TEACHERS' AND STUDENTS' PERCEPTIONS OF WEB 2.0 TOOLS FOR PROJECT-BASED LEARNING AT KURIKULUM MERDEKA-IMPLEMENTED SCHOOLS IN KABUPATEN PINRANG



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ABSTRACT

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Title : Teachers' and Students' Perceptions Of Web 2.0 Tools for Project

Based Learning at Kurikulum Merdeka-Implemented Schools in

Kabupaten Pinrang

In the era of digital transformation, the integration of Web 2.0 tools in Project-Based Learning (PBL) has gained significant attention, especially in Kurikulum Merdeka-implemented schools. This study identifies both teachers' and students' perceptions on the use of Web 2.0 tools in Project-Based Learning at Kurikulum Merdeka-implemented schools in Kabupaten Pinrang. Using the Technology Acceptance Model (TAM) as the theoretical foundation, the study focuses on two key constructs: Perceived of Usefulness (PU) and Perceived Ease of Use (PEoU). Employing a descriptive quantitative approach, data were collected from 101 participants, comprising 31 teachers and 70 students vary from elementary to high Schools, through structured questionnaires using a semantic differential scale. Findings reveal that both teachers and students perceive Web 2.0 tools as highly useful and relatively easy to use in PBL contexts. Teachers are reported higher mean scores in both PU (6.174 = very useful) and PEoU (5.883 = very easy), reflecting their professional experience and familiarity with technology integration. Students, while positive, exhibited slightly lower scores in both PU (5.226= Useful) and PeoU (5.099= easy), highlighting variability due to differences in digital literacy and access. The study underscores the need for targeted training programs and infrastructural support to maximize the effective use of Web 2.0 tools in PBL under Kurikulum Merdeka.

Keywords: Perceptions, Web 2.0 tools, Project Based Learning (PBL), Kurikulum Merdeka

ABSTRAK

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Judul : Persepsi Guru dan Siswa terhadap Penggunaan Web 2.0 tools dalam

Pembelajaran Berbasis Proyek di Sekolah yang Menerapkan Kurikulum

Merdeka di Kabupaten Pinrang.

Di era transformasi digital, integrasi Web 2.0 tools dalam Project-Based Learning (PBL) telah mendapatkan perhatian yang signifikan, terutama di sekolahsekolah yang menerapkan Kurikulum Merdeka. Penelitian ini mengidentifikasi persepsi guru dan siswa terhadap penggunaan Web 2.0 tools dalam PBL di sekolahsekolah yang menerapkan Kurikulum Merdeka di Kabupaten Pinrang. Menggunakan kerangka teori *Technology Acceptance Model* (TAM), penelitian ini berfokus pada dua konstruk utama: Perceived Usefulness (PU) dan Perceived Ease of Use (PEoU). Dengan pendekatan kuantitatif deskriptif, data dikumpulkan dari 101 partisipan yang terdiri dari 31 guru dan 70 siswa dari jenjang SD hingga SMA melalui kuesioner terstruktur menggunakan skala semantik diferensial. Temuan penelitian menunjukkan bahwa baik guru maupun siswa memandang Web 2.0 tools sebagai tools yang sangat berguna dan relatif mudah digunakan dalam konteks PBL. Guru memiliki skor rata-rata yang lebih tinggi pada PU (6,174 = sangat berguna) dan PEoU (5,883 = sangat mudah), mencerminkan pengalaman profesional dan keterbiasaan mereka dengan integrasi teknologi. Siswa, meskipun memiliki pandangan positif, menunjukkan skor yang sedikit lebih rendah pada PU (5,226 = berguna) dan PEoU (5,099 = mudah), menyoroti variabilitas yang disebabkan oleh perbedaan literasi digital dan akses terhadap teknologi. Penelitian ini menegaskan perlunya program pelatihan yang terarah dan dukungan infrastruktur untuk memaksimalkan penggunaan alat Web 2.0 secara efektif dalam PBL di bawah Kurikulum Merdeka.

Kata Kunci : Persepsi, Web 2.0 tools, Pembelajaran Berbasis Proyek (PBL), Kurikulum Merdeka

تجريد البحث

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موضوع الرسالة : تصورات المعلمين والطلاب حول استخدام أدوات الويب 2.0

في التعلم القائم على المشاريع في المدارس التي تطبق منهاج

الاستقلالية في منطقة بينرانج

في عصر التحول الرقمي، أصبحت دمج أدوات الويب 2.0 في التعلم القائم على المشاريع (PBL) محور اهتمام كبير، خاصة في المدارس التي تطبّق منهاج الاستقلالية. تُهدف هذه الدراسة إلى تحديد تصورات المعلمين والطلاب حول استخدام أدوات الويب 2.0 في التعلم القائم على المشاريع في المدارس التي تطبّق منهاج الاستقلالية في منطقة بينرانج. اعتمدت الدراسة على نموذج قبول التكنولوجيا (TAM) كأساس نظري، مع التركيز على بعدين رئيسيين: مدى الفائدة المتصورة (PU) ومدى سهولة الاستخدام المتصورة .(PEoU)باستخدام منهج كمي وصفي، مجمعت البيانات من 101 مشاركاً، تضمنوا 31 معلماً و70 طالباً من تختلف المستويات التعليمية، من الابتدائية إلى الثانوية، من خلال باست<mark>خدام مق</mark>یاس منظمة أظهرت النتائج أن المعلمين والطلاب ينظرون إلى أدوات الويب 2.0 على أنها مفيدة للغاية وسهلة الإستخدام نسبيًا في سياق التعلم القائم على المشاريع. حصل المعلّمون على متوسط درجات أعلى في كل من PU (6.174 = مفيدة جدًا) و PEoU (5.883 = سهلة جدًا)، مما يعكس خبرتهم المهنية و تآلفهم مع دمج التكنولوجيا. بينما أظهر الطلاب، رغم إيجابيتهم، درجات أقل قليلاً في كل من PU (5.226 = مفيدة) و PEoU (5.099 = سهلة)، ثما يشير إلى تفاوتات ناتجة عن اختلافات في مستوى المعرفة الرقمية وإمكانية الوصول إلى التكنولوجيا. تؤكد الدراسة على ضرورة تقديم برامج تدريبية موجهة ودعم البنية التّحتية لتعزيز الاستّخدام الفعّال لأدوات الويبّ 2.0 في التعلم القائم على المشاريع في إطار منهاج الاستقلالية.

