DIGITAL LITERACY AND DIGITAL COMPETENCE OF TEACHERS ON TEACHING ENGLISH AT SMKN 4 PEKANBARU
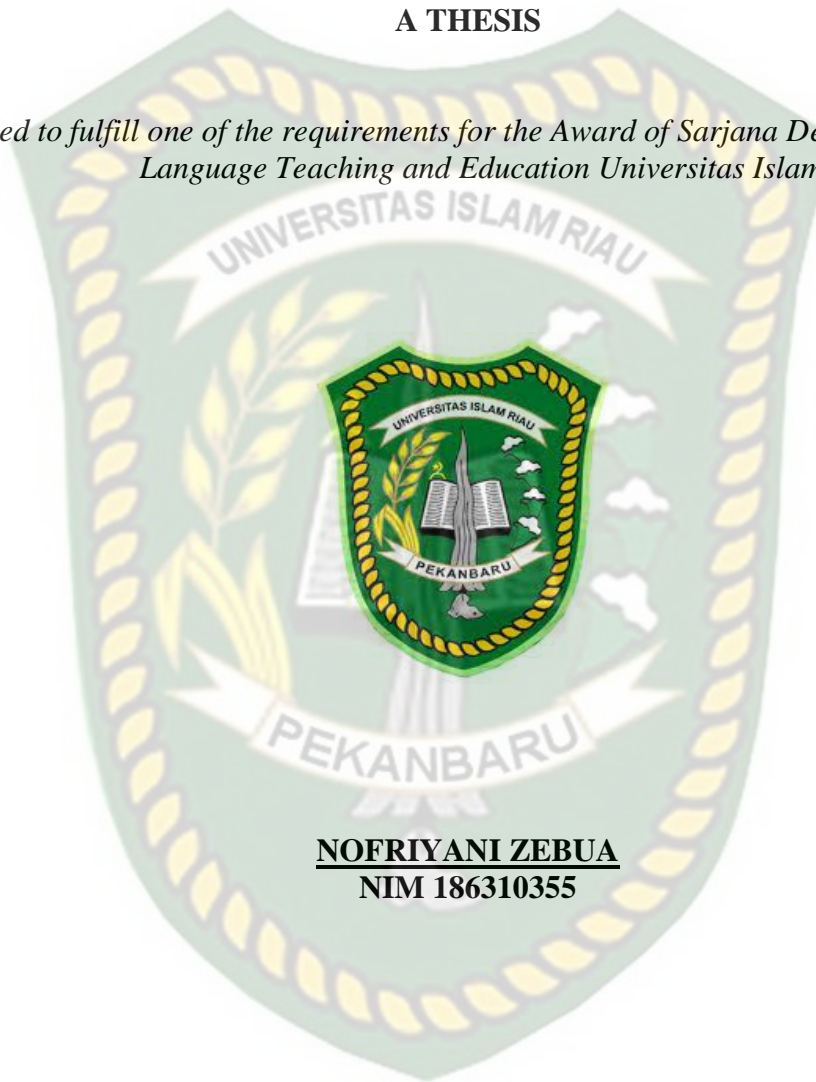
A THESIS

Intended to fulfill one of the requirements for the Award of Sarjana Degree in English Language Teaching and Education Universitas Islam Riau

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NIM 186310355

ENGLISH LANGUAGE EDUCATION
FACULTY OF TEACHERS TRAINING AND EDUCATION
UNIVERSITAS ISLAM RIAU
PEKANBARU
2022

THESIS

DIGITAL LITERACY AND DIGITAL COMPETENCE OF TEACHERS ON TEACHING ENGLISH AT SMKN 4 PEKANBARU

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Student Number	:	186310355
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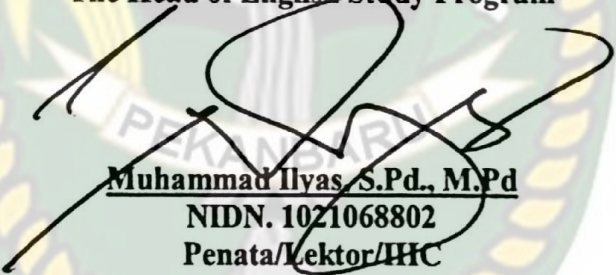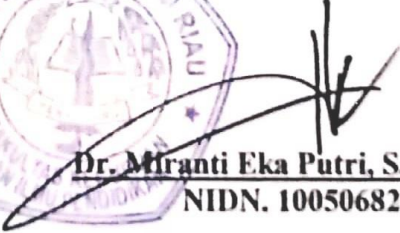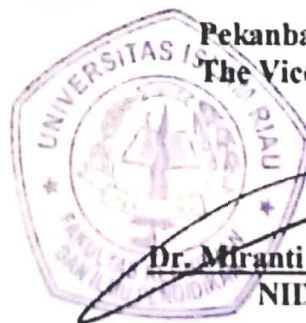Dr. Miranti Eka Putri, S.Pd., M.Ed
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LETTER OF NOTICE

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Digital Literacy and Digital Competence of Teachers on Teaching English at SMKN4 Pekanbaru

It ready to be examined. This letter is made to be used, as it is needed.

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Title	: Digital Literacy and Digital Competence of Teachers on Teaching English at SMKN 4 Pekanbaru

No	Date	Guidance Agenda	Signature
1	22-12-2021	Approved of title	
2	18-03-2022	Revised chapter II	
3	22-03-2022	Approved to join Seminar Proposal	
4	11-04-2022	Seminar proposal	
5	29-06-2022	Revised chapter IV	
6	08-07-2022	Revised chapter V	
7	15-07-2022	Approved to join thesis examination	
8	01-08-2022	Thesis Examination	

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KARTU BIMBINGAN TUGAS AKHIR
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Program Studi	: PENDIDIKAN BAHASA INGGRIS
Judul Tugas Akhir	: LITERASI DIGITAL DAN KOMPETENSI DIGITAL GURU DALAM PENGAJARAN BAHASA INGGRIS DI SMKN 4 PEKANBARU
Judul Tugas Akhir	: DIGITAL LITERACY AND DIGITAL COMPETENCE OF TEACHERS ON TEACHING ENGLISH AT SMKN 4 PEKANBARU
Lembar Ke	: 1

NO	Hari/Tanggal Bimbingan	Materi Bimbingan	Hasil / Saran Bimbingan	Paraf Dosen Pembimbing
1	Wednesday, 22 December 2021	Approved of title	Change the title	
2	Friday, 18 March 2022	Revised chapter II	Add more the theories in chapter II	
3	Tuesday, 22 March 2022	Approved to join Seminar Proposal	Recommend for seminar examination	
4	Monday, 11 April 2022	Seminar proposal	Further down research and data analysis	
5	Wednesday, 29 June 2022	Revised chapter IV	Repair, add the findings and finish chapter V	
6	Friday, 08 July 2022	Revised chapter V	Finish all the references, use mendeley and prepare the article	
7	Friday, 15 July 2022	Approved to join thesis examination	Recommend for thesis examination	
8	Monday, 01 August 2022	Thesis Examination	Prepare all the things	

Pekanbaru, 01 Agustus 2022
The Vice Dean of Academic

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I hereby declare that this thesis is entirely my own work, except for quotations which had been acknowledged in the references.

Pekanbaru, 01 August 2022

The Researcher

Nofriyani Zebua
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ACKNOWLEDGEMENT

Praise the lord, the researcher, would like to express her deepest gratitude to God, the Most Gracious and Merciful, for benefiting her in completing this thesis. The researcher believes that completing this thesis would not be possible without the affection and support of many individuals. Therefore, she would like to convey her most profound gratitude and respect to:

1. Dr. Sri Amnah, S.Pd., M.Si, as Dean of FKIP UIR, and all staff in Universitas Islam Riau for their invaluable assistance.

2. Muhammad Ilyas S.Pd., M.Pd, as Head of English Language Education, and Sri Wahyuni S.Pd., M.Pd, as Secretary of English Language Education, who provided encouragement and permission to write this thesis.

