep understanding about computer in depth to get achievement for better competency especially in teaching.

Based on the journal on in-service teachers of EFL at Indonesian schools and universities entitled "*Computer Literacy and Competency: A Survey of Indonesian Teachers of English as a Foreign Language"* that were done by Son, Robb and Charismiadji, the self-rated computer literacy competency is not equal to actual levels of the knowledge of using variety of applications.[4] They have limited skills on using few types of applications such as word processing. Otherwise, their self evaluation of basic computer skills are generally high. The finding proves that todays teacher only able to operate computer but only limited on few of application. However, they show the positive attitude towards the use of computer for teaching. Therefore, pre-service English teacher should be ready of their competency about computer literacy.

The term computer literacy can be considered to mean the minimum knowledge, know-how, familiarity, capabilities, abilities, and so forth, about computers essential for a person to function well in the contemporary world.[5] Simply says that computer literacy is the knowledge of knowing how to use computer or running a program. Computer literacy involves learning how to access information and perform basic operations on a computer. It can be understood in the same way that traditional literacy applies to print media. However, because computers are much more advanced than print media in terms of access, operation and overall use, computer literacy

[3] Steve Jones, *The Internet Goes to College* (2002), p. 3.
[4] Jeong-Bae Son, Thomas Robb, and Indra Charismiadji, *Computer Literacy and Competency: A Survey of Indonesian Teachers of English as a Foreign Language*.
[5] Ronni Lynne Rosenberg, *Computer Literacy Education* (Cambridge: Massachusetts Institute of Technology, 1989), p. 17.

includes many more types of cognitive and technical skills, from understanding text and visual symbols, to turning devices on and off or accessing parts of an operating system through menus.

In addition, the development of technology nowadays is very fast, no exeption in education. Furthermore, the teacher should be able to compete on creating the creative teaching media for students needs in this recent time. Nowadays, students are become digitally literate due the development of technology and the teacher should not be left behind. Thus, the teacher must have good computer literacy to support them when teaching. That is why student of English Teacher Education Department as the pre-service teachers should have good computer literacy. In line with the vision of UIN Sunan Ampel Surabaya to become the world class university, the students are demanded to be able to operate technology especially computer well.

English Teacher Education Department of UIN Sunan Ampel Surabaya students have been familiar with technology in ELT. Many lectures use LMS (Learning Management System) such as schoology, edmodo, etc as the tool for the learning. On the 6th semester, students of English Teacher Education Department are becoming pre-service teachers and do the teaching practice 1 in the classroom. Teaching practice 1 is a period that a pre-service teachers spends teaching at a classroom with their peer as part of their training. In this case, pre-service teachers are asked to create a lesson plan and media based on the skills and levels they already got. The time allocation they get is 20 minutes per lesson. Consequently, pre-service teachers have to create the efficient and interesting media. In fact, most of them are use multimedia presentation such as power point as the media for their teaching practice to shorten the time so they can teach efficiently.

Peter, in his journal entitled *'Self-Efficacy Beliefs as an Indicator of Teachers' Preparedness for Teaching with Technology'* investigate the information technology in education has shifted towards curriculum integration.[6] Consequently, teacher education programs need to prepare graduates for teaching with IT. Graduates should possess both skills in the use of IT and belief in their capacity

[6] Peter R Albion, *Self-Efficacy Beliefs as an Indicator of Teachers' Preparedness for Teaching with Technology* (1999).

to integrate IT into teaching. The result suggests that teachers' self-efficacy beliefs about using technology for teaching are directly related to their practice. From the above research, it appears that teachers nowadays should be well practiced in the relation with technology and ready to use technology in teaching learning process.

In this research, the researcher would like to know the computer literacy skill in 'creating multimedia presentations' on pre-service teachers of English Teacher Education Department in Teaching Practice 1 class at Universitas Islam Negeri Sunan Ampel Surabaya. Then, researcher would investigate how does the pre-service teachers computer literacy skill support them in creating multimedia presentation on their Teaching Practice 1 class. The computer literacy levels are based on the *'Maryland Technology Literacy Standards for Student'*, there are three levels of computer literacy:basic, intermediate and proficient. Every level has their own criteria. Researcher determined 'creating multimedia presentations' from eight aspects of computer literacy skills based on the focus of this research. Hopefully, the results of this research can give information and concern about the urgency of computer literacy especially in 'creating multimedia presentations'.

This research was conducted on the 6th semester of English Teacher Education Department in teaching practice 1 class at Universitas Islam Negeri Sunan Ampel Surabaya. The data was based on the online checklist that given to the students. The online checklist is chosen due the limited time of teaching practice course of 6th semester in UIN Sunan Ampel Surabaya. Thus, from the data researcher described the result based on the checklist that has been filled by the students. Conducting a survey in this manner allowed the researchers to guarantee that the data is valid as the checklist asked questions regarding students computer literacy about certain aspects that might be considered as it.

B. Research Questions

Based on the research background above, the researcher formulates two research question to guide this research. The research questions are as follow:

1. What are the pre-service teachers' computer literacy skill levels in 'creating multimedia presentations' of English

Teacher Education Department Students on Teaching Practice 1 class at Universitas Islam Negeri Sunan Ampel Surabaya?

2. How does the pre-service teachers' computer literacy skill support them in creating multimedia presentation on their Teaching Practice 1 class?

C. Objectives of the Research

Based on the research question, the objectives of this study are:

1. To investigate student's computer literacy levels in 'creating multimedia presentations'.
2. To describe how the pre-service teachers' computer literacy skill support them in 'creating multimedia presentation' on their Teaching Practice 1 class.

D. Significance of the Research

To know more how the researcher gets the significance, here the researcher states below. This research is expected to give benefit for students, lecturer, and also the next researcher.

a. *For student/pre-service teachers*, this research is expected to give some information about computer literacy especially in 'creating multimedia presentations'. Furthermore, researcher hopes that students could explore the variety of software presentations in order to give more variation of multimedia presentation for their teaching.
b. *For the lecturer*, this research are expected to give some insight about strategies on developing Computer Literacy levels. With good computer literacy hopefully students able to create the media for teaching maximally and apply it as the innovative learning media on their teaching practice.

E. Scope and Limit of the Study

This research has the scope and limitation as follow:

a. Scope of the study
   The scope of this study are pre-service teachers computer literacy skill levels in 'creating multimedia presentations' and

how does their computer literacy skill support them in creating media on their Teaching Practice 1 class.

b. Limitation of the study

There are seven aspects covered computer literacy. However, this study is limited on 'creating multimedia presentations' aspect. This research focus on how pre-service teachers' computer literacy skill levels and how computer literacy skill support them in creating multimedia presentations on their Teaching Practice 1 class. This research was conducted on 6th semester students of Teaching Practice 1 class at English Teacher Education Department, UIN Sunan Ampel Surabaya during the 2017-2018 academic years.

F. Definition of Key Terms

The researcher writes down some definitions of key terms in order to support the readers understand this study easily and have the same interpretation as the writer.

1. Computer Literacy

Computer literacy is the minimum knowledge, know-how, familiarity, capabilities, abilities, and so forth, about computers essential for a person to function well in the contemporary world.[7] As the definition above the researcher defined computer literacy as the knowledge to operate computer. In this research, computer literacy means the students knowledge and ability to handle computers usage related to create multimedia presentation for teaching practice 1 course. This research investigates the pre-service teachers' computer literacy skill on using multimedia presentation software. There are three levels of computer literacy: basic, intermediate, proficient.

2. Teaching Practice

Teaching practice is the subject in Tarbiyah faculty for training teachers candidate that called pre-service teachers to do some practice in the constructive situational in the small classes that involve students as the teacher, fake students and

[7] Ronni Lynne Rosenberg, *Computer Literacy Education*, p. 17.

as the observer. This teaching practice is held in the 6th semester of teacher education especially in the English teacher education department.[8] Teaching practice will have the two circles in one semester. In this study, practice teaching class means first pre-service teachers training class, Praktek Pengalaman Lapangan I (PPL I), where students at English Teacher Education Department of UIN Sunan Ampel Surabaya, will practice to teach in front of their friends who are in same class with them. In another word, it is not a real teaching conducted on the real school and real students.

3. Multimedia Presentation

Multimedia can be described as "the combination of various digital media types, such as text, images, sound, and video, into an integrated multisensory interactive application or presentation to convey a message or information to an audience".[9] In the context of this research, multimedia presentations stands for the software based application created on the computer to help pre-service teachers present or show the material while teaching practice process. This research use 'Microsoft PowerPoint' as the multimedia presentation software that pre-service teachers use in their teaching.

[8] Tim Tarbiyah UIN Sunan Ampel Surabaya, *Pedoman Praktik Pengalaman Lapangan II (PPL II) Tahun 2017*.

[9] Hemant Lata Sharma and Pooja, *Enhancing Students Interest In English Language Via Multimedia Presentation*, vol. 2, no. 1 (2016).