الكلمات الرائسية: التصورات، أدوات الويب 2.0، التعلم القائم على المشاريع، منهاج الاستقلالية

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CHAPTER I

INTRODUCTION

A. Background of the Research

Using information technology tools in foreign language education is making a new trend worldwide.¹ This spread also changed the role of language teacher. Teachers are expected to possess the ability to design interactive classes often by using digital tools. Today it is a general requirement for teachers to be able to use technology and to possess the know-how of implementing it in a way that fosters language learning.² The same way goes to students; they are constantly exposed to technology. Internet and social media have significantly impacted children. The accessibility of smartphones, tablets, and gaming consoles, along with free Wi-Fi, has made technology a central aspect of modern life.³

Web 2.0 tools, the second generation of The World Wide Web, have gained popularity across several educational sectors as the result of the development of technology and internet.⁴ These tools offer a wide array of opportunities for English language learners to engage in authentic, collaborative, and interactive activities that can enhance their language proficiency, digital literacy, and cross-cultural understanding.⁵

¹ Liu, J. (2009). A survey of EFL learners' attitudes toward Information and Communication Technologies. English Language Teaching, 2(4). Retrieved October 23, 2013, from http://ccsenet.org/journal/index.php/elt/article/download/4455/3797/

² Nagy, T.(2021). Using Technology for Foreign Language Learning: The Teacher's Role. Central European Journal of Educational Research, 3(2), 23–28.https://doi.org/10.37441/cejer/2021/3/2/9347

³ Carstens, Kaite J., Jamie M. Mallon, Mohamed Bataineh, and Adel Al-Bataineh. "Effects of Technology on Student Learning." *Turkish Online Journal of Educational Technology-TOJET* 20, no. 1 (2021): 105-113.

⁴ Degirmenci, R. (2021). The Use of Quizizz in Language Learning and Teaching from the Teachers' and Students' Perspectives: A Literature Review. Language Education and Technology (LET Journal), 1(1), 1-11.

⁵ Guillén, G., Sawin, T., & Avineri, N. (2020). Zooming out of the crisis: Language and human collaboration. Foreign Language Annals, 53(2), 320-328.

Project Based Learning (PBL) has emerged as a pedagogical approach that aligns well with the affordances of Web 2.0 tools. Learning in the digital era now does not only emphasize individual abilities and skills but rather on how students are able to work together with other students in the form of group work based on the spirit of global education (global education) to solve common problems that are around them ⁶ Web 2.0 tools amplify the benefit of PBL by providing students with a dynamic environment to communicate, co-create content, and present their work.

Indonesia's Kurikulum Merdeka, introduces as part of the national education reform, emphasizes a more flexible and learner-centered approach to education. A key feature of Kurikulum Merdeka is its focus on differentiated learning, allowing students to progress at their own pace.⁷ The shift reflects a broader recognition that students' abilities and learning contexts vary widely, particularly in the diverse socio-economic landscape of Indonesia. The curriculum encourages teachers to integrate innovative strategies like PBL, which not only enhance students' engagement but also align with the goals of preparing students for the challenges of the 21st century. The inclusion of technology, particularly digital tools, is seen as a crucial component of achieving these objectives.

Kabupaten Pinrang, a regency in South Sulawesi, provides a unique context for exploring the integration of Web 2.0 tools in PBL under Kurikulum Merdeka. Kabupaten Pinrang, has been an active participant in implementing Kurikulum Merdeka. Notably, 45 schools vary from elementary to high schools in Kabupaten Pinrang are registered as Sekolah Penggerak. Implementing Kurikulum Merdeka is one of program of Sekolah Penggerak. Several schools in the region have adopted

⁶ Priyatmojo, A., Rohani, R., & Anjaniputra, A. (2022, June). Web 2.0 and Project-Based Learning To Improve Students' 21st Century Skills. In Proceedings of the 10th UNNES Virtual International Conference on English Language Teaching, Literature, and Translation, ELTLT 2021, 14-15 August 2021, Semarang, Indonesia.

⁷ Lestari, D., Asbari, M., & Yani, E. E. (2023). Kurikulum Merdeka: Hakikat kurikulum dalam pendidikan. *Journal of Information Systems and Management (JISMA)*, 2(6), 85-88.

innovative teaching methods, including Project-Based Learning (PBL), to align with the curriculum's emphasis on real-world problem-solving and holistic education. Some schools, for example, have designed projects addressing local issues such as environmental conservation or the promotion of traditional crafts, making learning more relevant and impactful for students. However, while the adoption of Kurikulum Merdeka and PBL shows promise, the integration of Web 2.0 tools to support these initiatives varies. This makes Kabupaten Pinrang a compelling setting for exploring how these tools are perceived in fostering meaningful learning experiences.

Despite the potential of Web 2.0 tools, many schools in Indonesia, particularly those in rural areas like Kabupaten Pinrang, face challenges in technology integration. Limited infrastructure, such as unreliable internet access and a lack of devices, hampers the effective use of digital tools. Furthermore, teachers often lack sufficient training and confidence to incorporate these tools into their teaching practices, while students may struggle with digital literacy.

While studies have explored the benefits of PBL and the potential of Web 2.0 tools separately, little is known about how these tools are perceived by both teachers and students, particularly under the Kurikulum Merdeka framework. This gap is significant, as perceptions play a critical role in determining how effectively tools and approaches are adopted in educational settings. Addressing this gap is essential for supporting meaningful implementation.

Understanding teachers' and students' perceptions of Web 2.0 tools is crucial for designing effective policies and interventions. Positive perceptions can drive the successful adoption of these tools, while negative ones may hinder their implementation. By investigating these perceptions, this research aims to inform

the development of targeted training programs and resources that address the specific needs of teachers and students in Kabupaten Pinrang.

This study focused on exploring the teachers' and students' perceptions specially on usefulness and ease of use regarding Web 2.0 tools for PBL at schools implementing Kurikulum Merdeka in Kabupaten Pinrang. By shedding light on these perceptions, the research contributed to bridging the gap between policy and practice. This understanding aimed to help optimizing the integration of technology in education and enhance the success of Kurikulum Merdeka. Considering explanation above the researcher conducted research entitled "Teachers' and Students' perceptions of Web 2.0 Tools at Kurikulum Merdeka-Implemented Schools for Project-Based Learning In Kabupaten Pinrang"

B. Research Questions

The research questions are an essential element of the research. It would direct and frame the process of the research. According to background described above, this research is aimed to answer the following questions:

- 1. What are teachers' perceptions on the use of Web 2.0 tools in supporting Project-Based Learning under Kurikulum Merdeka?
- 2. What are students' perceptions on the use of Web 2.0 tools in their Project-Based Learning experiences under Kurikulum Merdeka?

