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Teachers' Perception of ICT Use in TEFL: A Case Study in Vocational School of Surakarta

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Abstrak: Penelitian ini bertujuan untuk mengetahui persepsi guru TEFL (*Teaching English as a Foreign Language*) di sekolah kejuruan mengenai penggunaan Teknologi Informasi dan Komunikasi (TIK) di kelas mereka. Studi ini mengeksplorasi potensi manfaat dan tantangan yang terkait dengan integrasi TIK dalam konteks pendidikan khusus ini. Desain penelitian untuk studi ini adalah penelitian metode campuran baik kualitatif maupun kuantitatif. Instrumen yang digunakan dalam penelitian ini adalah kuesioner dan wawancara. Hasilnya menunjukkan bahwa guru secara umum memiliki persepsi positif terhadap penggunaan TIK dalam proses pengajaran mereka. Diharapkan dengan menganalisis perspektif guru, penelitian ini bertujuan untuk memberikan kontribusi pada pemahaman yang lebih mendalam tentang bagaimana TIK dapat digunakan secara efektif untuk meningkatkan pembelajaran EFL bagi siswa kejuruan.

Kata kunci: Persepsi Guru, ICT, TEFL

Abstract**:** *Penelitian ini bertujuan untuk mengetahui persepsi guru TEFL (Teaching English as a Foreign Language) di sekolah kejuruan mengenai penggunaan Teknologi Informasi dan Komunikasi (TIK) di kelas mereka. Studi ini mengeksplorasi potensi manfaat dan tantangan yang terkait dengan integrasi TIK dalam konteks pendidikan khusus ini. Desain penelitian untuk studi ini adalah penelitian metode campuran baik kualitatif maupun kuantitatif. Instrumen yang digunakan dalam penelitian ini adalah kuesioner dan wawancara. Hasilnya menunjukkan bahwa guru secara umum memiliki persepsi positif terhadap penggunaan TIK dalam proses pengajaran mereka. Diharapkan dengan menganalisis perspektif guru, penelitian ini bertujuan untuk memberikan kontribusi pada pemahaman yang lebih mendalam tentang bagaimana TIK dapat digunakan secara efektif untuk meningkatkan pembelajaran EFL bagi siswa kejuruan.*

Keywords: *Teachers' Perception, ICT, TEFL*

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INTRODUCTION

The swift expansion of Information and Communications Technology (ICT) has resulted in notable transformations within the sphere of education. Through the utilization of ICT, educators have transitioned from traditional chalk-and-talk methodologies to instruction based on ICT. Students are currently exposed to a broader range of resources and have the ability to acquire languages in a more enriched and natural manner, given the plethora of texts, audio, and video materials available on the internet, as well as e-books, audio books, mobile applications, and other tools. The incorporation of technology has emerged as a pivotal element of the educational framework in the contemporary learning environment of the 21st century (Parette & Blum, 2013). The incorporation of ICT into the teaching of English language is particularly valuable, as students necessitate the acquisition of the skills essential for thriving in a global context, enabling effective and efficient teaching and learning

practices. As emphasized by Lewis (2009), depending exclusively on traditional textbooks in a world characterized by auditory and visual stimuli is insufficient. The adoption of ICT has the potential to redefine the role of educators, transitioning them from mere disseminators of knowledge to facilitators, thereby altering the dynamics of the teaching-learning process and empowering students to take ownership of their own educational journey.

Additionally, teachers' digital competency plays a crucial role in the effective implementation of ICT in teaching and learning processes, emphasizing the importance of developing e-learning skills among educators (Lamichhane, 2022). Furthermore, the advent of digital technologies has had an impact on the teaching profession in a number of ways., impacting teachers' work, professional development, and the need for ongoing adjustment and proficiency with digital skills (Medina et al., 2022). The integration of Information and Communication Technology (ICT) in Teaching English as a Foreign Language (TEFL) classrooms has indeed revolutionized foreign language teaching methodologies, as highlighted in various research papers. Studies emphasize that ICT tools such as LCD/LED projectors, PowerPoint presentations, and online platforms significantly enhance student engagement and comprehension (Ampa & Nappu, 2023). Furthermore, ICT integration in language instruction creates interactive learning environments and increases motivation for self-study., and improves critical thinking skills and creativity among students (Enrico, 2023). Additionally, collaborative technologies like telecollaboration have been shown to activate students' educational activities, increase language competence, and facilitate the exchange of linguistic and cultural competencies, ultimately enhancing the overall learning experience in foreign language classes (Otieno, 2023).As emphasized by Otenio (2023) and Softa (2022) ICT has significantly impacted foreign language teaching methodologies by providing powerful learning environments, enhancing interaction between students and teachers, and improving language competence and motivation.