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Review of Related Literature

1. Literacy

Literacy is ability to understand and use those written language forms required by society and or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in communities of readers in school and in everyday life, and for enjoyment.[10] In simple ways literacy also can be imagined as our daily lives activities. It is starting from the beginning, from waking up till going to bed again. Literacy is counted also on the daily regular activity. Literacy does not limit on just reading. It is more like the activities we do to get the information or input. The output could be from reading, seeing, listening, etc. The form of literacy can be very related to the specified object like digital, media, visual, data, game, health & financial, civic and athical, news, coding & computational and foundational literacy.[11] Literacy not only limit on writing and reading, but also the form of literacy is vary based on the specific subject. In short, literacy also means the competency or a knowledge in the specific area.

In this research, researcher focused on the computer literacy as the ability that pre-service teachers use on Teaching Practice 1 class. Furthermore, computer is a common thing for student in recent. Likewise the smartphone, computer can be accessed easily everywhere and anywhere. However, based on the research done by Son[12], language teachers selfrated competency is not equal to actual levels of computer knowledge and skills for using a variety of applications. The

[10] Mullis I. V. S., Martin M. O., and Kennedy A. M., *IEA's Progress in International Reading Literacy Study in Primary School in 40 Countries* (Boston: TIMSS & PIRLS International Study Center, 2007), p. 103.

[11] Nickey Pietila, *The Top 10 Literacies in Education Today*, https://www.skyward.com/discover/blog/skyward-blogs/skyward-executive-blog/march-2017/the-top-10-literacies-in-education-today, accessed 16 Nov 2017.

[12] Son, Robb, and Charismiadji, *Computer Literacy and Competency: A Survey of Indonesian Teachers of English as a Foreign Language*.

teacher may using limited applications because they think that computer is stressful. They like to use the simple media rather than exploring on computer. Therefore, teacher should consider their self-competency about computer in order to provide relevant teaching experience for students.

2. Computer Literacy

Computer Literacy is a part of the information literacy. The others are visual, media and network literacy. Computer Literacy is generally thought of as familiarity with the personal computer and the ability to create and manipulate documents and data via word processing, spreadsheet, databases, and other software tools.[13] Computer literacy is the knowledge and ability a person has to use computers and technology efficiently. Computer literacy can also refer to the comfort level someone has with using computer programs and other applications that are associated with computers. Another valuable component of computer literacy involves the knowledge of how computers work and operate.[14] Computer literacy also defined as the ability to use computers at an adequate level for creation, communication and collaboration in a literate society. In language teacher education, it involves the development of knowledge and skills for using general computer applications, language-specific software programs and Internet tools confidently and competently. It comprises a number of aspects, including technological awareness, technical vocabulary, components of a computer, concepts of data and programs, ways of computing, working on files, documents and pictures, working with multimedia, evaluating resources and communicating with others.[15]

As the definition above the researcher defined computer literacy as the ability to operate computer. The 'operate' here means they have knowledge about software, hardware and

[13] Kathleen L. Spitzer, Michael B. Eisenberg, and Carrie A. Lowe, *Information Literacy: Essential Skills for the Information Age* (New York: Syracuse University, 1994), p. 24.
[14] Luby Liao and Jack W. Pope, *Computer Literacy For Everyone* (2008), p. 231.
[15] Son, Robb, and Charismiadji, *Computer Literacy and Competency: A Survey of Indonesian Teachers of English as a Foreign Language*, p. 27.

internet based activity. Students knowledge about computer can be derived from their familiarity to the computer itself. However, students recently are very close with the technology because of the rapid development of information and easier access of internet. So, they do familiar with computer and all the stuff related to the computer utilization.

In English Teacher Education Department, there is a course called Teaching Practice 1. In this course, pre-service teachers were asked to to do some practice in the constructive situational in the small classes that involve students as the teacher, fake students and as the observer. This teaching practice is held in the 6th semester of teacher education especially in the English teacher education department.[16] Teaching practice will have the two circles in one semester. This course requires pre-service teachers to do create the media for their teaching in the classroom. Lecturer gives 20 minutes for the students to perform their teaching. As the time given is limited, pre-service teachers are likely use multimedia presentations such as powerpoint to help them deliver the material. Based on researcher's experience, pre-service teachers that have good computer literacy tends to use the multimedia presentations innovatively and efficiently than others that have lack of computer literacy.

The lack of the computer literacy would make pre-service teachers do not use multimedia presentation maximally. If it did not maximally done, probably they will not use the technology, especially computer to create multimedia presentation when they teach because of their skeptical feelings. They might think that using computer as the teaching media is difficult because they have lack of computer literacy. The impact might also happen when they become real teacher. According to Anthony Saba, there are many professions are understandably skeptical about getting involved in computer literacy initiatives. One explanation for this skepticism is that those who work with technology can quite easily find them

[16] Tim Tarbiyah UIN Sunan Ampel Surabaya, *Pedoman Praktik Pengalaman Lapangan II (PPL II) Tahun 2017*.

selves in a number of precarious situations.[17] This skeptical feeling may cause students has lack experience with computers. Moreover, they will feel burden when they have to face computer in near future when they become teacher.

Computer literacy is important for pre-service teachers as it it become the main tool for them to do the assignments and other things related to their academic activities. If they feel comfortable with using computer, their work quality will improve. Anthony Saba, on his journal stated that students can feel engaged and motivated at the same time when using computer. Students may use computer for individual learning.[18] It leads to the the improvement of their self-confidence. Computer used drill and practice based instruction as a traditional tool for teaching in a traditional sense. The instruction allows students to be brave on learn and make mistake.

3. Computer Literacy Skills

Computer literacy skill stands for the ability to use a variety of computer software applications within a personal, academic and professional context.[19] College students are mostly use computer for personal and academic purpose. This condition demands students to be able to operate computer well in order to get good achievement. There are eight aspects of computer literacy skills[20]

a. Computer use.
b. Using and creating databases.
c. Using e-mail.
d. Creating multimedia presentations.

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[17] Stuart A. Selber, *Multiliteracies for a Digital Age* (Carbondale: Southern Illinois University Press, 2004), p. 2.
[18] Anthony Saba, *Benefits of Technology Integration in Education*, no. 501 (2009), pp. 4–5, http://edtech2.boisestate.edu/sabaa/502/saba_synthesis_paper.pdf.
[19] A, *Computer Literacy: Rationale, Definition and Practices.*, p. 5.
[20] *Computer Literacy Skills: A Companion to the Maryland Technology Literacy Standards for Students*.

e. Using and creating spreatsheet.
f. Using and creating visual organizers.
g. Using and creating web-pages.
h. Using and word processing and dekstop publishing.

This research focused only on 'creating multimedia presentations'. See the detail of these aspects on appendices.

4. Computer Literacy Levels

Computer literacy level is the condition of someone who has ability to know and be able to do independently at various stages (basic, intermediate, proficient) with specific types of software applications to enable them to access, manage, integrate, evaluate, create and communicate information. There are three kind levels of computer literacy skills based on the '*Maryland Technology Literacy Standards for Students* '[21]:

a. Basic
Basic computer literacy skill is the foundation of all the skills. It is covered the essential skills of the computer use such as power on and off computer, saving files, printing documents, etc. Most of the skills we often use in our daily computer activities.

b. Intermediate
Intermediate computer literacy skill covered the skills that people infrequently use when operating their computer. For instance, recognizing and save files in various format, use peripheral devices such as scanners, digital cameras, and projection devices, etc.

c. Proficient
Proficient computer skill covered the skills that applied in educational or work settings. For instance, inserting specific graphic, create and edit movies and animations, organize email int folder, etc.

[21] *Ibid.*

In short, researcher used those three criterias to measure the computer literacy levels on pre-service teachers of teaching practice 1 class. Researcher formulated the checklist based on the computer literacy levels in '*Maryland Technology Literacy Standards for Student'*.

5. Computer Literacy in ELT

English teacher nowadays should be aware the the development of technology. They also should familiar with the use of computer, gadgets and web-based activities in the classroom. According to Gary Motteram on '*Innovations in learning technologies for English language teaching'*, training in ICT skills is crucial in implementing ICT integration in the teaching and learning of English and the extent to which teachers are given time and access to pertinent training to use computers to support learning plays a major role in determining whether or not technology has a major impact on achievement.[22] However, this training is not given, and more likely than not, teachers are left to their own devices. The great development of technology requires great teacher in order to utilize it in the classroom. The utilization is expected togive more extent knowledge for students.