C. Objectives of the Research

- To explain teachers' perceptions of using Web 2.0 tools in Project-Based Learning under the Kurikulum Merdeka framework.
- 2. To explain students' perceptions of using Web 2.0 tools in their Project-Based Learning experiences under Kurikulum Merdeka?

D. Significance of The Research

This research is expected to give both theoretical and practical significance. Theoretically, this research is expected to give information on about teachers' and students' perceptions toward the using of WEB 2.0 used in English project-based learning, especially in Kabupaten Pinrang. This research also expected to motivate future researchers who are interested in researching the same topic. The other researchers can be benefited from this study by focusing on the gaps left by this research.

Practically, this research is expected to be useful for groups of people in the English learning and teaching process, as follows:

1. English Teachers

The research expected to informs teachers to what extent they utilize the advancement of technology specially in using WEB 2.0 tools in project-based learning and to show students' perspective on it. So, teachers can plan their lesson plan with the integration of technology to build suitable learning environment for students.

2. Schools

The findings of this research are expected to be consideration for school to evaluate the implementation and regulation of ICT integration specially for WEB 2.0 tools in project-based learning. This researcher also hopes the school can provide the supporting tools and training for teachers' and students.

3. Education Stakeholder

This research is expected to support the education stakeholders to decide the technological implementation carefully in language learning. The government expected to consider the results of this study to revise as well as create an adequate policy to support the language learning for the 21st century learner.



CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents a review of the relevant literature, providing an indepth exploration of the theoretical frameworks underpinning this research. A thorough discussion of key theories is essential to clarify the concepts employed in this study. The literature reviewed includes various theoretical foundations and prior studies, particularly those that examine the perspectives of both teachers and students on the use of technology, specifically Web 2.0 tools, in English Language Learning. Special attention is given to the Project-Based Learning approach, which forms the methodological basis of this investigation.

A. Previous Related Research Findings

Firstly, the research entitled "Language Teachers' Perspectives on Web 2.0 in Education" written by Michael in 2023. Michael explores language teachers' perspectives on using Web 2.0 technologies in education and how they plan to use it in their classroom, particularly in Indonesia, where its use is not yet widespread. A qualitative study was conducted with 30 language teachers through questionnaires and interviews to gather their views on Web 2.0. Michael concluded that Web 2.0 is seen as beneficial for language teaching, but teachers need more support and training to integrate it effectively into their teaching practices. Most teachers are open to using Web 2.0 but need time to implement it. Younger teachers are more familiar with social media and video platforms, while older teachers face challenges. 8

"Iranian EFL Teachers' Perceptions, Familiarity and Use of Web 2.0 Tools In TEFL" is a study conducted by Seyed Abdollah Shahrokni. This study Investigated Iranian EFL teachers' familiarity, perceptions, and use of Web 2.0

⁸ Michael, M. (2023). Language Teachers' Perspectives on Web 2.0 in Education. In E3S Web of Conferences (Vol. 388, p. 04047). EDP Sciences.

tools in teaching English as a foreign language. Seyed study 53 EFL teachers from universities, Ministry of Education, and language schools in Dezful, Iran. Most teachers showed low familiarity and use of Web 2.0 tools despite recognizing their effectiveness. Teachers generally have positive attitudes towards the use of these technologies in language education. External factors like lack of training and inadequate equipment, poor internet connectivity, and reluctance from school managers to invest in new technologies were significance barriers faced by teachers. ⁹

Arif Suryo Priyatmojo, Rohani, and Agung Ginanjar Anjaniputra did research entitled "Web 2.0 and Project-Based Learning To Improve Students' 21st Century Skills". They employed Classroom Action research (CAR) with a focus on Flat Classroom Projects to facilitate collaborative learning and problem-solving. The study aimed to improve students' 21st Century Skills using Web 2.0 applications and Project-Based Learning (PBL) in the "ICT in Language Learning" class at Universitas Negeri Semarang. The research found the use of Web 2.0 technology and PBL significantly enhances students' higher order-thinking skills, promoting better collaboration and problem-solving abilities. The study utilized various Web 2.0 tools to enhance learning activities. Social media: platforms like blogs were used for students to post content and generate interaction. Learning Management System (LMS): Tools such as Elena and Edmodo were employed for managing online classes. Gamification: Application like Kahoot and Quizzes were used for brainstorming activities. These tools facilitated collaboration, sharing, and interaction among students and lecturers. The study highlights the need for

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⁹ Shahrokni, S. A., & Sadeqjoola, L. (2015). Iranian EFL Teachers' Perceptions, Familiarity and Use of Web 2.0 Tools in TEFL. Teaching English with Technology, 15(3), 31-46.

universities to adapt to the digital era, emphasizing the role of lecturers as facilitators and the importance of integrating technology in education.¹⁰

Esra Ergül Sönmez and Hasan Çakır, two researchers from turkey in their research entitled "Effect of Web 2.0 Technologies on Academic Performance: A Meta-analysis Study" found that Web 2.0 technologies like wikis and blogs have a positive and moderate effect on academic performance, with an effect size of 0.740. The study examined the impact of Web 2.0 technologies specifically wikis and blogs on academic performance using a meta-analysis method. The analysis included 19 studies from nine different countries, using a quasi-experimental approach with control groups and pre-test-posttest measures. The study suggests that wikis and blogs can significantly enhance academic performance, especially in higher education contexts. For further studies the research suggested to focus on the age and education level of students, as higher education students show better results with these technologies. The research also suggested to pay attention to which Web 2.0 tools are most effective for different courses. And conduct more studies to understand the collective effect of blogs and wikis on student performance, especially in different educational contexts. ¹¹

Gülsüm Aşıksoy conducted research on 207 students studying in the English Language Teaching department at Gazi University and Hacettepe University Faculty of Education in the spring semester of 2017-2018 academic year. The research entitled "ELT students' attitudes and awareness towards the use of Web 2.0 technologies for language learning". This study aimed to investigate ELT

¹⁰ Priyatmojo, A., Rohani, R., & Anjaniputra, A. (2022, June). Web 2.0 and Project-Based Learning To Improve Students' 21st Century Skills. In Proceedings of the 10th UNNES Virtual International Conference on English Language Teaching, Literature, and Translation, ELTLT 2021, 14-15 August 2021, Semarang, Indonesia.