Vocational school teachers' perceptions of integrating Information and Communication Technology (ICT) in Teaching English as a Foreign Language (TEFL) vary based on their experiences and contexts. Although most Indonesian teachers are in favor of adopting ICT in English classes, research indicates that many are not comfortable with these new tools, underscoring the importance of professional development. (Singh Saud, 2023). Additionally, a study in Indonesia's vocational schools found that teachers and students see benefits in using smartphones for English learning, but clear instructions are crucial to avoid confusion (Arzal et al., 2023). Vocational schools, with their emphasis on practical skills and career preparation, focus on equipping students with job-specific skills, present a unique environment for TEFL instruction and the role of English language proficiency may differ from traditional academic settings.

Bhandari (2020) in his research explored that Information and communications technology (ICT) in ELT is perceived and used by English language teachers in a way that incorporates critical skills. The teachers also looked into the advantages and difficulties of ICT integration. The constructivism theory served as the theoretical foundation for the study's execution. According to the survey, English language instructors view ICT integration positively since it allows them to engage students' cognitive abilities through

the use of ICT tools and gadgets. The study helps students become more creative and proficient in the English language. Furthermore, it has been identified that obstacles to the successful integration of ICT in English education include inadequate teacher ICT knowledge and proficiency, inadequate school resources and infrastructure, and a lack of ICT training.

Suparman (2020) The purpose of this study is to ascertain: 1) teachers' perceptions regarding ICT use; 2) Teachers' capacity to develop ICT; and 3) the impact of teachers' perceptions regarding ICT use and their ability to build ICT-based learning on student learning. Accomplishments in science suject at Jakarta's vocational high schools, this study is conducted at vocational high schools using a quantitative methodology and survey method. This study came to the following conclusions: 1) students' learning achievement in science subjects was influenced by teachers' perceptions about the use of ICT; 2) students' learning achievement in science subjects was influenced by teachers' abilities to develop ICT-based learning; and 3) students' learning achievement in science subjects was influenced by teachers' perceptions about the use of ICT and their ability to develop ICTs for learning together. Based on the study's findings, it is advised that instructors' perspectives of how to use ICT and their capacity to create ICTs for learning be improved in order to enhance students' ICT learning outcomes.

Yakkop (2021) said that It is critical to employ ICT for learning evaluation. These days, a popular paperless method for evaluating learning is Google Forms. One important benefit of using Google Forms as an assessment tool is that it can help teachers work less. According to this study, teachers' opinions on Google Forms-based applications for English assessment can be divided into two groups: highly and moderately perceived. Aside from that, Google forms' advantages as an EFL assessment tool are thought to be more effective, useful, straightforward, and cost, time, and energy-efficient.

Sosa Neira (2021) This study investigates how elementary and secondary school students see home learning (“Aprendeen Casa”) technique implemented in math classes during the COVID-19 pandemic by the morning shift of the School "la Aurora IE" in Bogotá, Colombia. 174 students participated in an inductive qualitative content analysis, and information was gathered using a handout for a learning guide. Academic (self-developing handouts + ICT, competences, processes, actors, and infrastructure), social (rule compliance, consideration for others, sharing with the family, lack of socialization), and personal (health issues and free-time activities) were the categories into which both positive and negative perceptions were grouped. The findings enable educators to modify their methods in order to enhance the areas that shaped unfavorable opinions, and educational establishments to embark on a digital revolution by utilizing ICT to enhance the quality of instruction.

Prasetyo et al (2022) in his research explain that,due to the COVID-19 epidemic, both teachers and students must modify their online learning strategies as they transition from in-person instruction to virtual learning. A lot of research has been done during the pandemic, especially on the use of ICT in EFL instruction. Relatively few studies discuss the use of cellphones as a platform for teaching English in the context of the workplace, despite an increasing body of research on ICT use in EFL contexts. The

study's findings demonstrated both the many advantages and difficulties of smartphone use in vocational education. According to the author, studying English on a smartphone is advantageous, useful, practical, and enjoyable—especially when employing a variety of smartphone applications. Notwithstanding the advantages of smartphones, the participants stated that the instructions should be more explicit because they occasionally become confused with those given by the teacher. Based on the results, this study proposed that English teachers use a variety of learning tools to help students better comprehend what it means to learn English.