The benefit of the teacher that has good computer literacy is leading his students to the interactive ways of learning language. One of the activities that teacher could conduct in the classroom is telecollaborative learning. According to Melynda Dooly, telecollaborative is a shared teaching and learning experience that is facilitated through the use of internet technology between distanced partners in institutional settings.[23] Students could get more concept of learning by doing this activitiy since they will face other people from other nations, cultures and environment. If students does not have the concept before, teacher can give them role and

[22] Gary Motteram, *Innovations in Learning Technologies for English Language Teaching* (London: British Council, 2013).
[23] Melynda Dooly, *Telecollaborative Language Learning* (Berlin: Peter Lang, 2008).

topic to talk about. The teacher can bring the diversity and variety of language in the classroom. The telecollaboration learning can be impelemented well when the teacher have sufficient resources to run and good planning. That is when computer literacy takes big role in supporting teachers preparing this activities. There are many options that teacher could do and apply in the classroom. Therefore, deep understanding about computer literacy is needed to enhance teachers computer competency.

As noted by Park and Son on their journal entitled '*Implementing Computer-Assisted Language Learning in the EFL Classroom: Teachers' Perceptions and Perspectives'*. Most of teachers pointed out positive aspects of using computers for language teaching. Some teachers described that the provision of real and authentic language materials and resources, especially on the Internet, is helpful for developing students' language skills and attracting their attention.[24] Therefore, for teacher in EFL need to consider their competency in computer literacy to develop the innovative learning in the classroom. Bringing new teaching ideas and authentic materials to the classroom using technology is a relevant for students in this recent time. As they become digitally literate, teacher should either keep up and become the good role for them.

6. Computer Literacy and Teachers' Classroom Performance

The utilization of computer in the classroom todays is often use to replace the whiteboard as the visual representative of the knowledge. Teacher usually put the materials on the slide and show it to the class or students itself make a presentations to present the assignments. [25] As well as the Teaching Practice 1 course on 6th semester in English Teacher Education

[24] Park C. N. and Son J.-B., *Implementing Computer-Assisted Language Learning in The EFL Classroom: Teachers' Perceptions and Perspectives. International Journal of Pedagogies and Learning*, vol. 5, no. 2, pp. 80–101.
[25] Helen Rallis, *Using Computers to Assist in Teaching and Learning* (4 Mar 2018), https://www.d.umn.edu/~hrallis/guides/computerideas.html.

Department using computer as a the tool for pre-service teachers to create multimedia presentation in order to facilitate them presenting the material when they do the teaching practice in the class. There are many things from the utilization of the computer on supporting teachers preparing classroom activities. Those activities will goes well if pre-service teachers have good understanding of computer literacy. It will help them to understand the instruction better because it involves computer as the primary device.

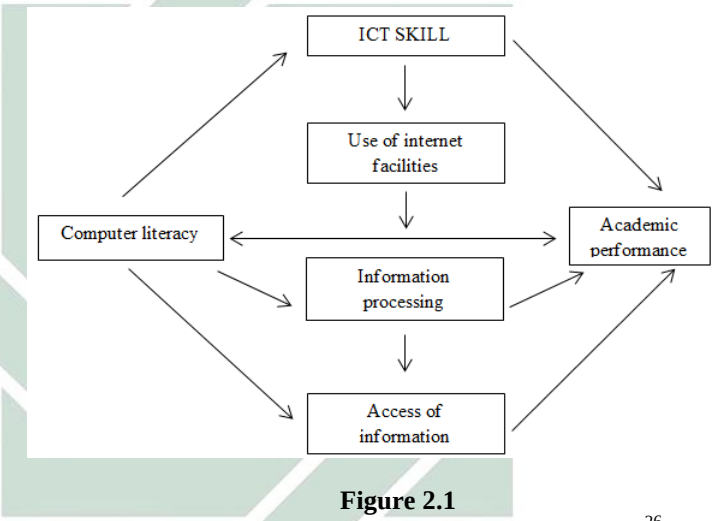

Figure 2.1
The Illustration on the Process of Computer Literacy[26]

Based on the Chima, the influence of computer literacy in education are promotes pre-service teachers performance in web-based courses, online searching and effective use of

[26] Aitokhuehi, Johnson Oseghale, and Ojogho John, "The Impact of Computer Literacy on Students' Academic Performance in Senior Secondary Schools in Esan West Local Government Area, Edo State, Nigeria", *American Research Institute for Policy Development*, vol. 3, no. 3 (2014), http://dx.doi.org/10.15640/jehd.v3n3a21.

library databases which are essential to students' academic performance.[27]

a. Web-based learning

Web-based learning were defined as those where the entire course is taken on the Internet. In some courses, there may be an initial meeting for orientation. Proctored exams may also be given, either from the source of the Web-based course or off-site at a testing facility.[28] Web-based learning is one way to learn, using web-based technologies or tools in a learning process. In other words, pre-service teachers use mainly computers to interact with the students, other teacher and learning material. This situation makes pre-service teachers have to master computer well in order to conduct the course effectively.

b. Online Searching

Online search outcomes largely depend on the chosen search strategy, which represents the ways people deal with information online and distinguish between correct and false information.[29] Three distinctive online search strategies exist: 1) The top-down strategy, where searchers start with a few general keywords, and then narrow the search by using more precise keywords until the necessary information is found; 2) The bottom-up strategy, where searchers look for specific keywords, and then review the returned results until the needed information is found; 3) The mixed strategy, where searchers combine both top-down and bottom-up approaches according to their information needs.[30] Students who have computer literate can search

[27] Ogbuiyi Darlina Chima, *Influence of Computer Literacy on Students in three University Libraries in South-Western, Nigeria*, vol. 1, no. 1 (2015), p. 102, http://www.irjims.com/files/Ogbuiyi-Darlina-Chima_257hr95p.pdf.
[28] Mesher D., *Designing Interactivities for Internet Learning* (1999).
[29] Li-Yueh Chen et al., *Affective Mechanisms Linking Internet Use to Learning Performance in High School Students: A Moderated Mediation Study*, vol. 34 (2014), https://pdfs.semanticscholar.org/6a41/fce03ff12550daebf2cea92c7e62e8aad95b.pdf.
[30] Navarro-Prieto, Mike Scaife, and Yvonne Rogers, *Cognitive Strategies In Web Searching* (1998), http://zing.ncsl.nist.gov/hfweb/proceedings/navarro-prieto/index.html.

information reliably and accurately. However, not all of the internet sources are reliable because it is an open for public. Everyone can see, add and edit whatever they want. Therefore, pre-service teachers should filter what is the best information they desire to look for. Then, pre-service teachers will gain more confidence in learning and their performance in the class will be improved.

c. Library Database

The Library uses the term 'database' to describe a searchable online resource. Usually, the Library pays for access, however, some databases are free to use. Using the databases provided by the Library will facilitate pre-service teachers to find reliable information from trusted sources. A database may be dedicated to a single subject or cover several subjects. Some publishers also provide databases which allow you to search all their published content from one website. Pre-service teachers can find a variety of information, including:

1) Full text articles from e-journals and other publications
2) Abstracts
3) Citation information
4) Newspaper articles
5) e-books
6) Images

The library also provides access to database which enable pre-service teachers to search major reference works, for example, the Oxford English Dictionary and the Oxford Dictionary of National Biography.[31] Pre-service teachers which have good understanding about database will find themselves easy when they are faced to looking for literature. As an academician, they should find relevant literature related for their course.

[31] *About Library Databases*, https://www.ed.ac.uk/information-services/library-museum-gallery/finding-resources/library-databases/library-databases-about, accessed 3 Apr 2018.

Most databases have scholarly/peer reviewed filter or contain only scholarly literature. Authority and trustworthiness are virtually guaranteed. In sum, good understanding in library database could facilitate pre-service teachers in finding more reliable online source and finding literature that they want.

7. Multimedia Presentations in ELT

Multimedia can be described as "the combination of various digital media types, such as text, images, sound, and video, into an integrated multisensory interactive application or presentation to convey a message or information to an audience". Multimedia plays very important role in English language teaching. The use of Multimedia presentation offers a potentially venue for improving student understanding about language.[32] The number of English language learners is increasing day by day, but for some students learning English language is one of the most difficult subjects they have learnt. For Due to the difficulties in learning, English language can make students lose their interest easily. Therefore, it is very important for teachers to be able to teach and arouse students' interest in the lesson in the classroom. It is within the benefit of education that teachers should use instructional strategies that are interesting and stimulating that make the students learn more effectively. According to Nwaocha, multimedia presentations can improve students' understanding, enthusiasm, class attendance and satisfaction.[33] In addition based on Lu and Liu, for teacher using multimedia in the instruction of English language creates learner-centeredness and helps students become active learners. This allows them to learn language according to their abilities, needs and preferences.[34]

[32] Sharma, *Enhancing Students Interest in English Language Via Multimedia Presentation*, pp. 276–277.
[33] Nwaocha VO., *Enhance Students Interest in Mathematics Via Multimedia Presentation*, vol. 3, no. 7 (2010), pp. 107–13.
[34] Lu W and Liu Y., *Reflection and Recommendation for the Teaching of English As A Second Language Under Multimedia Networking Environment* (2011).