3. Dr.Miranti Eka Putri, S.Pd., M.Pd., as my supervisor, always supported me in finishing my thesis. Thank you very much for your advice, suggestions, corrections, direction, love, and time on this thesis.

4. All the lecturers of English Language Education at FKIP UIR provided me with many lessons and experiences. Thank you for the love and support.

5. My dear parents Etina Najara and Sade Rakhi Zebua, my lovely brother and sister Yatafati Zebua and Nurwati Halawa, Mariyani Zebua and Rendi Harefa, Nolinia Zebua and Masaledi Zega, Fa'atule Zebua and Zaraini, Thank you for your prayers and blessings. And also my great younger brother and sister, Tris

Zebua and Vivi Zebua, Thank you very much for your love, effort, guidance, and trust. I love you all.

6. Thanks to Made for supporting the researcher and all my friends for helping the researcher in collecting the data for this research, my supportive friends Rada Febriani, Sarah Febrianti, Puan Maharani and all my classmates of B'18

Finally, the researcher recognizes that this thesis is far from perfection. As a result, constructive comments will be gratefully received to improve future studies. Hopefully, this research will contribute positively to educational progress, readers, and other researchers.

Pekanbaru, 01 August 2022

The Researcher

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ABSTRACT

Nofriyani Zebua.186310355. Digital Literacy and Digital Competence of Teachers on Teaching English at SMKN4 Pekabaru

Keyword : Digital Literacy, Digital Competence, Teaching English

This research aims to examine the literacy and competence of digital teachers in teaching English and its effect. Quantitative data is the result of the correlational study in the form of a questionnaire on teachers' digital literacy and digital competence. Data processing is done by simple regression, multiple regression test and correlation test using spss version 25. The simple regression test results concluded that the literacy and competence of digital teachers on teaching English at SMKN 4 Pekanbaru are high scores. The coefficient of determination (R Square) of digital literacy and digital competence is 90.3 % and 85.4 %.. Then, the effect concluded that T calc < T Table ; 1,182 <4,302 and 0,567 < 4,302. According to the basis of decision making, it was concluded that the null hypothesis is accepted. it means that digital literacy and digital competence in teaching English are not significant.

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CHAPTER I

INTRODUCTION

1.1 Background of the Problem

Education is surrounded by the internet and a series of digital technologies. Technology has been steadily infused into the regular lives of teachers and thus has ended up as a crucial portion of teacher instruction programs across the nation. According to B. Martin (2018) even though today's teachers are technologically familiar with ordinary technologies, numerous still battle with how to effectively actualize technology into instruction. It has been a difficult challenge for teachers to adapt to. The teachers must act flexibly to utilize the current development situation. They should embrace and stay digitalized to retain their existence following the rapid digitalization.

The main problem is teachers struggle to find valid information sources in digitalization because information can be easily produced and distributed to information users, and finding valid information becomes difficult. Then searching for information or material through the internet causes teachers to switch from physical reading sources to digital reading sources, so teachers lack problem-solving skills when using digital in the classroom. English teachers find challenges in teaching English through digitalization. On the other hand, they are proficient in communicating and conveying subject matter, questions, criticism, and suggestions to increase student enthusiasm for learning, while a

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comprehensive understanding of media literacy or digital is still speculative. It's happened and vice versa.

The teacher should possess and improve their digital literacy and digital competence as a solution. Teacher digital literacy can be used to gain access to teaching materials such as articles and explanations of English materials using audio, visual, and video media, among other things. The ability of teachers to apply their literacy is referred to as their digital competence. Hence, the use of digital technology in the English teaching and learning process must be integrated into the process. Many studies have confirmed that integrating digital technologies into English teaching and learning could benefit students. For instance, social networking applications can create effective learning processes and establish learning motivation among students. Therefore, to be useful for students, teachers need more reading skills and digital application skills to develop and strengthen their intellectual and emotional abilities. Adapting to technological change challenges teachers on two levels: first, to develop their literacy of digital. Second, to develop their competence in digital activities that give all students the competencies they need to succeed in the digital age.

Moreover, teachers' motivation to integrate digital literacy and digital competence is to prepare teaching for better careers in the future. It also describes intuition that has a significant effect on the use of digital devices in the teaching process. Access to digital devices, internet networks, and mobile phones are the main problems faced by teachers in integrating digital literacy and digital competence into teaching. Apart from this, the most important thing is the

teacher's knowledge of how to utilize all resources and media to successfully achieve teaching and learning objectives. Thus, this research helps teachers develop the necessary professional skills to support teachers in integrating digital literacy and competence into English language teaching.

Based on the explanation above, the researcher is interested in knowing the digital literacy and digital competence of teachers on teaching English. Thus, the researcher would like to conduct research entitled "**Digital Literacy and Digital Competence of Teachers on Teaching English at SMKN 4 Pekanbaru**."

1.2 Setting of the Problem

Reading skill is one of the indispensable skills in teaching and learning English in the digitalization era. Based on the researcher's observation of the class condition at the SMKN 4 Pekanbaru, The researcher observed that teachers had challenges in the teaching process with digitalization vibes. Searching for material sometimes needs a certain skill. Where the teacher must be able to direct and supply information to his students about the topic so that it may be easily comprehended as a learning material in digital terms. This necessitates that a teacher is qualified in digital literacy.

This means that by employing existing technology, teachers can readily access and explore learning resources. Not only that, but the researcher also discovered that there were other obstacles that teachers faced while using digital media, including hardware and software. On the other hand, it can be concluded

that the teachers' understanding of media or digital competence comprehensively is still speculative.

Because of that, digital competence is critical in deciding the answer to the challenges encountered. The digital literacy and digital competence of the teachers impacted their performance in using, developing, and creating media for teaching especially in English teaching. Therefore the researcher wants to know the effect of digital literacy and digital competence on teaching English.

1.3 Limitation of the Problem

Based on the setting of the problem above, There are two major limitations in this study that could be addressed. First, the study focused on the literacy of digital teachers in teaching English and on the competence of digital teachers in teaching English. Second, focused on the effect of digital literacy and digital competence of teachers on teaching English at SMKN 4 Pekanbaru.

1.4 Formulation of the Problem

Based on the limitation of the problem above, the formulation of the problem is verified as in the following:

1. How is the digital literacy of teachers towards teaching English at SMKN 4 Pekanbaru?

2. How is the digital competence of teachers towards teaching English at SMKN 4 Pekanbaru?

3. How is the effect of digital literacy and digital competence of teachers towards teaching English at SMKN 4 Pekanbaru?

1.5 Objective of the Research

The objective of the research is described as follows:

1. To find out the digital literacy of teachers towards teaching English at SMKN 4 Pekanbaru.

2. To find out the digital competence of teachers towards teaching English at SMKN 4 Pekanbaru.

3. To find out the effect of digital literacy and digital competence of teachers towards teaching English at SMKN 4 Pekanbaru.

1.6 Significance of the Research

This research is expected to provide benefits to parties in need. Some of the those areas are as follows:

1. This research is hopefully useful to help the process of teaching-learning English particularly in digital literacy and digital competence.

2. This research is hopefully useful to provide the teachers and readers information about Digital Literacy and Digital Competence of Teachers on teaching English at SMKN 4 Pekanbaru.

3. This research is hopefully useful to motivate teachers and readers to improve their Digital Literacy and Digital Competence.

1.7 Definition of the Key Terms

To avoid misinterpretation by the readers, would be better for the researcher to define the definition of the terms used in this research.

1. Digital literacy

   Digital literacy is defined as a set of understandings in the digital era is required to comprehend, produce, and negotiate meaning in a culture dominated by powerful images, words, and sounds (Gallardo et al., 2015)

2. Digital competence

   Digital competence is a set of abilities, skills, and attitudes needed for using ICT and digital media so that tasks are performed, problems are solved, communication is managed, information is shared, collaboration is achieved, content is created and shared, and knowledge is developed for work, leisure, learning, socializing, consuming, and empowerment (Ferrari, 2013).

3. Teaching English

   Teaching is the process of transferring knowledge from a teacher to students, as well as assisting them in developing skills and changing their attitudes to adopt positive behaviors. Teaching English is the activity of passing on the knowledge of the English language to students, which includes all elements and skills (Ulfa, 2020).