Ganiyu & Makinde (2021) In Oyo Township, Nigeria, this study looked at how primary school female teachers saw the roles of ICT and how those roles have changed as a result of the study. The study comes to the conclusion that Oyo and Nigeria as a whole would experience more sustained development if female primary school teachers were to refocus their values toward the use of ICT in teaching and learning. On the basis of this, it was suggested that the government make sure that ICT policy is implemented and that female teachers be provided with ICT tools and sufficient training on their usage.

Existing research on ICT in TEFL primarily focuses on general EFL contexts or higher education settings and research exists on teachers' perceptions of ICT in TEFL more broadly, there is a scarcity of studies specifically examining vocational school contexts and the location is in Surakarta regency. Studies investigating the use of ICT in vocational schools often concentrate on technical skill development rather than language learning. This research aims to bridge this gap by specifically examining the perceptions of vocational school TEFL teachers regarding ICT integration and understanding how they perceive the potential and challenges of using ICT in their classrooms. As previously mentioned, the integration of ICT in the classroom, together with its technological advancements and the modifications they bring about to the teaching assignment, The attitudes of vocational school instructors regarding the integration of Information and Communication Technology (ICT) in TEFL (Teaching English as a Foreign Language) appear to be influenced by many processes that affect teachers during their professional growth. Consequently, a few queries surfaced, which we sought to address in our research: 1. What are the potential benefits of ICT applied in vocational school? 2. How do the challenges of ICT applied in vocational school?.

METHOD

The study used a mixed method research design for its research methodology. "The class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study" is how Johnson and Onwuegbuzie (2004) define mixed methods research (p. 17). The study used interviews and questionnaires as research tools.

The study used an open-ended questionnaire to collect data from 6 EFL teachers in a state vocational school in Surakarta (SMK X). The questionnaire consisted of close question and open-ended questions that allowed the teachers to express their thoughts and opinions on the use of ICT in their teaching practices.In addition to the questionnaire, the study conducted in-depth interviews with 6 of the participating

teachers. The interviews were designed to gather more detailed information and to triangulate the data collected through the questionnaire.

By shedding light on the possible advantages and difficulties faced by EFL teachers in Indonesia, this study adds to the body of knowledge already available on the use of ICT in EFL teaching and learning. The findings of this study can inform the development of effective strategies for integrating ICT in EFL classes and improving the quality of EFL education in Indonesia. Thematic analysis was used to examine the data which identify the main themes and sub-themes related to the research questions.

RESULT AND DISCUSSION

Findings

This research, conducted through surveys and interviews with TEFL teachers in vocational schools, aimed to uncover a range of perceptions regarding their teaching practices and the integration of technology. The findings highlight the use of both hardware and software in the teaching-learning process, providing valuable insights into teachers' abilities to adapt to technological tools. The following table presents the results of the questionnaire, specifically focusing on the ability to use hardware effectively in classroom settings.

Table 1. The ability to use hardware in teaching-learning process

NO	Hardware usage in teaching learning process	Responses	Percentage
1	Do you have your own computer?	Yes	100%
		No	0%
2	Do you use instructional animations, slideshows,	Yes	100%
	Films (video, CD, DVD etc.)	No	0%
3	Have you ever used Computer – Projector system as	Yes	100%
	instructional tool	No	0%

The result of the questionnaire on the first indicator, hardware usage, shows that 100% of the teachers reported owning a computer and using instructional animations, slideshows, and films. All of the teachers have utilized computer projector systems as instructional tools. The teachers are proficient in using Microsoft Office. However, 83% of the teachers can effectively search for information using search engines like Google, while 17% are less proficient. Besides, 66% have computers installed with electronic encyclopedias.

Table 2. The ability to use software in teaching-learning process

NO	Software usage in teaching learning process	Responses	Percentage
1	Are you able to use Microsoft Offices?	Yes	100%
		No	0%
2	Are you able to search information using search	Yes	83,3 %
	engines like Google?	No	16,7 %
3	Is your computer installed to any Electronic	Yes	66,6 %
	Encyclopedia?	No	33,4

The result of the questionnaire on the second indicator, Information and Support Resources shows that teachers find the Internet helpful as an information resource. The support from technical units in the ICT sector and the preparation of ICT training by schools were rated from very good to satisfactory. On the other hand, 83% have shared

experiences from different schools.

Table 3. Information and support resources used in teaching learning process

NO	Variables	Responses	Percentage
1	Do you think that internet is helpful as information resource in teaching-learning?	Yes	100%
		No	0%
2	Have you ever got any experience sharing from different schools?	Yes	83,3 %
		No	16,7 %
3	What contribution of the school and employing technical support units in ICT sector?	Very Good	33,3 %
		Good	50 %
		Satisfactory	16,7 %
		Poor	0 %
		Very Poor	0 %
4	How is your school in preparing ICT Training?	Very Good	33,3 %
		Good	50 %
		Satisfactory	16,7 %
		Poor	0 %
		Very Poor	0 %

The result of the questionnaire on the third indicator, Factors Encouraging Technology Usage shows that investments in infrastructure, training programs, and support services for instructional technologies were seen as important. Besides Policies for the diffusion of instructional technologies and support for expansion projects were also rated highly.