The higher computer literacy can encourage and support pre-service teachers in creating multimedia presentations in teaching practice 1 class. The high computer literacy leads them to the self-efficacy of teaching with technology. Pre-service teachers' self-efficacy for computer use would be to provide them with training and support to work successfully with computers in their classrooms. According to Bandura ,self-efficacy beliefs develop in response to four sources of information. The most powerful influence on self-efficacy is "enactive experience" in which self-efficacy for a behavior is increased by successfully performing the behavior.[35] This could be happen in the class when pre-service teachers are successfully presenting the material in front of the class through the good multimedia presentations and as the result the teaching learning process goes well as expected. The success of teacher delivering the material to students using multimedia presentation depends on teacher's preparedness for teaching with technology. Teacher also should have good visual literacy to manage the content in order to give students meaningful lesson.

Visual literacy is a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret the visible actions, objects, symbols, natural or manmade, that he encounters in his environment. Through the creative use of these competencies, he is able to communicate with others. Through the appreciative use of these competencies, he is able to comprehend and enjoy the masterworks of visual communication.[36] As the pre-service teachers, it is important to critically analyze the visual texts and the sociocultural contexts surrounding the information. It is to support them make meaning from images and give their students powerful messages about images, language, and literacy. If the pre-service teachers have good visual literacy,

[35] Bandura, *Self-efficacy: The Exercise of Control* (New York: Freeman, 1997).
[36] Fransecky R. B. and Debes J. L., *Visual Literacy: A way to Learn, a Way to Teach* (Washington DC: AECT Publications, 1972).

they could create the good visual for their multimedia presentations.

In short, visual literacy was originally defined as a set of visual competencies or cognitive skills and strategies one needs to make sense of visual images.[37] As with any literacy, visual literacy begins with the development of the brain's capacities over time, through both structured experience (i.e., teaching) and ongoing, informal interactions with the visual environment.[38] As the teacher has experience in the classroom, it will shape teachers perception of the class itself. The teacher will decide what makes the students keep attention to the lesson to his media. According to Bruner, just as parents and teachers take pains to develop reading literacy, we can and should employ a similar process to ensure visual literacy, ideally by building on existing skills, challenging them appropriately, and structuring the experience to allow children to construct their understandings of what they encounter visually.[39] As stated by the journal by Vanderbilt University entitled *'Tips and Ideas for Making Visuals to Support Young Children with Challenging Behavior'* that visuals are static, meaning that they remain present after words are spoken. Students can refer to them once the spoken words are no longer present. Visuals serve as a reminder of the verbal direction.[40] By preserving the suitable media, hopefully it will support teacher deliver the material to gain more understanding for the students. Mastering both computer and visual literacy are needed for the teacher to create innovative and interesting media to support them in teaching.

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[37] Frank Serafini, *Visual Literacy* (11 Jul 2018), http://education.oxfordre.com/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-19.

[38] Danilo M. Baylen and Adriana D'Alba, *Essentials of Teaching and Integrating Visual and Media Literacy* (Switzerland: Springer International Publishing, 2015).

[39] Bruner J., *The Process of Education* (Cambridge: Harvard University Press, 1960).

[40] Vanderbilt University, *Tips and Ideas for Making Visuals to Support Young Children with Challenging Behavior* (2010), http://csefel.vanderbilt.edu/modules/module3b/handout2.pdf.

8. What makes good multimedia presentations

Students are mostly had the experience of how much presentation software has to offer. From backgrounds to graphics to fonts, there is always something that could be enhanced, adjusted, changed, or added. When we have the time and knowledge, we can experiment with new features, knowing that there are probably still more available that haven't been discovered yet. So, having the ability to create good multimedia presentations could lead teachers to provide the good visualization about the lesson. Therefore, teachers should now about the things that makes multimedia presentations interesting. Here are some criterias of good multimedia presentations based on the *'West Bolivar School District Summer Institute'*:

a. The User Interface Should be Simple
The presentation is not a venue for showing off all the neat features students have discovered at home, or that someone else has showed them. Users should only see what they need to know and have access to what they need to do when view the presentation.

b. Consistency
Objects that perform similar functions, such as back and forward buttons, should look and behave the same throughout the project. Interface components should appear in standard locations on all the screens.

c. Use Familiar Metaphors
Using familiar objects and actions will keep the user within his/her own comfort level. Arrows for navigation would be an example of an object almost all users are likely to know.[41]

B. Review of Previous Studies

[41] West Bolivar School District Summer Institute, *What Makes a Good Multimedia Presentation Design?* (2002), http://projects.sun-associates.com/wbsd/handouts/multimedia/whatmake.pdf.

There are five preceeding studies related with the current study. The first study is a study conducted by Son, entitled, *"Computer Literacy and Competency: A Survey of Indonesian Teachers of English as a Foreign Language".*[42] In his study, Son found that the selfrated competency of computer literacy of Indonesian Teacher is not equal to actual levels of computer knowledge and skills for using a variety of applications. Furthermore, he also found that there might be the possibility of influence from their unfamiliarity with technical vocabulary, the teachers in the study indicated that their self evaluation of basic computing skills are generally high but their frequency of using computer applications is very limited to few types of applications such as word processing. It is neccessary for them to have opportunities in using various of applications in order build their confidence. This research states that limited facilities affected the use of computers in their classrooms the most.

The studies above engaged the Indonesian in-service teachers that actively teaching at school. The fact, they are tend to have good attitude towards the implementation of computer in teaching learning process but they have a lot of obstacles. This might be happen because of the limited facilities and experience. However, in the future this may not become a problem anymore due the rapid development of the technology and the familiarity of the computer. Therefore, pre-service students should concern on their computer literacy level as it is become more urgent by the time goes on.

Another research that talking about the Computer Literacy done by Liao and Jack Pope entitled 'Computer Literacy For Everyone', they find out that computer literacy should empower students to solve problems. This statement means that computer literacy is not a sofware training class. Computer literacy should inspire students to solve their problems and find new ideas related to teaching.[43] By integrating the technology into their teaching like using multimedia presentations, it may help students in understanding the lesson and overcome the problem in the classroom by providing students' need.

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[42] Son, Robb, and Charismiadji, *Computer Literacy and Competency: A Survey of Indonesian Teachers of English as a Foreign Language*.
[43] Liao and W. Pope, *Computer Literacy For Everyone*.

Ridlwan, in his thesis entitled 'Students' Satisfaction of Online Learning Class: Survey on Computer assisted Language Learning 2 Online Class at Seventh Semester in Academic Year 2014/2015 State Islamic University of Sunan Ampel Surabaya' show the general percentages of students' satisfaction are neutral. This result comes from the questionnaire gathered from the students of CALL class.[44] Online learning cannot be apart with technology's involvement. Therefore, computer literacy is needed here to support the online learning. The good their computer literacy can help them on their involvement on online based learning.

The previous study were done by Wallace and Clariana entitled *Perception versus Reality—Determining Business Students' Computer Literacy Skills and Need for Instruction in Information Concepts and Technology*. It is shown that the assumption of the test that has been done incoming from freshman business students have sufficient knowledge of both computer concepts and computer literacy skills is not accurate. [45] It may happen on students today because majority they familiar with computer but cannot use it efficiently because of the lack of computer literacy. Most of the students only know the general use of computer without any desire to explore more.

The last is a journal by Arjuna I. Ranasinghe, Diane Leisher entitled '*The Benefit of Integrating Technology into the Classroom*'. This article discusses a study of technology rich learning approach to promote mathematics teaching. Research suggests that technology used inappropriately have a significant effect in teaching and learning.[46] The authors found that there are so many preparations to integrate technology on teaching such as, online access, time for planning, support, resources, and training in order to have the necessary skills. This research shows there

[44] Muhammad Taufiqi Ridlwan, "'Students' Satisfaction of Online Learning Class: Survey on Computer Assisted Language Learning 2 Online Class at Seventh Semester in Academic Year 2014/2015 State Islamic University of Sunan Ampel Surabaya'" (Surabaya: Universitas Islam Negeri Surabaya, 2017), pp. 73–74.

[45] Patricia Wallace and Roy B. Clariana, *Perception Versus Reality—Determining Business Students' Computer Literacy Skills and Need for Instruction in Information Concepts and Technology*, vol. 4, p. 2005.

[46] Arjuna I. Ranasinghe and Diane Leisher, *The Benefit of Integrating Technology into the Classroom*, vol. 4, no. 40 (2009).

are so many preparation and requirements to integrate technology in teaching. Therefore, the teacher should master computer literacy in order to choose the most possible way to integrate technology in their teaching.

These previous studies have mainly focus on the utilization of technology on education but have not yet touched upon the specific at the use of technology in learning media such as multimedia presentation.Thus, the research on the topic is urgent.