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Relevance Theories

This chapter discussed the review of related literature. The points will be discussed are the definition, concept, purposes, and components of digital literacy and digital competence, digital literacy and digital competence of teachers on teaching English, relevance studies, conceptual framework, and hypothesis.

2.1.1   Digital Literacy

Various parts of digital literacy will be discussed, including the concept, purposes, and components of digital literacy.

2.1.1.1   Concept of Digital Literacy

According to Putri (2020), "Literacy is an important part of language learning. Reading and writing skills are preferred aspects of literacy, but literacy is not just two skills". The understanding to recognize, develop, and create new media expressions through the use of digital media in specific situations to communicate with others is referred to as digital literacy (Lankshear, Colin Knobel, 2008). Forutanian, (2021) also argues that digital literacy is somehow a set of awareness, contexts, and skills that change with time and situation. To put it another way, it refers to the use of digital tools and technology for a simpler and better life. It is more than just computers, ICT, information, data, and media literacy.

Digital literacy is the ability to understand to create meaning using digital tools and to communicate effectively with others. It includes using visual representations and integrating different digital texts, navigating non-linear texts, and analyzing digital content (Neumann et al., 2017).

Liza & Andriyanti (2020) also argue that through the use of digital technologies, digital literacy is the a set of understanding to access, organize, understand, and evaluate information that includes multimodal perspectives as well as to participate in the rapidly growing digital communication channel by interpreting, managing, sharing, and creating meaning. Information literacy describes skills related to analyzing and interpreting information critically, interpreting visual media via visual literacy, utilizing digital content or computer literacy, and utilizing technology.

The concept of "digital literacy" arose from a long history of determining the meaning of terms in which a man named Paul Gilster (1997), used the term "digital literacy" to describe the capacity to comprehend and utilize information from multiple digital sources. Digital literacy, he maintained, is the ability to use technology and information from digital devices effectively and efficiently in a variety of contexts, including academics, careers, and everyday life. Digital literacy is divided into numerous capability groups (Yustika & Iswati, 2020). Digital literacy in concept is always related to many activities of life such as information, data and content, creation, innovation and research, technical proficiency, digital identity, wellbeing safety, security, communication, collaboration, participation, teaching, learning, and self-development.

Bawden (2001) develops a new concept of digital literacy that is based on computer and information literacy. When microcomputers became more widely utilized, not only in the business world but also in society, computer literacy arose in the 1980s. While, in the 1990s, as information became easier to organize, acquire, and broadcast via networked information technology, information literacy increased (Martin & Grudziecki, 2006).

Literacy's definition is changing, and it's no longer just about being able to read and write in the context of language and literature. Because it is suited to the demands of the times and the subject of science is mastered, there are numerous forms of literacy established. Statistical literacy, computer literacy, information literacy, media literacy, and digital literacy are examples of these types of literacy. As a result, the definition of literacy can be customized to the field of science being studied. The utilization of information technology and communication can aid literacy's success in today's educational environment. Indonesia recognizes the importance of aligning education with the times. As a consequence, technology's role in education has become increasingly important. The spread of information and communication technologies into all aspects of human life, as well as the development of new technologies.

In addition, A. Martin & Grudziecki (2006) indicated that digital literacy allows somebody's engage in social networks to create and share knowledge, as well as supports a wide range of professional computing abilities. According to Martin's (2008) opinion, digital literacy is a multi-faceted talent. Because each level is more difficult than the one before it, a person can gradually master digital

literacy. Digital competency in computers and technology is required for digital competency. To be considered digitally literate, however, one must be proficient in information, visual, media, and communication literacy. As a result, digital literacy is a complicated sort of talent that pertains to new skills that humans must possess to interact with today's digital environment.

It can be concluded that digital literacy is defined as a set of understandings in the digital era is required to comprehend, produce, and negotiate meaning in a culture dominated by powerful images, words, and sounds (Gallardo et al., 2015).

2.1.1.2 Purposes of Digital Literacy

Digital literacy is frequently used as a catch-all word for a variety of educational activities aimed at preparing users to function in a digitally rich society (Leaning, 2019). According to Janssen et al., (2013) the purpose of digital literacy is that teachers can help students understand and build awareness of the broader factors surrounding the use of technology and its impact in future classrooms, and to help them understand and develop attention to the broader considerations surrounding the use of technology and its impact. Furthermore, the concept of competence emphasizes the need for continuous revision, reflecting changes in technological systems and implementing them, "taking into account the nature of technological development".

Teachers, academics or researchers, and cultural commentators frequently reread The Uses of Literacy (Hoggart 1957) to address current difficulties in

education and social mobility. Literacy is viewed as having two functions: facilitating mobility on the one hand and regulating power on the other.

In practice teacher educators must always reflect on existing capabilities and requirements, and access professional learning, to respond to the rapidly changing educational environment and the opportunities presented by emerging technological breakthroughs.

According to Nugroho (2022), the purpose of digital literacy can be seen from the importance of implementing digital literacy. The following is the importance of implementing digital literacy:

1) Literacy is essential for a person's success in coping with a variety of issues.

2) Literacy abilities allow a person to not only learn new information but also record experiences for future reference.

3) Digital literacy increases vocabulary improves brain function, and new insights and information are just a few of the advantages of a literacy culture. It can help people enhance their interpersonal skills and sharpen their ability to grasp the significance of the information they are reading. And also Train someone's thinking and analytical skills, increase one's focus and concentration, and practice writing and word stringing.

2.1.1.3 Component of Digital Literacy

There are some components of digital literacy. Newman (2009), state that there are three basic components of digital literacy in the form of social awareness, critical thinking and knowledge of digital tools (Putri, 2022, p. 5). Those components can be seen as follows:

a. Social Awareness

The first component of digital literacy is Social Awareness. This is can be understood as the ability to perceive things from other people's points of view and empathize with them, including those from various origins and cultures, which is referred to as social awareness. The ability to recognize and use family, school, and community resources and supports, as well as the understanding of social and ethical norms. Putri (2022), stated that " Social awareness is the ability to understand oneself to collaborate, communicate according to context or audience"

In social awareness, a variety of interesting things occur when a person becomes focally aware of their experience. At the most fundamental level, the focus point of awareness becomes "something." It is formed as a unitary portion of experience and thus can be distinguished from other things.

b. Critical Thinking

Digital literacy is more than just the ability to use multiple sources of learning from the internet; it is also a process of reflective critical thinking (Alrianingrum et al., 2020). Critical comprehension or critical thinking is an indispensable skill. It can be defined as the ability to think logically and orderly to understand the link between ideas and facts, or an ability to see things in terms of how they relate to one another.

c. Knowledge of Digital

Literacy is the thing that has become the development of globalization in our digital era. It is only natural that the advancement of time and the way of literacy should be harmonized. The digital generation must contribute by raising

awareness of the importance of in-depth technical knowledge and proficiency. In general, knowledge can be divided into two categories: knowing what and understanding how. Knowing that refers to understanding definitions, concepts, and facts, whereas knowing how refers to understanding how to achieve something. Putri (2022) mentioned that knowledge of digital is "The ability to possess the software and hardware knowledge or ICT literacy"

Knowledge of digital technologies entails understanding what, how, and why such technologies are used. In supportive environments, technologies enable everyone to participate in problem-solving and knowledge advancement. Knowledge of the functions and benefits of digital technologies, as well as their applications, might be considered a prerequisite for the successful integration of digital technologies into education.

2.1.2 Digital Competence

There are various ideas associated with the study being conducted on the concept of digital competence, the purposes of digital competence, and the components of digital competence.

2.1.2.1 Concept of Digital Competence

The term "skills" is replaced by the term "competence", which expresses the need for a wider and deeper scope for skills-related issues. Competence consists of more than just ability. From (2017), states that digital competence first emerged in the European debate in 2000, when conditions for lifelong learning were being developed and were expanded further when they were presented as

one of the eight core competencies in the 2006 EU guidelines. For the ability to use ICT, "digital competence" includes the ability to utilize certain digital technologies or software, such as Microsoft Word, or a type of digital equipment such as a word processor, etc (Krumsvik, 2011).