Table 4. Factors that encourage technology usage in teaching- learning process

NO	Variables	Scale	Remark	Mean
1	Motivating and rewarding teachers to use ICT in instructional activities	3= Important 2= Uncertain 1= Not important	15 2	17
2	Investments of the college on infrastructure of instructional technologies	3= Important 2= Uncertain 1= Not important	18	18
3	Investments of the college on teachers training programs for instructional technologies	3= Important 2= Uncertain 1= Not important	18	18
4	Investments of the college on the support services of instructional technologies	3= Important 2= Uncertain 1= Not important	12 4	16
5	Developing the policies and plans for diffusion of the instructional technologies	3= Important 2= Uncertain 1= Not important	12 4	16
6	Providing support for the projects towards the expansion of instructional technologies	3= Important 2= Uncertain 1= Not important	15 2	17
7	Integrate ICT into each subject during curriculum designing	3= Important 2= Uncertain 1= Not important	15 2	17

The result of the questionnaire on the third indicator, Factors Encouraging Technology Usage shows that investments in infrastructure, training programs, and

support services for instructional technologies were seen as important. Besides Policies for the diffusion of instructional technologies and support for expansion projects were also rated highly.

Table 5. Perception of teachers about ICT usage in teaching-learning process

NO	Variables	Scale	Remark	Mean
1	Use of ICT for instructional purposes is important rather than printed materials only	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	5 16 3	24
2	Computers can play a big role in instructional environments	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	5 20	25
3	Creating awareness raising on the opportunities that computers offer	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	5 20	25
4	I am interested to use ICT in class activities more effectively	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	10 16	26
5	ICT supported teaching can make learning more effective	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	15 12	27
6	Use of ICT as instructional tool can increase the interest of students toward learning courses	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	10 16	26
7	Students can actively pursuit knowledge if ICT is integrated in curriculum areas	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	24	24
8	Use of instructional technologies can increase the quality of courses	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	5 20	25
9	Usage of instructional technologies makes it easier to prepare course materials (assignments, handouts etc.).	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	24	24
10	Using instructional technologies	5=Strongly Agree		24

	make teachers more productive	4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	24	
11	Using technology makes it easier to reach instructional resources	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	 20 3	23

The result of the questionnaire on the fourth indicator, Teachers' Perceptions shows that teachers strongly agree on the importance of using ICT over printed materials alone. The teachers recognize the role of computers in instructional environments and are interested in using ICT more effectively in class activities. ICT-supported teaching is seen as enhancing learning effectiveness and increasing student interest. The teachers believe that integrating ICT into the curriculum can improve the quality of courses and make teachers more productive.

Table 6. The barriers that teachers face to use technology during teaching learning process

NO	Variables	Scale	Remark	Mean
1	Inefficient time to prepare materials based on technology	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	5 6 6	17
2	Lack of teachers' technical knowledge to prepare materials based on technology	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	5 4 9 2	20
3	Shortage of resources like computer, projector etc	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	 8 6 4	
4	Inefficiency of college computer laboratory and audio visual rooms	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	 16 3 2	21
5	Inefficient number of media (printer, scanner etc.) for effective use of computers	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	 4 3 8	15
6	Shortage of computers used by teachers	5=Strongly Agree 4=Agree 3=Uncertain 2=Disagree 1=Strongly Disagree	 4 6 6	16
7	Absence of motivation and reward systems for ICT usage	5=Strongly Agree 4=Agree	 12	20

		3=Uncertain	6	
		2=Disagree	2	
		1=Strongly Disagree		
8	Inadequacy of computers used by learners	5=Strongly Agree	5	22
		4=Agree	12	
		3=Uncertain	3	
		2=Disagree	2	
		1=Strongly Disagree		
9	Deficiency in support services in ICT usage for teaching-learning	5=Strongly Agree	5	20
		4=Agree	4	
		3=Uncertain	9	
		2=Disagree	2	
		1=Strongly Disagree		
10	Lack of interest of teachers in ICT usage for teaching-learning	5=Strongly Agree	10	22
		4=Agree	4	
		3=Uncertain	6	
		2=Disagree	2	
		1=Strongly Disagree		

The results of the questionnaire regarding the fifth indicator, "Barriers to Technology Usage," reveal significant challenges faced by teachers. Among these challenges are the insufficient time available to prepare technology-based materials and a lack of technical knowledge. These barriers hinder teachers' ability to fully integrate technology into their teaching practices, limiting the effectiveness of instructional technology in the classroom. As a result, there is a pressing need for targeted interventions, such as providing more dedicated time for technology preparation and enhancing teachers' technical skills through comprehensive training programs. Addressing these barriers is essential for optimizing the use of technology in education and ensuring that teachers can leverage digital tools to enhance learning outcomes.