CHAPTER III

RESEARCH METHOD

A. Approach and Research Design

The purpose of this research actually is to investigate the levels of pre-service teachers' computer literacy in 'creating multimedia presentations' at teaching practice 1 class. This research used qualitative method because this research investigates the quality of the activities.[47] There was a distribution of the checklist to measure the *the computer literacy levels* (RQ 1). In addition, researcher was conducted the interview to know how the pre-service teachers' computer literacy skill support them in creating multimedia presentation on their teaching practice 1 class (RQ 2).

B. Setting of Study

The research location of the study was conducted on Teaching Practice 1 class in English Teacher Education Departement of Universitas Islam Negeri Sunan Ampel Surabaya. The researcher chooses this class because in this class the student in the 6th semester will have their chance do teaching practice by using various kind of media. The research focused on the pre-service teachers' computer literacy skills on 'creating multimedia presentations' due they are likely use this to deliver the material and shorten time than writing on the whiteboard. There might be around 120 students that take the course in this year. Based on Cohen, Manion and Morrison, the researcher took random sample of 83 student that take the Teaching Practice 1 class in English Teacher Education Departement as their subject.[48]

C. Data Collection Technique

The researcher got the data based on two data sources as follow:

1. Survey

[47] Jack R. Freankel and Norman E. Wallen, *How to Design and Evaluate Research in Education* (New York: McGraw-Hill, 2009).
[48] Louis Cohen, Lawrence Manion, and Keith Morrison, *Research Methods in Education 7th Edition* (New York: Routledge, 2011).

The researcher conducts survey to the students in order to get the data related on their computer literacy level on 'computer use', 'creating web-pages' and 'creating multimedia presentations'.

2. **Interview**
   Interview is done to get the data related to the strategies that students use in developing their computer literacy skill.

D. Research Instruments

This research used two instruments to gain the data. The instruments can be seen below:

1. **Checklist**
   The researcher uses the checklist as the data collection technique to find out about the students computer literacy skill levels. So this checklist was given to the students in form of online survey.
2. **Interview guideline**
   To find the support of computer literacy skill in creating multimedia presentation, the researcher used the interview guideline find the data collection. Interview is chosen due to gain the data as objective as possible.

E. Data Analysis Technique

The researcher used coding to analyze the data. Coding is the organisation of raw data into conceptual categories. Each code is effectively a category or 'bin' into which a piece of data is placed. As Miles and Huberman note: Codes are tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study.[49] Codes are usually attached to 'chunks' of varying size – words, phrases, sentences or whole paragraphs. These technique will be followed by some procedures. Accrording Miles

[49] Matthew B. Miles and Michael Huberman, *Qualitative Data Analysis* (London: SAGE, 1994).

and Huberman, suggest that qualitative data analysis consists of three procedures[50]:

1. **Data reduction**
   This refers to the process whereby the mass of qualitative data researcher may obtain – interview transcripts, field notes, observations etc. – is reduced and organized. At this stage, researcher tries and discards all irrelevant information from the interview and questionnaire that did not support research questions, but do ensure that researcher have access to it later if required, as unexpected findings may needed to re-examine some data previously considered unnecessary.
2. **Data display**
   To draw conclusions from the mass of data, Miles and Huberman suggest that a good display of data, in the form of tables, charts, networks and other graphical formats is essential. This is a continual process, rather than just one to be carried out at the end of the data collection.
3. **Conclusion drawing/verification**
   Researcher begin to develop conclusions regarding to the study. These initial conclusions can then be verified, that is their validity examined through reference to your existing field notes or further data collection.

After those three procedures is done, researcher was conducted data coding. These are the stages of data coding according to Miles and Huberman:

1. All statements relating to the research question are identified, and each is assigned a code, or category. These codes are then noted, and each relevant statement is organised under its appropriate code. This is referred to as open coding.
2. The researcher rereads the qualitative data, and searches for statements that may fit into any of the categories. Further codes may also be developed in this stage. This is also referred to as axial coding.

[50] *Ibid.*

3. Once the first two stages of coding have been completed, the researcher should become more analytical, and look for patterns and explanation in the codes.
4. The last stage is that of selective coding. This involves reading through the raw data for cases that illustrate the analysis, or explain the concepts.

F. Research Stages

The process of this study was done as these following stages:

1. **Take a preliminary research**
   Pre-service teachers of ETED in Universitas Islam Negeri Sunan Ampel Surabaya often have to do teaching practice 1 in 6th semester with their peer before teaching real students in the school. In teaching practice 1, pre-service teachers have to make lesson plan and media for their teaching. Based on the preliminary research, most of the pre-service teachers used multimedia presentation such as power point because it is easy to make and fast. Pre-service teachers only got 20 minutes of teaching practice in the classroom with their peer. Therefore, some of them were used multimedia presentation to shorten the time while doing teaching practice 1. There were many variety results of pre-service teachers' multimedia presentation based on pre-service teachers' creativity and skill on creating the media.
2. **Decide the research design**
   The researcher wrote the title of this study and research question first before go ahead to the research design. After drawing focus of the topic that will be discussed, the researcher decided the research design of this research along with the outline, including the data that might be needed.
3. **Conduct the research**
   a. Collecting data
      As the data was obtained from the survey and the checklist sheet given to the participants. There were 45 participants answered the online survey, and 20 participants were already interviewed. The answers from the participants are the main data of this research.

b. Analyzing the data
   1) Editing
      In this stage, the first step after the survey distributed, the researcher did check one by one covering completeness and the accuracy of the survey. Then, the researcher's conducted the interview to strengthen the data and to check the validity of the data.
   2) Coding
      The researcher categorized the data based on each criteria. Then, the researcher read the statement to confirm that it is fit into categories. After that, the researcher analyzed the data and read again thoroughly.
   3) Data display
      After all the data already gathered, the researcher categorize each data into based on the following rubric. Next, the researcher did the data reduction to pick the suitable data for the research questions. When the data already completed, it is displayed as the figure and tables.

c. Concluding the result of the research
   After the result of the analysis and the theory were combined, the researcher made the conclusion of the research based on the whole sections of this study that have been discussed.

CHAPTER IV

RESEARCH FINDING

This chapter is devoted to present the results and findings of the study and their discussion. It is divided into two main sections. The first section is about the finding of the research. The second section is the discussion which explains about the researcher's response towards the findings and relate in with the theories. The account presented in this chapter is in line with the two research questions presented in Chapter I.

A. Findings

1. Pre-service teachers' computer literacy skill levels

Researcher has done the survey of Pre-Service Teachers' Computer Literacy levels in 'creating multimedia presentations'. According to computer literacy skills based on the '*Maryland Technology Literacy Standards for Students'*, there are three levels of pre-service teachers computer literacy, there are basic, intermediate and proficient. Researcher decided the level based what pre-service teachers select the most in each levels. The survey results are in the following figure.

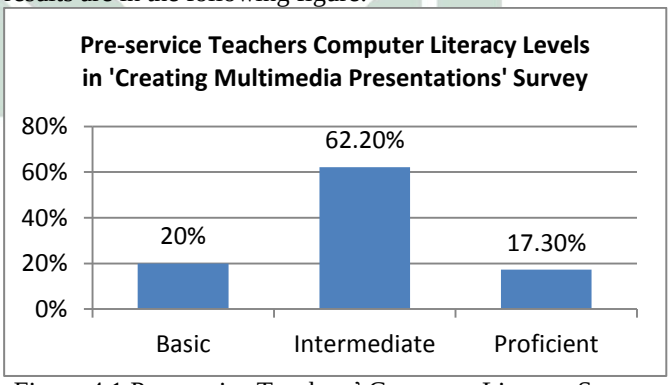

Figure 4.1 Pre-service Teachers' Computer Literacy Survey

The survey showed that 62.20% of pre-service teachers' computer literacy levels in 'creating multimedia

presentations' were in intermediate level with 28 pre-service teachers. Meanwhile, the 20% of pre-service teachers were in basic level and the rest 17.30% pre-service teachers were in the proficient level. In total, there were 45 pre-service teachers who participated in the survey.

To strengthen the data, researcher did the interview to the pre-service teachers based on the theory of West Bolivar School District Summer Institute in the article entitled '*What Makes a Good Multimedia Presentation Design?*'. There were some questions that pre-service teachers need to answer related to what the pre-service teachers usually do when creating multimedia presentation. There were 20 pre-service teachers participated in the survey.