Most of the literature deals with "basic Information and Communication Technology (ICT) skills or specific sub-skills (Ilomäki et al., 2016). In the context of education, digital competence is defined as the ability to apply the knowledge, attitudes, and skills necessary to plan, implement, evaluate, and maintain an overview of the teaching and learning process supported by ICT, together with a solid theoretical foundation, investigation, and experimentation. The pedagogical community has recognized the importance of digital competencies for teaching and learning and believes that they will help in solving many problems in the teaching and learning process (Zhao, Pinto Llorente, et al., 2021). Digital competence is the foundation for teacher education and a means of strengthening their professionalization. The development of digital competence is critical in achieving the minimum level of competence at various stages of education (Vuorikari et al., 2016).

People's ability to utilize technology, including appropriation, recognizing ethical problems, and critical use, is conceptualized as digital competence (Ilomäki et al., 2011). Based on the foregoing, it is clear that digital competence can aid in the direction of learning in a digital world that is always changing, while also promoting the critical, responsible, and creative use of technology.

Thus, digital competence is essential for training in educational processes and involvement in twentieth-century society.

Based on the explanation above, we can conclude that digital competence is a set of abilities, skills, and attitudes needed for using ICT and digital media so that tasks are performed, problems are solved, communication is managed, information is shared, collaboration is achieved, content is created and shared, and knowledge is developed for work, leisure, learning, socializing, consuming, and empowerment (Ferrari, 2013). Digital competence is essential in applying technology-based knowledge, attitudes, and skills whereas digital competence is closely related to the ability to apply knowledge in the use of information and communication technology based on pedagogical principles, with an understanding of the implications of educational methods.

2.1.2.2 Purposes of Digital Competence

Digital competence is also understood as cognitive skills, attitudes, and technology (Zhao, Sánchez Gómez, et al., 2021) For deeper detail, digital competence also has a purpose, such as helping relieve many problems and challenges in today's knowledge society. For teachers, digital competence means using ICT with a good pedagogical-didactic understanding and being aware of how this might impact the learning strategies and educational formation of pupils.

The possibilities of digital competence are also mentioned by the European Commission (2016), namely: (1) a new training syllabus for digital competence in adult education; (2) professional development programs for teachers; and (3) third-sector education and training programs.

2.1.2.3 Component of Digital Competence

According to Putri (2022) there are five components of digital competence:

a. Information

Information is facts or details about something. This can be encountered or interacted with through digital, this can be found digitally, such as when browsing, searching, and filtering data and digital content.

b. Communication

Communication is about interacting with digital technology so that people learn the digital communication methods that are suited for a specific setting. This also includes sharing using digital technologies, such as sharing data, information, and digital content with others via acceptable digital technologies. To act as an intermediary and to be aware of reference and attribution standards.

c. Content-Creation

Content creation entails developing and editing digital content in various formats, as well as expressing oneself through digital methods. involving the modification, enhancement, and integration of information and material into existing knowledge pools to produce new content and knowledge following that, programming is used to plan and build an understandable sequence of instructions for a computing system to solve a given problem or perform a certain task.

d. Safety

This includes safeguarding equipment, safeguarding private information, safeguarding safe practice, and safeguarding the environment.

e. Problem-Solving

This includes fixing technical difficulties, identifying needs and technological solutions, leveraging digital technologies creatively, and detecting digital competency gaps.

2.1.3   Digital Literacy and Digital Competence of Teachers on Teaching English

Digital literacy and digital competence in education are especially important in light of both the dangers posed by the Internet and the opportunity for learning information that it provides. There is a tight relationship between digital competence and digital literacy. According to Putri (2022), "Digital literacy is a digital technology that is effectively and critically navigated and evaluated. In another words, digital litercy is technology-based literacy"(p.5). Then she add that "Digital competence is the ability of a person to use technology based or digital literacy" (p.5). However, they are sometimes referred to as one and used to support one another while having separate definitions. The term "digital literacy" is defined as the combination of computer literacy, information literacy, and media literacy. Then, "digital competence" is frequently used to describe the skills that people in today's society should possess. In terms of teacher education, generating digitally literate pupils entails prioritizing technical abilities in the use of digital tools and systems deemed appropriate for education, as well as identifying how they might be applied in units of study.

Because of technological innovation, teachers must better comprehend and critically examine their role and influence in the emergence of new practices when teaching English. This is a significant problem for teachers, who must not only help students utilize digital technology more actively and effectively in class but also help them understand and pay attention to a broader variety of considerations around the use of technology and its effects (Janssen et al., 2013).

Furthermore, Lund (2014) said this is especially difficult to achieve because it necessitates catering to more than just students' immediate capability needs to develop transformative competence, which will allow them to translate how to best use digital resources to support their own students' learning into specific instructive, learning design, classroom organization, and assessment practices. As a response to the significance of improving English teaching and learning, teachers' digital literacy and digital competence in teaching English must be continuously improved and developed.

There are some differences between digital competence and digital literacy that can help people to understand those meanings in detail. The differences can be seen in the below table.

Table 2.1 The differences between digital competence and digital literacy

Digital Competence	Digital Literacy
An employability requirement of the digital age	Conceptualizations of the changing learning paradigm in the digital age
A 'skills' connotation, implying competency with some of today's	Deictic approaches to learning and communication

computer applications, including word processing and e-mail, etc.	
Set of abilities needed to apply digital technologies to work, leisure and education	Set of understandings needed in the digital era to understand, produce and negotiate meaning in a culture made up of powerful images, words and sounds
Skills people should have in the digital era	An assumption that skills, awarenesses and understandings exist that will enable individuals first to survive and second to be more effective in their e-encounters
Skills to communicate with others and address a wide range of texts in all media	A combination of technical-procedural, cognitive and emotional-social skills
A range of capabilities (knowledge, skills and competences) covering three main categories: ICT practitioner skills; ICT user skills, and e-business skills	Processes of awareness, confidence, evaluation, reflection, adaptability and willingness to meet the digital age challenges
Demonstrated ability to apply knowledge, skills and attitudes to achieve observable results; measurable	Ability to understand and use information in multiple formats from a wide range of sources when this is

performance through rubrics	presented via computers
Confident and critical use of Information Society Technology (IST) for work, leisure and communication	Complex cognitive, motor, sociological, and emotional skills that users need in order to function effectively in digital environments
Underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet	Awareness, attitude and underlying abilities needed to use digital tools appropriately and to reflect upon this process

(Adopted from Gallardo et al., 2015)

2.2 Relevance Studies

In this section, the researcher discusses the relevance of studies that may provide insight into the effect of digital literacy and digital competence of teachers on English teaching at SMKN 4 Pekanbaru. In this situation, the researcher is never made aware of or hears about the same research. However, the researcher discovered a research study that was similar to this study.

The first Hassan & Mirza, (2021), entitled *"The Digital Literacy in Teachers of the Schools of Rajouri (J&K)-India"* tells the results of the study to demonstrate that instructors in District Rajouri (J&K) do not support ICT integrated teaching. The main cause for this is a lack of ICT skills among teachers, which can be mitigated by providing suitable teacher training that focuses on the development of ICT abilities. The data was collected using closed-ended multiple-choice questionnaires in which respondents were asked about their experiences with the use of ICT in the teaching process at their respective schools.

The second (Putri, 2022b), entitled "Monograph Digital on English Language Education: Literacy and Competence". This book explained that students and lecturers have digital skills in the context of literacy. The problem comes from the real environment in the world of education. Based on the relevant study, the researcher determined that this research was conducted alone by the researcher herself.