Sönmez, E. E., & Çakir, H. (2021). Effect of Web 2.0 technologies on academic performance: A meta-analysis study. International Journal of Technology in Education and Science, 5(1), 108-127.

students' attitudes toward using Web 2.0 tools for language learning and identifies the tools they use. Some key findings in this study are students aware of Web 2.0 tools and have positive attitude towards their use. They believe these tools help in learning English, especially in improving listening skills. The study conducted with the descriptive, survey design was carried out. There were limitations in this study as well. The first limitation was that the study was composed of ELT students. In future studies, ELT educators, as well as ELT students may be involved in the study. The second limitation was that gender factor was not considered in the study. The female and male students' attitudes towards the Web 2.0 tools can be compared in future studies. Another limitation was that only questionnaires were used as data collection tools in the study. Data can also be obtained through semi-structured interviews with students. ¹²

"University students" attitudes towards the usage of WEB 2.0 tools for learning ESP. A Preliminary investigation" written by Eglė Selevičienė and Nijolė Burkšaitienė, is one of the first in Lithunia to focus on the use of Web 2.0 tools in foreign language education, suggesting a novelty in regional research. The study is based on the Technology Acceptance Model (TAM), examining variables like awareness, perceived usefulness, perceived ease of use, attitudes, behavioral intention, and actual system usage. A quantitative approach using a questionnaire was employed to gather data from students at Mykolas Romeris University. A survey revealed that 90% of EU Internet users prefer websites in their own language, but 53% would use an English version if necessary. Respondents are aware of Web 2.0 technologies and find them useful for academic purposes especially for improving ESP reading, listening, and writing skills. The ability to

¹² Aşıksoy, G. (2018). ELT Students' Attitudes and Awareness Towards the Use of Web 2.0 Technologies for Language Learning. Journal of Language and Linguistic Studies, 14(2), 240-251.

use Web 2.0 tools significantly correlates with positive attitudes and intentions to use these tools for learning English for Specific Purposes (ESP). In this study, an interesting discovery was made that the majority of participants seem to prefer the virtues of traditional teacher-centered ESP classes to teacher-students interaction online. These findings support McCain's and Jukes' comforting assumption that "educators must get over an idea that technology will replace them. Any teacher that can be replaced by a computer absolutely deserves to be, because they just do not get it". 13

The research entitled "The Students' Perception of Artificial Intelligence-Based Instruction in Speaking Class" by Mujahidah, Kisman Salija, and Muhammad Asfah Rahman in 2023 explores students' perceptions of using AI in English Language Teaching (ELT), specifically in speaking classes. A quantitative study was conducted with 100 English Department students through questionnaires to gather their views on AI-based instruction. The researchers concluded that AI is perceived as easy to use and beneficial for learning English. Students have a positive attitude towards using AI and show a promising intention to continue using it in the future. The study highlights the potential of AI to enhance English language learning, but also notes that students may need more support and resources to fully integrate AI into their studies.¹⁴

Another research related is "Pre-Service Teachers' Opinions on Learning, Designing, Utilizing Web 2.0 Tools in Education". Written by Ahmet Berk Ustun, and Tugba Guler, this research conclude Pre-service teachers were generally positive about using Web 2.0 tools and expressed a willingness to integrate them

¹³ Selevičienė, E., & Burkšaitienė, N. (2015). University students' attitudes towards the usage of Web 2.0 tools for learning ESP. A preliminary investigation. Socialinių mokslų studijos: mokslo darbai= Societal studies: research papers/Mykolo Romerio universitetas. Vilnius: Mykolo Romerio universitetas, 2015, Nr. 7 (2).

¹⁴ Mujahidah, Salija Kisman., & Rahman, M.A. (2023). The Students' Perceptions of Artificial Intelligence-Based Instruction in Speaking Class .ELITE Journal.,5(3), 593-604.

into their future classrooms. They found that Pre-service teachers found Web 2.0 tools easy to learn and useful for creating educational content. They noted benefits like increase learning retention, improved creative thinking, and time saving. Some challenges included language barriers and technical issues. This research explored the experiences and insight of pre-service teachers as they design digital educational content various Web 2.0 tools during their undergraduate years. The study used a qualitative research method with semi-structured interviews conducted with 18 preservice teachers. Data were analyzed using content analysis. ¹⁵

B. Some Pertinent Ideas

Transformation is natural and will always happen. Everything in life will continue to experience transformation, including education. The learning crisis, accompanied by the emergency condition of the COVID-19 pandemic, has dramatically impacted transformation in education in Indonesia. The demands of 21st century learning regarding the fulfillment of competent quality human resources (HR) are the basis for improving the quality of education in Indonesia. However, there still needs to be more clarity in the delivery of learning methods in its implementation. One of the efforts made by the government is implementing Kurikulum Merdeka. The still needs to be more clarity in the delivery of learning methods in the implementation.

Kurikulum Merdeka Introduced to redefine education in Indonesia, shifts from rote learning to fostering independence and critical thinking. This curriculum

¹⁵ Ustun, A. B., & Guler, T. (2022). Pre-service teachers' opinions on learning, designing, utilizing web 2.0 tools in education. Journal of Interdisciplinary Education: Theory and Practice, 4(2), 83-97.

¹⁶ Nugraha, T. S. (2022). Kurikulum merdeka untuk pemulihan krisis pembelajaran. *Inovasi Kurikulum*, 19(2), 251-262.

¹⁷ Alhayat, A., Mukhidin, M., Utami, T., & Yustikarini, R. (2023). The Relevance of the Project-Based Learning (PjBL) Learning Model with "Kurikulum Merdeka Belajar". *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, 7(1), 105-116.

Shares a natural synergy with Project Based Learning which provides authentic, real-world learning experiences. PBL aligns with the curriculum's goal of fostering independent and critical thinkers. Even though Project Based Learning cannot be used with all selected material, PBL has many benefits over traditional methods. ¹⁸

Technology becomes unquestionably helpful in classroom, offering both functionally and engagement. Beyond its entertaining appeal, it simplifies learning process and fosters a more interactive and dynamic environment. With hundred of platforms now available, educators have wide array of resources to enhance teaching and learning. Many teachers have embraced PBL and integrated technology tools into their practices, leveraging these platforms to enrich the overall learning experiences.

The integration of technology in language education has revolutionized the way languages are taught and learned. The use of modern technology in English language teaching has therefore become indispensable, especially in the wake of unprecedented developments across numerous fields and disciplines. It is essential that the education sector keep apace of the global technological revolution by adopting modern technological means such as computerization, multi-media devices, mobile phones, audio/visual effects applications, and social media, to optimize English language instruction and equip teachers to connect with classroom language learners in a systematic and advanced way. ²⁰

However, the rapid pace of technological change presents challenges, including the need for ongoing teacher training and addressing the digital divide. In

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¹⁸ Shafaa, Y. W., & Daulay, S. H. (2024). Teachers' Perceptions On Project Based Learning Method In Teaching English Lesson. *Didaktika: Jurnal Kependidikan*, *13*(2), 2389-2398.