From the interview session researcher found that pre-service teachers who have intermediate computer literacy level could insert the picture through the toolbar. Furthermore, the pre-service teachers with basic computer literacy level added the picture by dragging from the explorer. Pre-service teachers that have proficient computer literacy level of the pre-service teachers copy the picture directly from the web and paste it to the presentation. The descriptions of pre-service teachers' computer literacy level in adding picture were presented in the figure below:

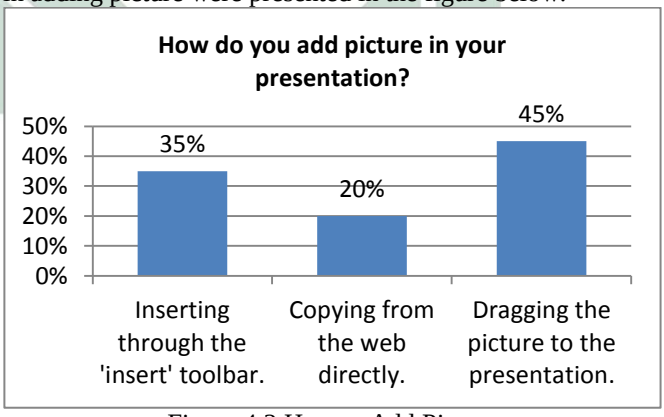

Figure 4.2 How to Add Picture

Based on figure 4.2, there were about 45% or 9 interviewees added the picture by dragging it to the presentation. While 35% or 7 interviewees used ‘insert toolbar’ and 20% or 4 interviewees copied from the web, then pasted it in the presentation files.

Another result of the interview showed that pre-service teachers with basic computer literacy level can insert and edit the data of graph or chart through toolbar. While the other could not use graph or chart feature because it is too hard and difficult. The details of how pre-service teachers add graph can be seen in the following figure:

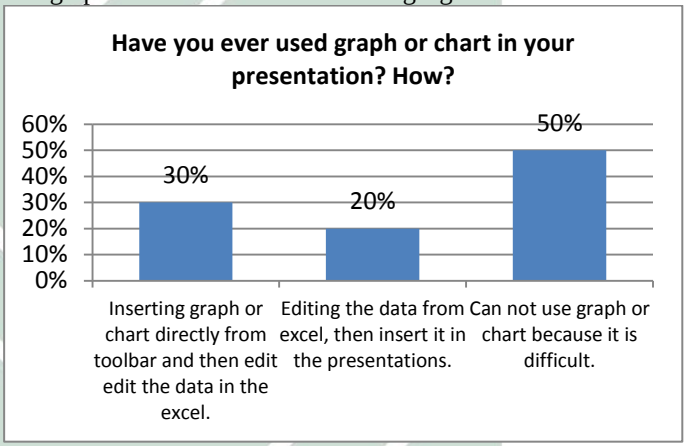

Figure 4.3 How to Add Graph or Chart

Based on figure 4.3, the 50% or 10 of the interviewees answer that they cannot use graph or chart on their presentation because it is too difficult and they did not have any experience before. About 30% or 6 interviewees could do it by edit the data through excel, then they add it in the presentation. Then, 20% or 4 interviewees used graph through ‘insert toolbar’.

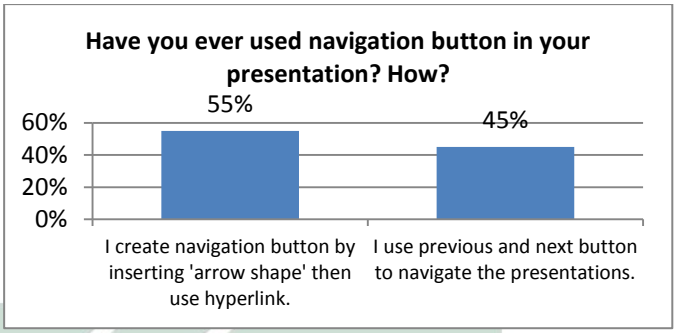

Figure 4.4 How to Add Navigation Button

Figure 4.4 shows that 45% or 9 interviewees answer that they could create the navigation button by inserting hyperlink to their presentation. Meanwhile, the rest of 55% or 11 interviewees said that they used navigation keyboard to operate between slides. Pre-service teachers with basic computer literacy did not use the navigation button to move between slides, but they prefer to use navigation keyboard. Otherwise, pre-service teachers with proficient computer literacy skill created the navigation button by inserting arrow shape and adding the hyperlink on it.

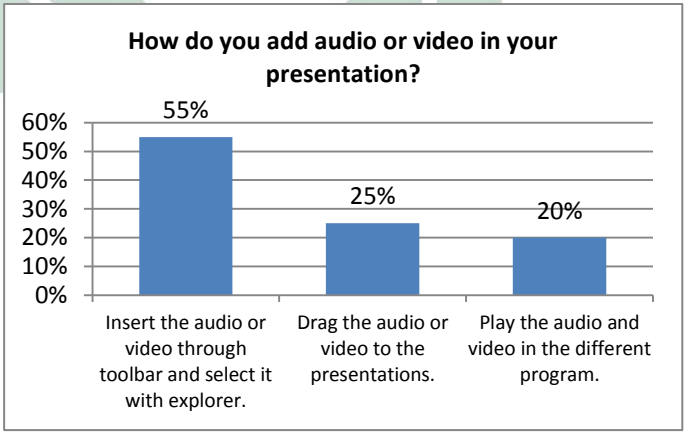

Figure 4.5 How to Add Audio or Video

The 55% or 11 interviewees based on Figure 3.5 stated that they usually add the audio or video through the 'insert' tool in the toolbar. While the 25% or 5 interviewees dragged the audio or video from the explorer to their presentation. Last but not least, 20% or 4 interviewees played the audio or video separately from the presentation. On the basic level, pre-service teachers tended to insert the audio or video through the insert toolbar and drag from the explorer into the presentation files. Meanwhile, pre-service teachers with basic level computer literacy played the audio and video separated from the presentation.

2. Computer literacy skill in supporting pre-service teachers' multimedia presentation

The computer literacy skill levels were highly influence students when designing the multimedia presentation. Then, how does pre-service teachers computer literacy skill levels in supporting them creating the presentation? The researcher did the interview of 20 pre-service teachers still based on West Bolivar School District Summer Institute in the article entitled '*What Makes a Good Multimedia Presentation Design?*'. In the interview, researcher took the data which contain how computer literacy supporting for them in creating multimedia presentation. The results are in the following figures below:

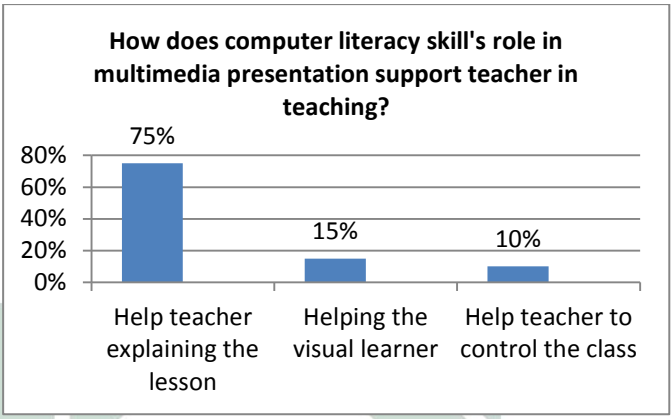

Figure 4.6 Multimedia Presentation Supports in Teaching

Based on the figure 4.6, the 75% or 15 interviewees said that multimedia presentation's role is to support the teacher explaining the material in the class. While pre-service teachers explaining the material, students can see the visualization of what the pre-service teachers said. For example, we can look at the figure 4.7 below:

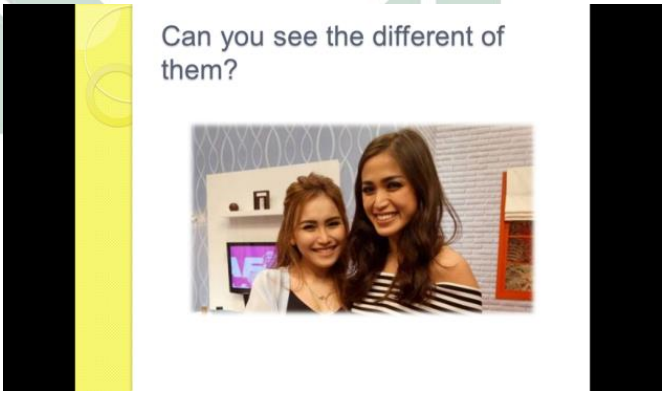

Figure 4.7 The Example of Pre-Service Teacher's A Multimedia Presentation

The multimedia presentations above were created by the pre-service teachers to teach about descriptive text. Here, the pre-service teachers gave the example of two female and the students were asked to say the difference between them.

While 15% or 3 interviewees stated that computer literacy facilitate students with visual learning style to catch the material. They said there were several of students learning style that needed to be facilitated in the classroom. They admit that students with auditory learning style get more benefit because teacher usually explains the lesson orally rather than giving picture. That is why they said that multimedia presentation could facilitate students with visual learning style in the classroom. For instance, it can be seen on the figure 4.8 below:

Figure 4.8 The Example of Pre-Service Teacher's B Multimedia Presentation

The material of this media were giving and responding suggestion. Pre-service teachers used the visualization in form of the messy kitchen and give the suitable text about what students should do if they were have this kind of situation. By giving the picture, it will trigger the students to speak up and active in the classroom.