Based on the result above can be described that using computers in learning has several benefits such as enhancing student engagement and motivation, creating interactive and diverse learning experiences, and facilitating access to a wide range of instructional resources. On the other hand, the teacher faces challenges such as technical difficulties and insufficient training, limited access to high-quality ICT resources, and the need for more structured professional development programs. Therefore, teachers need ongoing training to keep up with technological advancements and professional development should focus on practical applications and integrating technology into daily teaching practices.

Discussions

The research highlights the potential benefits of integrating ICT into EFL teaching practices. Teachers acknowledged that ICT enhances student motivation and engagement through interactive activities and multimedia resources, improves accessibility to authentic language materials such as online videos and articles, and provides opportunities for personalized learning and self-paced practice. Furthermore, ICT fosters the development of students' digital literacy skills, which are crucial for navigating the modern job market.

However, the study also uncovered several challenges that hinder the effective

integration of ICT in EFL classrooms. Teachers identified two primary obstacles. First, issues with equipment and infrastructure, such as insufficient devices, low internet bandwidth, and inadequate technological resources, posed significant barriers. These limitations affected both teachers and students, making it difficult to fully utilize ICT tools. Second, attitudes and willingness among teachers were identified as challenges. Some teachers displayed resistance to adopting new methods, often due to a lack of motivation or institutional recognition for their efforts in implementing ICT-based learning.

In addition to identifying these challenges, the research explored the specific ICT tools and resources most beneficial for vocational EFL learners. Given the practical skill focus and career-oriented aspirations of these students, the findings suggested that teacher perceptions of ICT effectiveness varied depending on the specific vocational fields being taught.

The discussion of these findings integrates insights from existing literature on ICT in TEFL and vocational education. It emphasizes the need to address both the benefits and challenges of ICT through targeted interventions. For instance, professional development programs can equip teachers with essential ICT skills and pedagogical strategies, enabling them to seamlessly incorporate technology into their teaching practices. Infrastructure development is another critical area, ensuring reliable access to technology and the internet in vocational schools. Additionally, adapting curricula to integrate ICT tools tailored to vocational EFL contexts can enhance practical skills while maintaining a focus on career readiness.

The findings reveal a generally positive attitude among teachers towards using computers in the classroom, recognizing their potential to enrich teaching and learning. Nonetheless, addressing challenges such as inadequate infrastructure, insufficient technical support, and the need for ongoing professional development is imperative. This aligns with Tondeur et al. (2017), who emphasized that teachers' personal perceptions and beliefs significantly influence their decisions to integrate technology effectively. Similarly, Taimalu and Luik (2019) highlighted that pedagogical beliefs greatly shape instructional practices and the incorporation of technology into teaching.

The mixed-method approach adopted in this research provided a comprehensive understanding of ICT integration in EFL teaching. Quantitative data revealed widespread use and acceptance of technology, while qualitative insights shed light on the perceived benefits and challenges. The alignment between these findings strengthens the validity of the results. As noted by Enrico (2023), ICT fosters interactive learning environments, boosts motivation for independent learning, and enhances students' critical thinking and creativity. Additionally, Ampa and Nappu (2023) demonstrated that tools such as LCD/LED projectors, PowerPoint presentations, and online platforms significantly enhance student engagement and comprehension, further supporting the integration of ICT in vocational EFL education.

CONCLUSION

Teacher perceptions of ICT integration play a crucial role in determining the

effectiveness of ICT integration in enhancing student learning outcomes. Positive attitudes towards ICT integration can lead to enhanced engagement, improved learning outcomes, increased access to information, and development of digital skills. The conclusion would summarize the key findings of the research. It would emphasize the importance of considering the unique context of vocational schools when promoting the use of ICT in TEFL classrooms. By acknowledging both the potential and challenges, teacher training programs and resource development can be tailored to support a more effective integration of ICT in vocational EFL education that enhances student learning and prepares them for the demands of the modern workplace. It would be valuable to the future research to explore or investigate the impact of ICT use on student learning outcomes in vocational schools.

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