¹⁹ Mujahidah, Salija, K. and Rahman, M.A. 2023. The Students' Perceptions of Artificial Intelligence-Based Instruction in Speaking Class. *ELITE JOURNAL*. 5, 3 (Oct. 2023), 593-604.

²⁰ Mofareh, Alqahtani. "The Use of Technology in English Language Teaching." Frontiers in Education Technology, vol. 2, no. 3, 2019, pp. 173-174. SCHOLINK INC.

Indonesia, research has shown that while students and teachers recognize the benefits of technology in language learning, challenges such as technical issues and lack of support persist. As we look to the future, emerging technologies promise to further transform language education, offering new opportunities for learners and educators alike.

Regardless of what people say about technology, it must be now accepted that the use of technology in modern education by modern society is a need, otherwise we will be left behind. The world continuously develops more global and technology helps us to connect to more developed knowledge, science, and information that in turn it can be used as a media of teaching and learning improvement.²¹

1. Web 2.0

The World Wide Web, developed by Tim Berners-Lee in 1989 for scientists to share information, was later expanded with the help of Robert Cailliau in 1990 to create Web 1.0, the foundation of the internet. Referred to as the "read-only web," Web 1.0 functioned as a one-way information delivery system from the late 1980s to the mid-2000s. It relied on static web pages and a "Webmaster-to-Website-to-Users" model, where a limited number of creators shared content globally without user interaction or data collection. Unlike Web 1.0, Web 2.0 introduced two-way communication, empowering users to contribute and create content, marking a significant shift in how the internet operates.²²

²¹ Zhao, Y. (2015). Research in technology and second language learning. IAP PUblishing ²² Hendrickson, L. (2023, February 6). Web 1.0 to Web 2.0: The evolution of the World Wide Web. Identity. Retrieved January 15, 2025, from https://www.identity.com/web1-andweb2/#:~:text=Web% 201.0% 20introduced% 20the% 20early, the% 20groundwork% 20for% 20other

%20developments.

The term "Web 2.0" was officially coined in 2004 by Dale Dougherty, a vice president of O'Reilly Media Inc. It is a company famous for its technology-related conferences and high-quality books. The term was coined during a team discussion on a potential future conference about the Web. The bursting of the dot-com bubble in the fall of 2001 marked a turning point for the Web. Many people concluded that the web was overhyped, when in fact bubbles and consequent shakeouts appear to be a common feature of all technological revolutions. ²³ It was also noted, at the same meeting, that companies that had survived the dot-com firestorms of the late 90s now appeared to be stronger and have a number of things in common. It is important to note that the term was coined in an attempt to capture the essence of an identified group of technologies, but an attempt to capture something far more amorphous.

Web 2.0 does not require any specific installation. Internet users can browse and use the features which are readily available on the internet. Thus become one of the reasons why Web 2.0 is gaining popularity²⁴ Generally, Web 2.0 can be grouped into 3 different groups. The first group is about social group or communities. This group enables users to interact with one another. The second group is the sharing platform. The third is group that enables users to create and edit information. Some features work across the groups, and that makes categories lenient.²⁵

²³ O'reilly, T. (2009). What is web 2.0. "O'Reilly Media, Inc.".

²⁴ M. A. Jarrah and A. A. Alzubi., Arab postgraduates' readiness towards and effectiveness of utilizing Web 2.0 in language learning. *International Journal of Instruction*, 14, no. 1, pp. 673-690, (2021).

²⁵ Sügümlü, Ü., & Aslan, S. (2022). The Use of Web 2.0 Tools in Mother-Tongue Instruction: Teachers' Experiences. *International Journal of Education and Literacy Studies*, 10(1), 124-137.

Like many important concepts, Web 2.0 doesn't have a hard boundary, but rather, a gravitational core. Web 2.0 can be visualized as a set of principles and practices that tie together a veritable solar system of sites that demonstrate some or all of those principles, at a varying distance from that core.

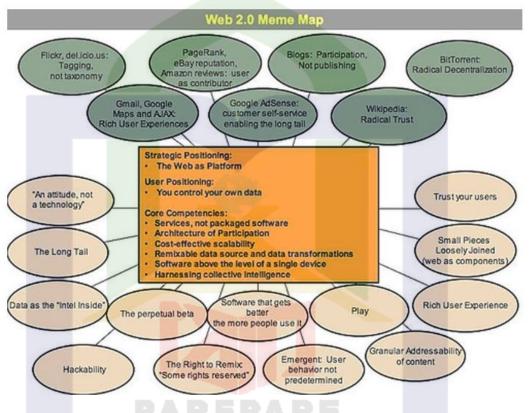


Figure 1 Meme Map of Web 2.0 developed by O'Reilly Media²⁶

The figure above is a meme map of Web 2.0 that was developed at a brainstorming session during FOO Camp, a conference at O'Reilly Media. It's very much a work in progress, but shows the many ideas that radiate out from Web 2.0 core. In October 2004, at the first Web 2.0 conference, John Batelle et.al listed preliminary set of principles in their opening talk. The first of those principles was "The Web as Platform".

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²⁶ O'Reilly, T. (2005, September 30). *What is Web 2.0?* O'Reilly Media. Retrieved January 12, 2025, from https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html?page=1.

In other word, Web 2.0 tools can be defined as internet tools that enable the user to create content and interact with other users. They therefore differ from Web 1.0 tools which allow the user to receive information through the web. The user is no longer a passive receiver or consumer of information; consumer rather an active producer of content. The emergence of Web 2.0 tools has positively influenced all spheres of life and education has attained the lion's share of these tools.²⁷

In the last few years much has been written about the ways in which these tools are changing practices; practices that involve shifting from the web as a content repository and information retrieval mechanism to a web that enables more social mediation and user generation of content. New practices are emerging:

- a. Sharing of images, videos and documents (as is evident with sites such as Youtube, Flickr, Google Drive, Slideshare, Instagram, Dropbox, Pinterest)
- b. Mechanisms for content production, communication and collaboration (through blogs, wikis, Google Docs/ workspace, Microsoft Teams, Slack, Zoom)
- c. Opportunities to interact in new ways through immersive virtual worlds (Second Life, Minecraft: Education Edition, Mozilla Hubs, AltspaceVR, OpenSim, Engage)

The social interface of Web 2.0 offers novel ways for connecting people, sharing, and discussing ideas. It can be used to support and enhance existing communities or to foster the development of new communities or to foster the development of new communities' inquiry and exploration.