The rest 10% or 2 interviewees thought that multimedia presentation could support the teacher to monitor

the class, especially the big class. Pre-service teachers said that they sometimes felt the difficulty to monitor the big class due the large number of students inside. Pre-service teachers also thought that using multimedia presentation could catch students' attention in the class. Pre-service teachers said that students could focus on the presentation in front of the class and pay attention. Pre-service teachers stated if teacher only use instructions instead of supporting media in big class, students will not pay attention to the class activity. Pre-service teachers usually put the picture in the big size and then give some text, question or instruction in it. See the example on the figure 4.9 below, it showed that pre-service teachers asked students to count the color of the rainbow. Students can see and count by themselves by seeing on the picture. Indirectly, students will put their attention to the picture and teacher could monitor the whole class.

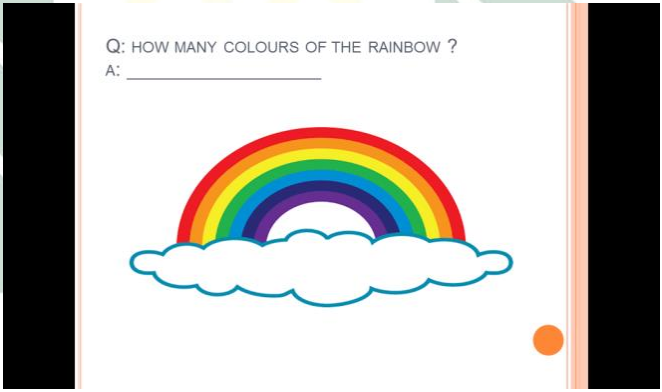

Figure 4.9 The Example of Pre-Service Teacher's C Multimedia Presentation

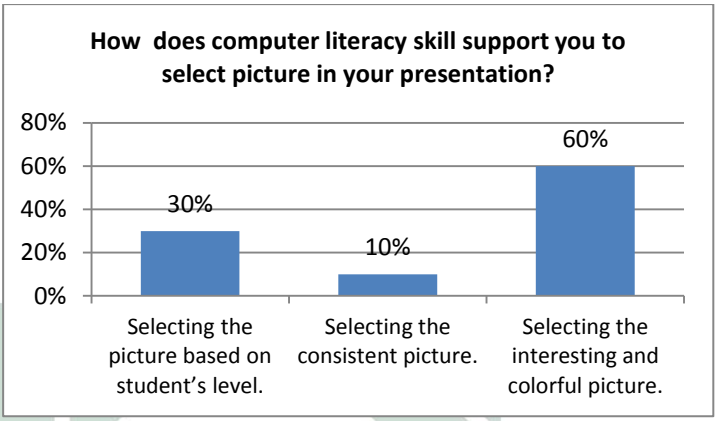

Figure 4.10 Selecting Picture for Multimedia Presentation

Based on the figure 4.10, the 60% or 12 interviewees stated that pre-service teachers selected picture that they thought will be interesting for students in the class. Considering what the suitable picture for the presentation sometimes is difficult. Pre-service teachers said that the colorful and interesting picture will make students pay attention. Students mostly had short attention's span, therefore students need something that can attract their attention.

The other 30% or 6 interviewees considering students need and what material they are going to teach before selecting the picture. Pre-service teachers thought about the student's age and the material before deciding the picture to put in the presentations. For example, if the material is for junior high school, pre-service teachers' needs more pictures because students need more visualization. While for senior high school, teacher can use fewer pictures because students already could concept a theory. See the example below on the figure 4.11:

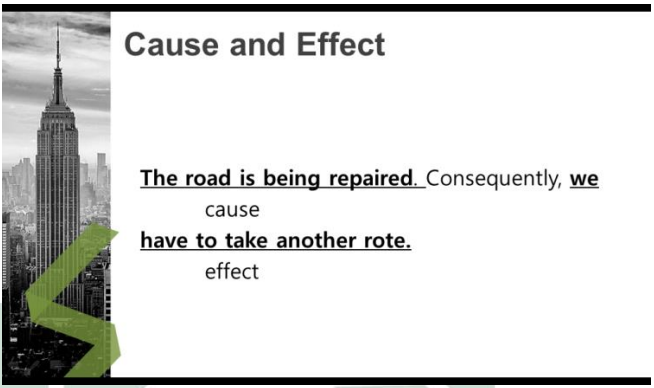

Figure 4.11 The Example of Pre-Service Teacher's D Multimedia Presentation

According to figure 4.11, pre-service teachers just use text and few pictures because the level of the students is on senior high school. The material of this media is cause and effect. Therefore, there is no need to add more pictures because the students need clear explanation through the sentence example.

The rest 10% or 2 interviewees select the picture from the certain website to make the presentation look consistent. Some of pre-service teachers are using *freepik.com, pexels.com, pinterest.com,* and any others sources to make their picture consistent. Pre-service teachers believed that with consistent picture, the presentation could run well. Students would not feel difficult to follow the presentation because the picture seemed to be attractive and unique instead of using random picture. Pre-service teachers believed that random picture caused the students get confused easily.

B. Discussions

In this section, the researcher will discuss about the findings and the relation with the theory based on the research questions of the pre-service teachers' computer literacy skills levels in 'creating multimedia presentations' of English Teacher Education Department Students on Teaching Practice 1 class at

Universitas Islam Negeri Sunan Ampel Surabaya and the how pre-service teachers' computer Literacy skill support them in creating multimedia presentation on their Teaching Practice 1 class. On research question 1, researcher use theory from '*Maryland Technology Literacy Standards for Students*'[51] to determine pre-service computer literacy levels and for research question 2 is using theory from West Bolivar School District Summer Institute.[52]

1. Pre-Service teachers' computer literacy skill levels

According to the survey (figure 4.1), most of the pre-service teachers were in intermediate level with 62.20% in total. The 20% of them were in basic level and 17.30% in proficient level. This is accurate regarding most of the pre-service teachers were already familiar with computer. In addition, some of the lecturers used LMS (Learning Management System) such as *schoology*, *edmodo*, etc as the tool for the learning. Moreover, at the 5th semester, they got CALL (Computer Assisted Language Learning) course that introduce them to the utilization of technology in teaching language.

Every pre-service teachers' have their own habit of operating computer. This habit diversity can be seen from the difference of how they add picture, graph/chart, navigation button and audio/video. As the pre-service teachers of English Teacher Education Department, most of them relied on their previous experience and knowledge about computer. In addition, some of them are from vocational high school and senior high school. Therefore, the kind of ways they design and edit the multimedia presentation could be different.

[51] *Ibid.*
[52] West Bolivar School District Summer Institute, *What Makes a Good Multimedia Presentation Design?*.

2. Computer literacy skill in supporting pre-service teachers' multimedia presentation

a. Multimedia Presentation Supports in Teaching

1) Supporting teacher to explain the lesson

From the figure 4.6, the researcher found that 75% or 15 interviewees stated computer literacy's role is to support teacher explaining the lesson. The teacher can design a multimedia presentation in a creative way to help students follow up the lesson. Based on Mayer, the cognitive theory of multimedia learning is known as the "multimedia principle", states that "people learn deeper from words and pictures than from words alone". However, simply adding words to pictures is not an effective way to achieve multimedia learning.[53] Therefore, teacher needs high computer literacy skill to support them designing the presentation so it is not only providing picture and text but also meaningful material that can make learning easier. According to Nwaocha, multimedia presentations can improve students' understanding, enthusiasm, class attendance and satisfaction.[54] By combining the good multimedia presentations and teachers clear explanation, students understanding of the material will enhance. Students need visualization to gain the information. It is proven with the findings *(see figure 4.7)*, pre-service teacher use multimedia presentation to give students a visualization of the object. As stated by the journal by Vanderbilt University entitled *'Tips and Ideas for Making Visuals to Support Young Children with Challenging Behavior'* that visuals are static, meaning that they remain present after words are spoken. Students can refer to them once the spoken words are no longer present. Visuals serve as a reminder of the verbal direction.[55] This theory equals to the findings that teacher need high computer literacy

[53] R.E. Mayer, *Cognitive Theory of Multimedia Learning* (Cambridge: The Cambridge Handbook of Multimedia Learning, 2005).
[54] VO., *Enhance Students Interest in Mathematics via Multimedia Presentation*.
[55] Vanderbilt University, *Tips and Ideas for Making Visuals to Support Young Children with Challenging Behavior*.

skills to support them providing the good visualization to students.

2) Facilitating students with visual learning style

Based on findings of selecting picture for multimedia presentation, 15% of pre-service teachers said that the multimedia presentation could facilitate the students who have visual style learning to engage in the lesson. As we know that visual learners are those who learn best through what they see. They learn best when they use graphical ways to represent what they are studying. They prefer it when information is represented in diagrams or graphs. By preserving students with good multimedia presentation, teacher could provide the need of visual and auditory learner in the class than just explaining the material through the oral explanation only. Balancing both text and picture in multimedia presentation, need high computer literacy levels. Therefore, the teacher's computer literacy skill could support teacher providing suitable media for all students. By providing the same opportunity of both the visual and auditory learner, the students understanding can improve thoroughly. This theory proven by the researchers' findings based on pre-service teachers' works on creating multimedia presentations (*see figure 4.8*) page 48.