2.3 Conceptual Framework

Figure 2.1 Conceptual Framework

Digital Literacy and Digital Competence of Teachers on teaching English

Digital Literacy

Digital Competence

A set of understandings in the digital era is required to comprehend, produce, and negotiate meaning in a culture dominated by powerful images, words, and sounds. **(Gallardo et al., 2015)**

Digital competence is a set of abilities, skills, and attitudes needed for using ICT and digital media so that tasks are performed, problems are solved, communication is managed, information is shared, collaboration is achieved, content is created and shared, and knowledge is developed for work, leisure, learning, socializing, consuming, and empowerment Ferrari (2013)

Teaching English

Giving the questionnaire about digital literacy

Giving the questionnaire about digital competence

Teaching English is the activity of passing on the knowledge of the English language to students, which includes all elements and skills (Ulfa, 2020)

Indicator about digital literacy:
1. Technique
2. Cognitive
3. Socio-Emotional

Indicator about Digital Competence :
1. Information
2. Communication
3. Content-Creation
4. Safety
5. Problem-Solving

Giving the questionnaire

English Teacher

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2.4 Hypothesis

Based on the research question, the hypothesis can be written as follows:

Research Question 1: How is the digital literacy of teachers towards teaching English at SMKN 4 Pekanbaru?

Ho : The digital literacy of teachers towards teaching English at SMKN 4 Pekanbaru   is not high score

H$_1$: The digital literacy of teachers towards teaching English at SMKN 4 Pekanbaru is high score

Reseach Question 2: How is the digital competence of teachers towards teaching English at SMKN 4 Pekanbaru?

Ho : The digital competence of teachers towards teaching English at SMKN 4 Pekanbaru is not high score

H$_1$: The digital competence of teachers towards teaching English at SMKN 4 Pekanbaru is high score

Reseach Question 3: How is the effect of digital literacy and digital competence of teachers towards teaching English at SMKN 4 Pekanbaru?

Ho : The digital literacy and digital competence of teachers towards teaching English at SMKN 4 Pekanbaru is not significant

H$_1$: The digital literacy and digital competence of teachers towards teaching English at SMKN 4 Pekanbaru is significant

CHAPTER III

RESEARCH METHOD

3.1 Research Design

This current research is a quantitative approach that used a correlational study design. According to Mulyatiningsih (2011), The Correlational study hypothesis is a phrase that expresses a hypothesis concerning the relationship, correlation, or association between the independent and dependent variables (X and Y). One independent variable might have a relationship with one dependent variable, or numerous independent variables can have a relationship with one dependent variable.

Furthermore, Gay et al., (2012:204) explain that the purpose of correlational research involves collecting data to determine whether, and to what degree, a relationship exists between two or more quantifiable variables. The degree of relationship is expressed as a correlation coefficient. If two variables are related, scores within a certain range on one variable are associated with scores within a certain range on the other variable. This research consisted of two variables; two variable independent; Digital literacy and digital competence, and one dependent variable; teaching English. The following diagrams were the design of the research:

Figure 3.1 Research Design

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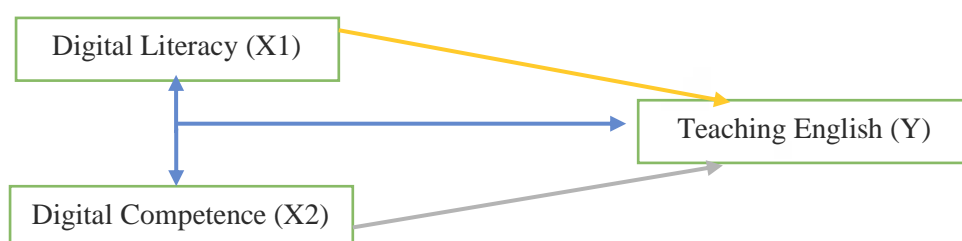
3.2 Location and Time of the Research

This research conducted at SMKN 4 Pekanbaru Jl Purwodadi Kelurahan Sidomulyo Barat Kecamatan Tampan Kota Pekanbaru. Started to conduct on June up to July 2022.

Table 3.0 The schedule of the research

No	Activities	June				July			
		1	2	3	4	1	2	3	4
1	Spread out the questionnaire								
2	Processing the data and consultating the report								
3	Ready for examination								

3.3 Population and Sample of the Research

3.3.1 Population of the Research

According to Sugiyono (2017), population is a broad category that includes objects or subjects with specific quantities and characteristics that are studied by researchers and from which conclusions are drawn. The population of this research is the teachers at SMKN 4 Pekanbaru.

3.3.2 Sample of the Research

According to Sugiyono (2017), a sample is a subset of the population in terms of size and characteristics. Samples taken from the population must be truly representative. In taking the sample the researcher used the purposive sampling technique. The purposive sampling technique is a technique with specific considerations. The sample of this research is existing English teachers who teach at SMKN 4 Pekanbaru. Five teachers was the respondent of this research.

Table 3.1 Sample of the research

No	English Teacher	Amount
1	Class X	2 Person
2	Class XI	2 Person
3	Class XII	1 Person
	Total	5 Person

3.4 Instrument of the Research

The intruments that used by the researcher in this research can be seen on the following table :

Table 3.2 Variables and Instruments of the research

No	Variables	Instrument	Information
1	Digital Literacy	Questionnaire	Teachers
2	Digital Competence	Questionnaire	Teachers
3	Teaching English	Questionnaire	Teachers

3.4.1   Variable X

In collecting the data the researcher used a questionnaire. For Variable X the questionnaire is about digital literacy and digital competence. For digital literacy, each questionnaire consists of 3 indicators and 8 sub-indicators. Meanwhile, digital competence consists of 5 indicators and 27 sub-indicators related to digital literacy and digital competence. Furthermore, This instrument uses the Likert scale which consists of five scales to decide whether they are always, often, sometimes, rarely, and never. The researcher used a questionnaire with closed ended question.

Table 3.3 Digital Literacy Research Instruments

Data type	Instrument	Indicator	Sub-Indicator
Quantitative	Questionnaire	Technique	Using technology for learning
			Using and adapting to new technologies
			Formatting and publishing research and idea electronically
			Solving basic engineering problems
		Cognitive	Critical thinking skills when searching, evaluating and creating digital information
			Ability to use and analyze visual or audio text-based information, understand the form, location format and methods of accessing information sources
		Socio-Emotional	Structural social literacy by placing and producing socially
			Using a digital environment for learning and communication

Tabel 3.4 Digital Competence Research Instruments

Data Type	Instrument	Indicator	Sub-indicator
Quantitative	Questionnaire	Information	Identifying
			Finding
			Retrieving
			Storing
			Arranging
			Analyzing
		Communication	Communicating through digital environment
			Sharing resources through online tools
			Connecting with other people
			Collaborating through digital tools
			Interacting
			participating in communities and networks, cross-cultural awareness
		Content Creation	Create and edit new content (from word processing to images and videos)
			Integrating and elaborating knowledge and content

			Producing creative expression, media output and programming
			Dealing with andimplementating intellectual property rights and licenses
		Safety	Personal protection
			Data protection
			Digital identity protection
			Security measures
			Safe and sustainable use
		Problem solving	Identifying digital requirements and resources
			Making the right decisions on the most appropriate digital tools
			Objectives and needs
			Solving conceptual problems through digital means
			Creative in using technology
			Troubleshooting technical problems
			Updating competencies and others

Adopted from (Putri, 2022b)

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Table 3.5 Likert Scale

NO	DESCRIPTION	SCORE
1	Always	5
2	Often	4
3	Sometimes	3
4	Rarely	2
5	Never	1

3.4.2 Variable Y

Variable Y or the dependent variable is the variable that is affected or resulted as a result of the independent variable (Sugiyono, 2017). The (Y) variable in this research will be teaching English. The researcher will use the questionnaires explored from the above indicator relate to teaching English.

3.5 Data Collection Technique

The researcher followed the procedures in collecting the data which is necessary in the this research as follows:

1. Questionnaire

   Questionnaire is a number of written statements or questions to obtain the information needed from the respondent as the data. The questionnaire used closed ended question. it will be given to the English teachers and will be documented afterward.

In collecting the data, the researcher carried out several stages in the form of :

1. Data collection,

   The researcher gives the questionnaire to the English teacher at SMKN 4 Pekanbaru. Then collect the questionnaire and the recording as the data.

2. Checking data (editing),

   After collecting the data the researcher checks the data (editing). Here the researcher ensures that the existing data is filled in properly.