²⁷ Mohammed, T. A., Assam, B. N., & Saidi, M. (2020). The use of Web 2.0 tools in the foreign language classroom. *Journal of Educational and Social Research*, 10(2), 177-190.

There seems to be tantalizing alignment between the affordances of digital networked media (the focus on user-generated content, the emphases on communication and collective collaboration) and the fundamentals of what is perceived to be good pedagogy (socio-constructivist approaches, personalized and experiential learning)²⁸

Dohn argues for a conceptualization of Web 2.0 that focuses on characterizing types of Web 2.0 practices rather than on identifying specific features of Web 2.0 tools. This way of thinking about Web 2.0 sees technology as embedded in human social practices that both reflect the design of tools but which also shape them, and encompasses the possibility of change over time. From this perspective, to be considered Web 2.0 all or most of the following criteria must be met:

- a. collaboration and/or distributed authorship
- b. active, open-access, "bottom-up" participation and interactive multi-way communication
- c. continuous production, reproduction, and transformation of material in use and reuse across contexts.
- d. openness of content, renunciation of copyright, distributed ownership
- e. lack of finality, "awareness-in-practice" of the "openendedness" of the activity

²⁸ Conole, G., McAndrew, P., & Dimitriadis, Y. (2011). The role of CSCL pedagogical patterns as mediating artefacts for repurposing Open Educational Resources. In *Techniques for fostering collaboration in online learning communities: Theoretical and practical perspectives* (pp.

206-223). IGI Global.

f. taking place on the WWW, or to a large extent utilizing Webmediated resources and activities²⁹

The emergence of Web 2.0 tools sits within a broader context of continual technological change. The 2010 Horizon report identifies four trends as key drivers of technology adoption in higher education for the period 2010 through 2015:

- a. The abundance of online resources and relationship inviting a rethink of the educators' role in sense-making, coaching and credentialing.
- b. An increased emphasis on, and expectation of, ubiquitous, just-in-time, augmented, personalized and informal learning.
- c. The increased use of cloud computing challenges existing institutional IT infrastructures, leading to notions of IT support becoming more decentralized.
- d. The work of students being seen as more collaborative in nature and therefore there is potential for more intra- and interinstitutional collaboration. ³⁰

Crook et.al summarized the variety of actual activity that is embraced by Web 2.0 with four overarching themes. First, Web 2.0 is about a scaling up of user participation that creates new possibilities for sharing and 'network effects' that are emergent from this new scale. Thus, many categories in the table refer to technologies that put users into contact with others: letting them enjoy an exchange of opinion, digital products, or conversation. The greater the number of people participating, the greater the

³⁰ Johnson, L., Levine, A., Smith, R., & Stone, S. (2010). *The 2010 Horizon Report*. New Media Consortium. 6101 West Courtyard Drive Building One Suite 100, Austin, TX 78730.

²⁹ Dohn, N. B. (2009). Web 2.0: Inherent tensions and evident challenges for education. *International journal of computer-supported collaborative learning*, 4, 343-363.

value derived. Second such sharing can evolve into more organized forms of joint knowledge building. Thus, Web 2.0 is about creating arenas for user collaboration. Third, Web 2.0 is about exploring a wide range of expressive formats. This is because digital media create new opportunities for manipulating more than the conventional texts of communication: in particular, they encourage exploration of images, sound and video. Moreover, these opportunities have now become widely available. Lastly, the rich and democratic patterns of exchange and publishing that Web 2.0 affords mean that the internet offers novel frameworks and resources for research and inquiry.³¹ The table below will explore 12 categories of Web 2.0 activities.

Media sharing

Uploading and downloading media files for purposes of audience or exchange

YouTube – https://www.youtube.com

Users can upload, share, and comment on videos with peers or a wider audience. It is widely used for educational content, tutorials, and project-based work.

REPARE

Flickr - https://www.flickr.com

A platform for sharing and organizing images and videos.

³¹ Crook, C., Cummings, J., Fisher, T., Graber, R., Harrison, C., Lewin, C., ... & Sharples, M. (2008). Web 2.0 technologies for learning: The Current landscape: Opportunities, challenges and tensions.

Media manipulation

Using web-accessible tools to design and edit digital media files.

Canva – https://www.canva.com

Create and edit digital media such as posters, presentations, and social media posts.

Pixlr – https://pixlr.com

An online photo editor for editing and enhancing images.

Data/web mashups

Combining data from multiple sources to create a new application, tool or service

IFTTT (If This Then That) –

https://ifttt.com

Automates tasks by combining data from different services like Google, Twitter, and Dropbox.

Google Maps API -

https://developers.google.com/maps

Allows developers to create mashups by combining geographic data with other datasets.

Conversational arenas

One-to-one or one-to-many conversations between internet users

WhatsApp-

https://www.whatsapp.com

Enables private or group messaging, including text, images, and videos.

Slack – https://slack.com			
	A team communication tool for		
	messaging, file sharing, and		
	collaboration.		
Online games and virtual	Minecraft: Education Edition –		
worlds	https://education.minecraft.net		
Rule-governed games or	r A virtual world where students can		
themed environments that	collaborate and build in a creative, rule-		
invite live interaction with	governed space.		
other internet users			
	Second Life – https://secondlife.com		
	An immersive virtual world where users		
	can interact with each other in real time.		
Social networking	Facebook – https://www.facebook.com		
Websites that structure social	A global social networking site		
interaction between members	connecting users to friends and		
who form subgroups of	communities.		
'friends'	PARE		
Instagram –			
	https://www.instagram.com		
	A platform for sharing photos and videos		
	with friends and followers.		
Blogging	WordPress –		
	https://www.wordpress.com		
An internet-based journal or	https://www.wordpress.com		

text and digital	l material	while
others can com	ment	

A popular platform for creating blogs and websites, enabling comments and interaction.

Medium – https://medium.com

A platform where users can share stories, essays, and articles.

Social bookmarking

Users submit their bookmarked web pages to a central site where they can be tagged and found by other users

Diigo – https://www.diigo.com

Social bookmarking, annotation, and tagging for research and collaborative learning.

Pocket – https://getpocket.com

A tool for saving, categorizing, and tagging web pages for later reading.

Recommender systems

Websites aggregate and tag user preferences for items in some domain and thereby make novel recommendations

Goodreads -

https://www.goodreads.com

Aggregates book reviews and preferences to suggest new reads.