3) Supporting teacher to manage the big class

The other 10% pre-service teachers said that to manage the big class, they could use multimedia presentation. Multimedia technology has been exploited often for improving teaching and learning. According to Park and Son, most of teachers pointed out positive aspects of using computers for language teaching. Some teachers described that the provision of real and authentic language materials and resources, especially on the Internet, is helpful for developing students' language skills and attracting their attention.[56] One of

[56] C. N. and J.-B., *Implementing Computer-Assisted Language Learning in the EFL Classroom: Teachers' Perceptions and Perspectives. International Journal of Pedagogies and Learning*.

the advantages of using multimedia presentation is increases learning effectiveness. Therefore, teacher could be able to manage the big class effectively if they have experience and skill in creating good multimedia presentation. The interactive interface of the multimedia presentation can engage student's attention to the lesson. Based on Hall, students are more interested in multimedia messages which combine the elements of text, audio, graphics and video.[57] However, most of the pre-service teachers seldom use audio or video on their presentation. They prefer to combine text and picture instead of the video and audio unless the material needs those. In this case, the teacher should master the computer literacy well to support them to combine those elements. This term is equal to the findings that researcher already found *(see figure 4.9)* page 49.

b. Multimedia Presentation Supports in Selecting the Picture

Based on figure 4.7, there is various consideration of the pictures selection in multimedia presentations. It is influenced by the pre-service teacher's habit and their visual literacy. Visual literacy was originally defined as a set of visual competencies or cognitive skills and strategies one needs to make sense of visual images.[58] Teacher's visual literacy assists them deciding the suitable picture to represent the explanation. With experiencing the various activities related to the selecting picture, it could enhance pre-service teacher's visual literacy. According to Baylen and D'Alba, visual literacy begins with the development of the brain's capacities over time, through both structured experience (i.e., teaching) and ongoing, informal interactions with the visual environment.[59] With the high level of computer literacy skill and good visual literacy, the quality of the presentation will increase. There were three major consideration of pictures' selection based on the

[57] Hall and Baumgartner, *IBM* (1991).
[58] Serafini, *Visual Literacy*.
[59] M. Baylen and D'Alba, *Essentials of Teaching and Integrating Visual and Media Literacy*.

figure 4.7. There are 'interesting and colorful picture, student's level and the consistency of the picture'.

1) Selecting the interesting and colorful picture

The 60% or 12 interviewees stated that they select the colorful and interesting picture for their presentation. It is because the students were likely pay attention when they saw something unusual and unique. The interesting picture here means that it is something that can engage student's attention. The interesting picture could facilitate learning and to arouse students' interest and imagination. As noted in the journal by Leung entitled *'Teaching with Visual Aids'*, stated that the key success factor of the picture selection is to get students involved and engaged with your presentations, to encourage them to imagine and visualize what is in the picture.[60] As seen on figure 4.8, pre-service teachers used animation of messy kitchen picture with colorful picture instead of using real picture of kitchen. Pre-service teacher chose this picture to get students attention to the material in the class.

2) Selecting the picture based on student's level

While the 30% or 6 interviewees said that they considered the student's level and material before deciding the picture. They said that the different of student's level need different picture such as senior high school and college students. The content of the material also affect the picture selection, whether they need more examples or more instruction. This is important for pre-service teachers as they will face the real students in teaching practice 2. The high computer literacy could accommodate them enhance their self-efficacy on teaching at any levels. According to Bandura, self-efficacy beliefs develop in response to four sources of information. The most powerful influence on self-efficacy is "enactive experience" in

[60] Olivia Leung, *Teaching with Visual Aids*, https://sites.google.com/a/gapps.cityu.edu.hk/gallery/issue003.

which self-efficacy for a behavior is increased by successfully performing the behavior.[61] Therefore, by experiencing with the several of students level and need will enhance their self-efficacy in order to facilitate students need. The evidence can be seen on figure 4.11 when teacher only use text to give example of sentence due the high of students level. While on figure 4.9, pre-service teachers used a simple picture to give students visualization about the task. This is important to enhance pre-service teachers self-efficacy in teaching any students level. By considering the students' level to decide the picture selection, it will make it easier for pre-service teachers to teach in the class.

3) Selecting the consistent picture

The rest 10% or 2 interviewees need consistency of the picture. Therefore, they selected the picture form certain website such as *pexels.com*, *freepik.com*, *pinterest.com*, etc. This consistency is needed to make the presentation look neat and orderly. With consistency, it reduces the unnecessary information and mess in the presentation. Pre-service teachers just put what's important and omit the unwanted information or picture. According to article of West Bolivar School District Summer Institute, it is stated that consistency is important for multimedia presentations to make the content placement in order.[62] The result proved the theory based on the appendix V, it is shown that the entire picture used is real human picture instead of animation. It will make students feel enjoy following the lesson because the examples are same from the beginning to the end. However, the placement of the picture is still messy and inconsistent.

[61] Bandura, *Self-efficacy: The Exercise of Control*.
[62] West Bolivar School District Summer Institute, *What Makes a Good Multimedia Presentation Design?*.

The selection of picture can affect students understanding about the material. Because in multimedia presentation, there are more picture used than text depend on students' level. To know the appropriate picture selection, pre-service teachers need the understanding about visual literacy and computer literacy. With high levels of computer literacy, pre-service teachers could enhance their skills in 'online searching'. Based on Prieto and friends, online search outcomes largely depend on the chosen search strategy, which represents the ways people deal with information online and distinguish between correct and false information. Three distinctive online search strategies exist: 1) The top-down strategy, where searchers start with a few general keywords, and then narrow the search by using more precise keywords until the necessary information is found; 2) The bottom-up strategy, where searchers look for specific keywords, and then review the returned results until the needed information is found; 3) The mixed strategy, where searchers combine both top-down and bottom-up approaches according to their information needs.[63] These strategies could help pre-service teachers find the appropriate keyword and variety of pictures in internet for their presentation. Meanwhile, visual literacy could help them deciding the best picture to put based on students need and lesson aim.

[63] Scaife and Rogers, *Cognitive Strategies in Web Searching*.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

1. Pre-service teachers' computer literacy skill levels

In order to answer research question what the pre-service teachers computer literacy skill levels in 'creating multimedia presentations', researcher did the survey to 45 pre-service teachers about their computer literacy skill levels. The levels are based on the *'Maryland Technology Literacy Standards for Student'*. There are three levels of computer literacy: basic, intermediate and proficient. Every level has their own criteria. Researcher determined 'creating multimedia presentations' from eight aspects of computer literacy skills based on the focus of this research. Based on the survey on 45 pre-service teachers, researcher found that 62.20% or 28 pre-service teachers' computer literacy levels were intermediate. Meanwhile, the 20% or 9 pre-service teachers were in the basic level and the rest 17.30% or 8 pre-service teachers were in the proficient level.

2. The support of computer literacy skill in creating multimedia presentation

To answer the second research question, the researcher did the interview about how computer literacy skill is supporting them in creating multimedia presentation. The results show that computer literacy skill supported them in explaining and designing the suitable presentation for the students. It also supports the pre-service teacher to provide suitable learning styles for students who have visual learning style. Furthermore, the computer literacy skill could support pre-service teachers managed the big class effectively because it can attract students' attention by providing interactive media. In sum, computer literacy skill can support pre-service teachers in selecting the appropriate pictures to help students understanding. High computer literacy skill level could support pre-service teachers select interesting, consistent and suitable pictures to support the lesson.

B. Suggestion

The researcher proposes some suggestions to the faculty of policy maker faulty of Faculty of Tarbiyah and Teacher Training, pre-service teachers and further researchers. They are as these following points:

1. To policy maker Faculty of Tarbiyah and Teacher Training
   a. It is essential to confirm the pre-service teacher about their preparedness of using technology in the classroom.
   b. It is considerable to facilitate students to access computer or online to make them easier in developing their computer literacy skills.
2. To Pre-service teachers

   It is important to consider the level of pre-service teachers' computer literacy to support them teaching using technology in the classroom. Along with the development of technology, pre-service teachers should take the advantage by learning about the use of technology in educational context.
3. To the further researcher

   The researcher has figured out about pre-service teachers' computer literacy skill in UIN Sunan Ampel Surabaya. The researcher presents a suggestion for further researchers in conducting a next research which is still related to this research. It is significantly considerable to conduct a research what strategies that pre-service teachers did to develop their computer literacy skill and the factor affected students' computer literacy. In addition, some weaknesses of this research can be reference for further research in order to make a complete study about pre-service teachers' computer literacy skill can be achieved.

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