3. Coding data,

   After checking the data, the researcher continues the stages by coding the data and arranging the data so it can be easier to read.

4. Data entry,

   The next step is entering the data, the researcher will move the data that has been converted into code into the data processing machine/computer

5. Data processing

   The researcher process the data and ensure that all data that has been entered into the data processing machine is following the actual.

6. Data analysis, data interpretation

   The researcher has to analyze the data and know the relationship that exists between the variables.

7. Making conclusions and recommendations.

   The researcher concludes the result of the process.

3.6 Data Analysis Technique

The data will be analyzed by using inferential statistics. The researcher chooses to use SPSS version 25 to make the data analysis easier. Some steps can be used :

a. Simple Regression

To analyze the effect of the independent variable (free) on the dependent (bound), the researcher uses simple regression. Simple regression is a regression that only involves one independent variable and one dependent variable. The independent variable is symbolized by X while the dependent variable is concluded by Y. $Y'=a+bX$ is the regression equation for simple regression.

b. Multiple Regression

The researcher uses multiple regression to analyze the effect of independent and dependent variable. Multiple regression is devoted to the independent variables that give the effect of at least 2 variables. The regression equation of multiple regression is formulated as $Y = a + b_1X_1 + b_2X_2 + b_nX_n$.

c. Classical Assumption Test

The classical assumption test is the next step in this research. This is a prerequisite test that was performed before undertaking additional analysis of the data that had been obtained. This classical assumption test is designed to provide a regression model that meets the BLUE criterion (Best Linear Unbiased Estimator). A regression model that meets the BLUE criteria can be utilized as a dependable estimator when the estimator is deemed unbiased, consistent, and efficient. There are 3 kinds of classical assumption tests such as:

1. Normality Test

This is done to determine whether the data used to test hypotheses, both dependent and independent, is normally distributed or not. As a result, the Kolmogorov-Smirnov test is used in this study for statistical analysis. If the data is determined to be normally distributed, it passes the normality test and meets the BLUE (Best Linear Unbiased Estimator) requirements. The following assumptions describe whether or not the research data has a normal distribution.

a. Data is said to be normally distributed if the significance value of the Kolmogrov-Smirnov test on the residual value from multiple linear regression analysis is more than 0.05 (> 0.05.).

b. Data is considered to be non-normally distributed if the Kolmogorov-Smirnov test on the residual value from multiple linear regression analysis yields a significance value of 0.05(<0.05).

2. Heteroscedasticity Test

A heteroscedasticity test is performed to determine whether or not the regression model has the same error diversity. Homoscedasticity refers to the assumption of the same error diversity, whereas heteroscedasticity refers to the diversity of distinct error values. The error value for each observation is anticipated to be constant. The data after the test, on the other hand, is declared to have heteroscedasticity. This differs from the traditional assumption requirements in that there are requirements in the BLUE criteria (Best). Heteroscedasticity that is linear One of the methods for detecting heteroscedasticity is the Glacier Test,

which performs a regression test of the independent variables on the absolute residual value.

Multiple linear regression analysis is used to get this residual value from research data. The following assumptions can be used to determine if the data has heteroscedasticity or not:

a. If the glacier test findings show that the significance value of the independent variable on the absolute value of the residual is greater than the predefined significant level (0.05), the data is said to be heteroscedastic.

b. If the glacier test findings show that the significance value of the independent variable on the absolute value of the residual is greater than the specified significant threshold (0.05), the data utilized in the study does not have heteroscedasticity.

3. Multicollinearity Test

A multicollinearity test is used to examine whether there is intercorrelation or collinearity between independent variables in a regression model. In a regression model, intercorrelation is a linear or strong link between one independent variable or predictor variable and other predictor variables. The value of the correlation coefficient between the independent variables, the value of VIF and Tolerance, the value of Eigenvalue and Condition Index, and the standard error value of the beta coefficient or partial regression coefficient all indicate intercorrelation. The following assumptions can be used to identify whether or not the study data have multicollinearity :

a. If the value of VIF is greater than 10 and the value of Tolerance is less than 0.1, the data is considered to be multicollinear.

b. If the value of VIF is greater than 10 and the value of Tolerance is greater than 0.1, the data is said to be free of multicollinearity.

d. Validity and Reliability Test

Validity refers to the ability of the instrument used to measure something to precisely measure what is being measured. Reliability is the consistency of a measuring instrument, or whether an instrument can consistently measure something from time to time. The researcher asked the judgment expert. Here the instrument is validated by the validator: Dr. Miranti Eka Putri M.Ed as the vice dean of academic Universitas Islam Riau and the researcher advisor.

e. Correlation Test

The correlation test is a statistical test used to determine whether or not there is a relationship between two or more variables from the study, as well as the magnitude of the relationship between research variables.

f. Hypothesis Testing Design

This hypothesis testing is evaluated by identifying the null hypothesis and alternative hypotheses, conducting test research and design, calculating the degree of significance, and making conclusions.

CHAPTER IV

RESEARCH FINDINGS

4.1 Data Presentation

The title of this research was digital literacy and digital competence of the teachers on teaching English at SMKN 4 Pekanbaru. Therefore, digital literacy and digital competence as the independent variable, and teaching English is the dependent variable. In assessing the digital literacy and digital competence of the teachers on teaching English, the researcher used instruments namely: a questionnaire that have been validated by validator Dr. Miranti Eka Putri, M.Ed, the vice dean of academic Universitas Islam Riau and also the researcher advisor.

Moreover, the score of digital literacy and digital competence was assessed by using each indicator such as technique, cognitive, socio-emotional, information, communication, content creation, safety, and problem-solving. All the data is analyzed using SPSS version 25 which can help the researcher in answering the formulation of this research question.

Furthermore, the score for digital literacy and digital competence was taken from the instrument which is shared with the sample. The sample here was English teachers at SMKN 4 Pekanbaru.

Data presentation is presented simple and multiple regression, classical assumption test, correlation test, and hypothesis testing designs.

1. **Simple Regression (Digital Literacy toward teaching English)**

<p align="center">**Table 4.1 Simple Regression model summary**</p>

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.903[a]	.815	.753	1.077
a. Predictors: (Constant), Digital Literacy				

The above table shows Correlation (R) = 0.903 it is mean there is correlation between digital literacy (X1) towards teaching English. The total correlation is 90.3 %. From that output was obtained (R Square) = 0.815 which means that the contribution of the total influence of digital literacy (X1) towards teaching English is 81.5 %. Based on the correlation strength table, the correlation is in between 0.81 - 0.99. So the correlation rate between digital literacy (X1) towards teaching English is categorized as high score. The hypothesis shows that H0 is rejected.

2. **Simple Regression (Digital competence toward teaching English)**

<p align="center">**Table 4.2 Simple Regression model summary**</p>

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.854[a]	.729	.639	1.302
a. Predictors: (Constant), Digital Competence				

The above table shows Correlation (R) = 0.854 it is mean there is correlation between digital competence (X1) towards teaching English. The total correlation is 8.54 %. From that output was obtained (R Square) = 0.729 which means that the contribution of the total influence of digital competence (X2)

towards teaching English is 72.9 %. Based on the correlation strength table, the correlation is in between 0.81 - 0.99. So the correlation rate between digital competence (X2) towards teaching English is categorized as high score. The hypothesis shows that H0 is rejected.

3. Multiple Regression

Table 4.3 Multiple Regression Anova

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.804	2	7.902	**5.275**	**.159**[b]
	Residual	2.996	2	1.498		
	Total	18.800	4			
a. Dependent Variable: Teaching English						
b. Predictors: (Constant), Digital Competence, Digital Literacy						

Table 4.2 shows that Fcalc < F Table = 5.275 < 19.00 and Sig > 0.05 = 0.159 > 0.05 From the amount above, shows that digital literacy and digital competence in teaching English together are influential but insignificant in the other words it can be concluded that literacy of digital and competence of digital teachers towards teaching English at SMKN 4 Pekanbaru are not significance which means that H0 is accepted.