Netflix – https://www.netflix.com

Recommends movies and TV shows based on users' viewing history.

Collaborative editing

Web tools are used collaboratively to design, construct and distribute some digital product

Google Docs – https://docs.google.com

Allows real-time collaborative editing of documents.

Padlet - https://padlet.com

A digital collaboration tool for creating boards, documents, and pages with shared editing features.

Wikis

A web-based service allowing users unrestricted access to create, edit and link pages

Wikipedia – https://www.wikipedia.org

A community-driven encyclopedia where users can create, edit, and link pages.

Wikispaces (formerly) -

https://www.wikispaces.com

A collaborative platform for creating shared content (no longer in operation, but a great historical example).

Syndication

Users can 'subscribe' to RSS feed enabled websites so that they are automatically notified of any changes or updates in content via an aggregator.

Feedly – https://feedly.com

An RSS feed aggregator that allows users to follow websites and blogs for updates.

Inoreader – https://www.inoreader.com
An RSS reader and content aggregator
for keeping up with multiple websites.

Table 1. 12 Categories of Web 2.0

Matt Bower used structured typological analysis techniques to derive a typology of Web 2.0 learning technologies. Typologies of Web 2.0 have been previously suggested. While many of these typologies included valuable and sensible categories of Web 2.0 technologies, none of them appear to result from any sort of systematic analysis or review. Matt Bower then reviewed over two thousand links from online archive sites, educational technology texts, online searches and previous Web 2.0 review papers. The Schemic representation of the resulting typology of Web 2.0 learning technologies is shown in Figure below ³²

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³² Bower, M. (2016). Deriving a typology of Web 2.0 learning technologies. *British Journal of Educational Technology*, 47(4), 763-777.

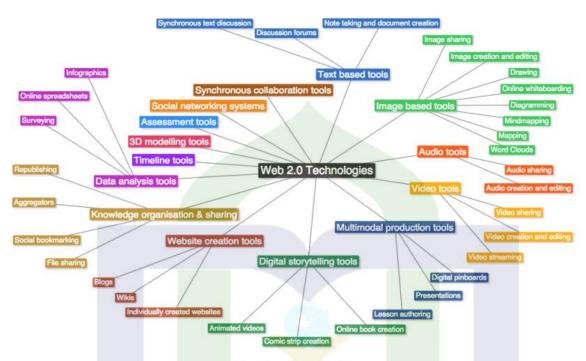


Figure 2. Typology of Web 2.0 learning technologies developed by Matt Bower³³

The typological analysis by Bower resulted in 37 types of Web 2.0 technologies that were arranged into 14 clusters. Their description will be described in the table below:

Text based tools	Synchronous text discussion	
F	Enable users to exchange text-based comments in	
	real-time. These can be used for synchronous	
	interaction between groups of learners to form a	
	backchannel during live presentation, or for instance	
	to facilitate remote troubleshooting support.	

 $^{^{33}}$ Bower, M. (2016). Deriving a typology of Web 2.0 learning technologies. British Journal of Educational Technology, 47(4), 763-777.

D •	•	T-	
l lice	nccion	Forums	

Facilitate asynchronous text discussions between groups of users, organizing contributions according to discussion threads. This can be useful for more reflective text conversations where real-time interaction is not required.

Note-Taking and Document Creation

Enables groups of users to collaborative author documents in real time and see each other's changes.

Image based tools

Image sharing

Designed to facilitate asynchronous public sharing of images. Users can utilize these to source and share image resources.

Image creation and editing

Enable users to individually create and edit images that can then be shared via URL. This can be useful when users need to produce and disseminate an image, for instance to represent a concept.

Drawing

Allow users to use their mouse as a pen to create a picture and share it via URL. This can be useful for sketching purpose and illustrating purposes.

Online whiteboarding

Differ from drawing tools in so far as they include line, shape and text tools (and in some cases other features) to structure the illustrative process.

Diagramming

Impose more structure to the drawing process by offering a range of templates for creating diagrams and flowcharts. This can be useful if users need to quickly develop a procedural schematic diagram.

Mind mapping

Support development of images to represent interrelated concepts in the form of a visual knowledge network that can be shared via URL. This can be used to represent conceptual and even metacognitive understanding.

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Mapping

Support creation of custom maps by marking up publicly available mapping information, which can then be shared by link or by embedding within another site.

		Word clouds	
		Enable users to create and share image arrangements	
		of keywords of a text based on the file, text or URL	
		provided by users.	
Audio tools		Audio Sharing	
	Enable users to upload and share their au		
		recordings via open repositories. This can be useful	
		for sourcing disciplinary information and also to be	
		used for remixing.	
		Audio creation and Editing	
		Enable individuals to record audio directly through	
		their browser.	
Video tools		Video Sharing	
		Enable users to share video content via public	
		repositories. This enables teachers and students to	
		source video content for knowledge acquisition or	
		remixing purposes, as well as disseminate their own	
		video.	
		Video Creation and Editing	
	Allow individual users to create and edit videos		
		through their browser. This enables teachers and	
students to create video content for instructional			
		students to create video content for instructional of	
		assessment purposes.	

			Video streaming	
1			Allow users to publicly broadcast a live video stream	
	fr		from their video camera or webcam. This is useful for	
			providing remote access to live events (such as	
			presentations) or creating a student-driven television	
			broadcast.	
Multi	modal	production	Digital pinboards	
tools			Allow groups of users to organize and share a range	
			of resources such as web pages, files, photos, and	
			notes by adding them to a freeform canvas. This is	
			useful for collaborative brainstorming sessions.	
			Presentation	
			Enable users to sequence multimodal content so as to	
			support or deliver an instructional narrative. Products	
			are shareable via URL and public repositories.	
			Lesson Authoring	
			Enable users to sequence content into learning	
			modules and often add interactive elements.	
Digital storytelling tools Online book creation		Online book creation		
			Enable individual users to create a story based on	
			pictures and text, and share them via URL or	
			repository.	

Comic strip creation

Allow users to drag and drop character and backgrounds into template and then overlaying individualized images and text.

Animated videos

Enable creation and sharing of animated videos and presentations through drag-and-drop interfaces with a large variety of elements, styles, and templates.

Website creation tools

Individual website creation

Enable single users to create websites from customizable template through point-and-click interface (no coding required).

Wikis

Enable users to create, edit, and link multi-page websites through their web-browser, Teachers and students can use this to create collaborative knowledge bases and for project workspaces.

Blogs

Differ from wikis in that they organize website posts in chronological order. This making the suitable for teachers and students to represent and track evolving thinking over time.