4. **Correlation Test**

Table 4.4 Multiple Regression Coefficients

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	**-1.488**	7.276		**-0.205**	0.857					
	Digital Literacy	**0.415**	0.351	0.64	**1.182**	0.359	**0.903**	0.641	0.334	0.271	3.687
	Digital Competence	**0.061**	0.107	0.307	**0.567**	0.628	**0.854**	0.372	0.16	0.271	3.687
a. Dependent Variable: Teaching English											

Table 4..3 shows that the formula of multiple regression is Y = a + b1X1 + b2X2.. Y= -1.488 + 0.415X1 + 0.061X2. It is mean when digital literacy increases 1 % then Teaching English increases 41.5% While digital competence increases 1 % then teaching English increases 6.1%. For each digital literacy and digital competence shows that $T_{calc} < T_{Table}$ = 1.182 < 4.302 and 0.567 < 4.302 which means that digital literacy toward teaching English and digital competence toward teaching English are not significant or H0 is accepted. The correlation (Zero-order) of digital literacy towards teaching English = 0.903 (very strong relationship) and digital competence towards teaching English = 0.854 (very strong relationship). When viewed at Collinearity Statistics tolerance is more than 0.1 then, VIF less than 10. Hence, it is concluded that there is no multicollinearity.

5. Classical Assumption Test

Figure 4.1 Normality Histogram Test

Histogram
Dependent Variable: Teaching English

Mean = -1,15E-15
Std. Dev. = 0,707
N = 5
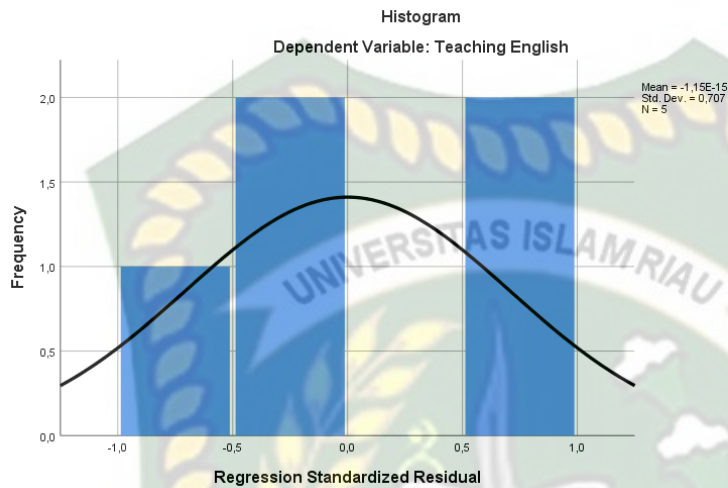
Based on the histogram figure, it looks bell curve shaped which shows that the residual is normally distributed.

Figure 4.2 Normality Probability Plot Test

Normal P-P Plot of Regression Standardized Residual
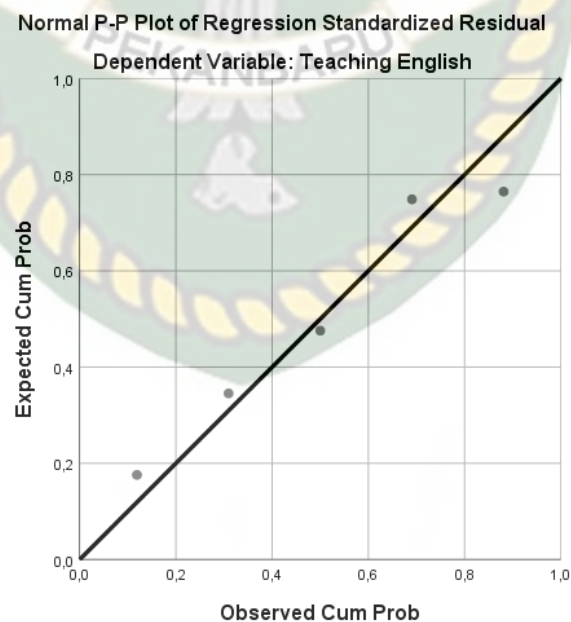Dependent Variable: Teaching English

Figure 4.2 shows the residual value based on the location of the dots concluding that has been normally distributed.

Table 4.5 Normality Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		5
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	0.86543527
Most Extreme Differences	Absolute	0.228
	Positive	0.154
	Negative	-0.228
Test Statistic		0.228
Asymp. Sig. (2-tailed)		.200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Table 4.4 shows the significance of the Kolmogorov-Smirnov Test One-Sample is greater than 0.05 hence the variables are normal or normally distributed.

Figure 4.3 Normality Scatterplot Test
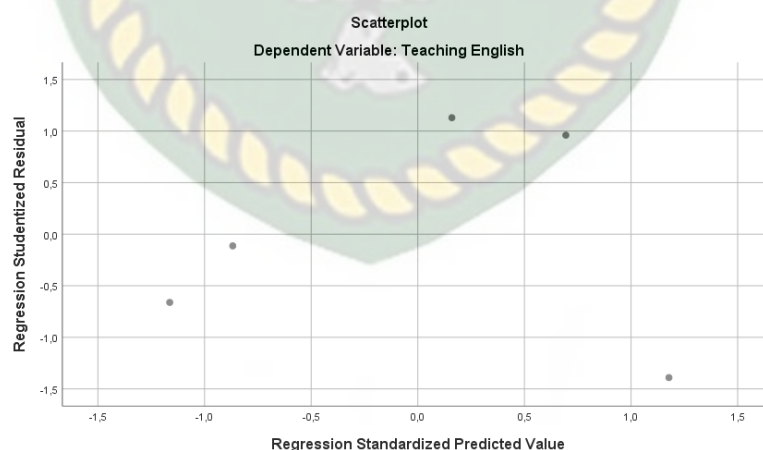
The visible pattern shows the pattern of dots spreading above and below the number 0 on the Y axis, so it is concluded that there is no heteroscedasticity

6. Hypothesis Testing

Table 4.6 Hypothesis Testing Design X1

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
1 (Constant)	**-2.125**	6.324		-.336	.759
Digital Literacy	**.585**	.161	.903	**3.636**	**.036**
a. Dependent Variable: Teaching English					

Table 4.5 Hypothesis Testing Design shows that T $_{calc}$ < T $_{table}$ = **3.636** < 4.302. So, it can be concluded that H0 is rejected while H1 is accepted which means there is an effect between the variables of Digital literacy and teaching English

Table 4.7 Hypothesis Testing Design X2

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
1 (Constant)	4.055	5.917		.685	.542
Digital Competence	.168	.059	.854	2.844	.065
a. Dependent Variable: Teaching English					

Table 4.6 Hypothesis Testing Design X2 shows that T $_{calc}$ < T $_{table}$ = **2.844** < 4.302. So, it can be concluded that H0 is rejected while H1 is accepted which means there is an effect between the variables of Digital Competence and teaching English.

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4.2 Data Interpretation

Data interpretation in the following explanation explains the result of literacy of digital teachers on teaching English, the competence of digital teachers in teaching English and the effect of teacher digital literacy and teacher digital competence on teaching English.

Research Question # 1: How is the digital literacy of teachers towards teaching English at SMKN 4 Pekanbaru?

Table 4.8 Descriptive Statistics Digital Literacy

	N	Minimum	Maximum	Mean	Std. Deviation
Digital Literacy	5	35	43	39.20	3347
X1.1	5	3	4	3.80	.447
X1.2	5	3	4	3.60	.548
X1.3	5	2	5	3.00	1.225
X1.4	5	3	5	4.00	.707
X1.5	5	4	5	4.20	.447
X1.6	5	3	5	4.40	.894
X1.7	5	3	5	4.20	.837
X1.8	5	3	5	4.00	.707
X1.9	5	3	5	4.00	.707
X1.10	5	3	5	4.00	.707
Valid N (listwise)	5				

The above table show that teacher's Digital Literacy variabel has the highest order of values on the six sub-indicator of the cognitive, then on the first of sub-indicator Technique. So that it can be conluded that the influential indicators are (1) Cognitive (2) Technique (3) Socio Emosional

Research Question # 2: How is the digital competence of teachers towards teaching English at SMKN 4 Pekanbaru?

Table 4.9 Descriptive Statistics Digital Competence

	N	Minimum	Maximum	Mean	Std. Deviation
X2.1	5	4	5	4.40	.548
X2.2	5	3	5	4.40	.894
X2.3	5	3	5	4.00	.707
X2.4	5	3	5	4.20	.837
X2.5	5	3	5	4.00	.707
X2.6	5	4	5	4.40	.548
X2.7	5	4	5	4.40	.548
X2.8	5	4	5	4.40	.548
X2.9	5	3	5	4.60	.894
X2.10	5	3	5	3.80	.837
X2.11	5	3	5	3.60	.894
X2.12	5	3	4	3.40	.548
X2.13	5	2	4	3.20	.837
X2.14	5	3	5	4.20	.837
X2.15	5	3	5	4.20	.837
X2.16	5	3	5	4.40	.894
X2.17	5	3	5	3.80	.837
X2.18	5	3	5	3.80	.837
X2.19	5	3	4	3.60	.548
X2.20	5	3	5	3.80	.837
X2.21	5	3	5	4.00	.707
X2.22	5	3	4	3.60	.548
X2.23	5	3	4	3.40	.548
X2.24	5	3	5	4,20	.837
X2.25	5	2	5	3,60	1.140
Digital Competence	5	86	112	99,40	10.991
Valid N (listwise)	5				

The above table shows that Digital Competence variable has the highest order of values in the fourth sub-indicator of the communication indicator. Then, the first and second sub-indicator of information indicator; The fourteenth and fifteenth sub-indicator of safety indicator; then the twenty first sub-indicator of the problem solving indicator; and the content creation indicator is on the seventeen

and eighteen sub-indicator. So that it can be concluded that the influential indicators are (1) communication; (2) information; (3) safety; (4) problem solving and (5) content creation.

Research Question # 3: How is the effect of digital literacy and digital competence of teachers towards teaching English at SMKN 4 Pekanbaru?

Tabel 4.10 Descriptive Statistics Digital Literacy and Digital Competence on Teaching English

	N	Minimum	Maximum	Mean	Std. Deviation
Digital Literacy	5	35	43	39.20	3.347
Digital Competence	5	86	112	99.40	10.991
Teaching English	5	18	23	20.80	2.168
Valid N (listwise)	5				

The table present the data Digital Literacy (X1) with N of 5 ; Mean of 39.20 then SD of 3.347. while Digital Competence (X2) with N of 5; Mean of 99.40 then SD of 10.991. Furthermore, Teaching English with N of 5; mean of 20.80 then SD 2.168.

Table 4.11 Descriptive Statistics Teaching English

	N	Minimum	Maximum	Mean	Std. Deviation
Teaching English	5	18	23	20.80	2.168
Y.1	5	4	5	4.40	.548
Y.2	5	4	4	4.00	.000
Y.3	5	3	5	4.00	1.000
Y.4	5	3	5	4.00	.707
Y.5	5	4	5	4.40	.548
Valid N (listwise)	5				

In teaching English the technique and problem solving indicator very influential which is software and hardware knowledge and identifying digital needs.

The correlation between digital literacy on teaching English is: First, there is correlation between digital literacy (X1) towards teaching English. The total correlation is 90.3 %. Second, the correlation value is positive with coefficient of determination (R Square) = 0.815. 0.815 > 0.01 which means that is correlated in the same direction. So the correlation rate between digital literacy (X1) towards teaching English is categorized as high score. The hypothesis shows that H0 is rejected.

The correlation between Digital Competence on teaching English is: First, there is correlation between digital competence (X1) towards teaching English. The total correlation is 85.4 %. From that output was obtained (R Square) = 0.729 > 0.01 which means that the contribution of the total influence of digital competence (X2) towards teaching English is 72.9 %. So the correlation rate between digital competence (X2) towards teaching English is categorized as high score. The hypothesis shows that H0 is rejected.

For the significance between digital literacy and digital competence toward teaching English is: First, digital literacy increases 1% then teaching English increases 41.5% While digital competence increases 1% then teaching English increases 6.1%. For each digital literacy and digital competence shows that $T_{calc} < T_{Table} = 1.182 < 4.302$ and $0.567 < 4.302$ which means that digital literacy toward teaching English and digital competence toward teaching English are not significant or H0 is accepted. Meanwhile, the correlation (Zero-order) of digital literacy towards teaching English = 0.903 (very strong relationship) and digital competence towards teaching English = 0.854 (very strong relationship).

The insignificant caused by not all indicator of the instument are influential. From the researcher data analysis it can be concluded that Teacher's digital literacy (1) Cognitive indicator with the sixth sub-indicator very influential which is evaluate and contextualize information. (2) Technique indicator with the first sub-indicator which is software and hardware knowledge; (3) Socio Emosional indicator with the ninth and tenth sub-indicator which is understand to collaborate, communicate according to context

Teacher's digital competence (1) Communication indicator with the fourth sub-indicator very influential which is sharing, connecting, collaborating, interacting. (2) Information indicator with the first and second sub-indicator which is identify, locate, retrieve, store, organize, and analyze information. (3) Safety indicator with fourteenth and fifteenth sub-indicator which is personal data. (4) Problem solving indicator with nineteenth sub-indicator which is identifying digital needs and (5) Content creation indicator with seventeenth and eighteenth sub-indicator which is creating and editing new concept. Teacher's teaching English on technique and problem solving indicator very influential which is software and hardware knowledge and identifying digital needs.

CHAPTER V

CONCLUSION, IMPLICATION, AND SUGGESTION

5.1 Conclusion

After analyzing the obtained data, it can be concluded that there is an influence of digital literacy and digital competence on teaching English. The strength of the relationship between digital literacy towards English is shown by the presented scores of **90.3 %.** Then digital competence towards teaching English is **85.4 %.** Based on the score strength table of correlation (R), the score is categorized as a very strong relationship. The null hypothesis (H0) is rejected. it concluded that the literacy and competence of digital teachers in teaching English at SMKN 4 Pekanbaru are high scores. The effect of digital literacy and digital competence of teachers on teaching English influence each other. The null hypothesis (H0) is accepted which means the literacy of digital and the competence of digital teachers in teaching English at SMKN 4 Pekanbaru is not significant.

5.2 Implication

The findings reported that literacy and digital competence impact teaching English. The implication of the impact are described as follows:

1. The literacy of digital teachers always impacts their English learning-teaching process. More teachers were good at literacy, increasing the input of knowledge that will be possessed by them.

2. The competence of digital teachers always impacts their English learning-teaching process. They are good at digital competence more they are effective and creative in doing teaching and learning activities.

3. Although the literacy of digital teachers and competence of digital teachers is a very strong relationship or categorized as high scores, then the literacy of digital and competence of digital teachers in teaching English at SMKN 4 Pekanbaru are not significant in this research, it is hoped that the teacher can continue to evolve themselves in digitalization era. Thus, teachers in the teaching and learning English are doing better and can also transfer good knowledge to the student in particular increasing their achievements.

4. The research findings are used as input for English teachers to prepare themselves related to English which has been done better and focuses on digital literacy and digital competence.

5.2 Suggestion

After conducting this research, the researcher proposes some suggestions for the English teachers and other researchers as written below:

1. **To the English teachers**

Many aspects of life influenced by digitalization, one of them is education where teaching always being the center of the activity. The teacher has to face and master all new technology digital base. This is hope in teaching English, teachers ability both literacy and competence of digital can help the students to increase their achievements in learning English. The teacher can present interesting digital media and use the attractive platform of teaching English and stimulate the

student to be more creative and active in using the digital technology. English teachers in teaching explore the software and hardware of digitalization as well as it brings advantages to the students' skills.

2. To other researchers

The research focused on digital literacy and digital competence in teaching English. There are many subjects and objects of learning that can be researched. This research can explore more by using other instruments such as documentation and other researchers could use specific material in English teaching to run the detailed research in a better way. Hence other researchers can conduct better improvement deals with this research by adding the subject or object for future research.

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