Knowledge	File Sharing		
organization and	Enable users to share their documents, images, audio		
sharing tools	files and videos via the web.		
	Social Bookmarking		
	Enable users the capacity to store, organize, annotate,		
	and share links to websites online. This is useful for		
	creating sets of links amongst a community of		
	practice or team.		
	Aggregators		
	Use RSS harvest web-based information into one		
	place.		
	Republishing		
	Extent beyond aggregation tools to enable		
	individuals and groups of users to not only scrape		
F	content from the web but also comment upon and		
	republish it.		
Data analysis tools	Conducting Surveys		
	Enable collection of data via web forms. This enable		
	students and teachers to source data to use in		
	subsequent analysis.		

	Online spreadsheets	
	Provide the ability for users to collaboratively edit	
	spreadsheets that are shared via URL. Teachers and	
	students can conduct collaborative data analysis.	
	Infographic	
	Provide online tools and templates for representing	
	numerical data that can in turn be shared via URL.	
Timeline tools	Allow users to organize text and images on a single	
	page according to when they occurred. This is useful	
	for representing historical events.	
3D modelling tools	Enable users to create three-dimensional Computer	
	Aided Design (CAD) models through their Web-	
	browser. These tools support the rising maker	
	movement by enabling 3D objects to be designed,	
	stored, and shared in the cloud, and then exported for	
	3D printing.	
Assessment tools	Typically enable users to create online quizzes using	
	a range of question types (such as allows users to	
	create multiple choice, fill in the blank, matching,	
	short answer, and true/false questions) with	
	automatic grading and feedback as well as	
	performance tracking.	
Social networking	Enable users to sharing photos and videos, post text	
systems	thoughts and run polls via their personalized profile	
	pages. They can be used to help student share content,	

another, and harvest perceptions via comments and voting activities.
chat as well as audio-video web-cam or screen-share
, and the second

Table 2 The Typological Analysis by Matt Bower

Web 2.0 can be visualized as a set of principles and practices that tie together a veritable solar system of sites that demonstrate some or all of those principles, at a varying distance from that core. In education, Web 2.0 tools amplify teaching and learning by fostering a collaborative, interactive environment. They complement modern pedagogical frameworks like Project-Based Learning (PBL) by offering platforms where learners and educators can communicate, co-create, or solve problems in meaningful, real-world contexts. Web 2.0's gravitational core lies in its potential to transform users from passive recipients into active contributors, revolutionizing not only the internet but also the way knowledge is constructed and shared in the 21st century.

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2. Project Based Learning

The 21st century is known as the information technology era, globalization era and industrial revolution 4.0. defined 21st-century learning as a reform of education aimed at equipping every student with the basic skills required to meet the challenges of the 21st century. Those 4 C's elements are essential skills that everyone must master to succeed in facing the challenges, problems, life, and careers of the 21st century.³⁴

The use of a wide range of techniques to create a new knowledge, thought, or idea is also one of the bases of great teaching according to 21st century education. It is an important process in which learners make connection across domain of knowledge. The students play an important role to develop their knowledge where they innovate their own ideas to create new things and or adapt new situation Every experience that is encountered in students' learning process will become a useful knowledge and those are considered as educative experience if they are organized from an authentic context.³⁵

The importance of students' role in the learning process is also stated in Indonesian Regulation of National Education Standard (PP. No. 19 Th. 2005, Pasal 19, Ayat 1). Learning process should be organized in an interactive, inspiring, fun, and challenging environment. The learning activities are expected to be able to provide sufficient space for innovation, creativity, and independence. Learners develop their own learning by being attached into several range of activities in accordance with their talents, interests, physical, and psychological development.

³⁵ Putri, N. L. P. N. S., Artini, L. P., & Nitiasih, P. K. (2017). Project-based learning activities and EFL students' productive skills in English. *Journal of Language Teaching and Research*, 8(6), 1147-1155.

³⁴ Redhana, I. W. (2019). Mengembangkan Keterampilan Abad Ke-21 Dalam Pembelajaran Kimia. Jurnal Inovasi Pendidikan Kimia, 13(1), 2239 – 2253.

Maximizing students' active participation in learning should be based on constructivist principles, Project Based Learning is one of the most frequently adopted models. Project-based learning is a student-centered form of instruction which is based on three constructivist principles: learning is context-specific, learners are involved actively in the learning process and students achieve their goals through social interactions and the sharing of knowledge and understanding.³⁶

The roots of Project Based Learning extend back over a hundred years, to work of educator and philosopher John Dewey. Dewey argued that students will develop personal investment in the material if they engage in real, meaningful tasks and problems that emulate what experts do in real-world situations. Furthermore, Krajcik et al. stated that Project-Based Learning is an overall approach to the design of learning environments. And Learning environments that are project-based have five key features:³⁷

- a. They start with a driving question, a problem to be solved.
- b. Students explore the driving question by participating in authentic, situated inquiry process problem solving that are central to expert performance in the discipline. As students explore the driving question, they learn and apply important ideas in the discipline.
- c. Students, teachers, and community members engage in collaborative activities to find solutions to the driving question. This mirrors the complex social situation of expert problem solving.
- d. While engaged in the inquiry process, students are scaffolded with learning technologies that help them participate in activities normally beyond their ability.

³⁷ Krajcik, J. S., & Blumenfeld, P. C. (2006). *Project-based learning* (pp. 317-34).

³⁶ Cocco, S. (2006). Student leadership development: the contribution of project-based learning. Unpublished Master's thesis. Royal Roads University, Victoria, BC.

e. Students create set of tangible products that address the driving questions. These are shared artifacts, publicly accessible external representations of the class's learning.

PBL is both process- and product-orientated. Students have opportunities to use several skills (e.g., problem-solving, creativity, teamwork, as well as language) at different work stages, so the work and language skills are developed. Since PBL is potentially motivating, empowering and challenging to language learners, it usually results in building learners' confidence, self-esteem, and autonomy as well as improving students' language skills, content learning, and cognitive abilities. Furthermore, Kornwipa Poonpon characterized Project Based learning activities into 6 categories: focuses on content learning rather than on specific language patterns, is student-centered so the teacher becomes a facilitator or coach, encourage collaboration among students, leads to the authentic integration of language skills and processing information from multiple sources, allows learners to demonstrate their understanding of content knowledge through an end product (e.g., an oral presentation, a poster session, a bulletin board display, or a stage performance), and bridges using English in class and using English in real life contexts. ³⁸

Nizwardi argued Implementation of the Project Based Learning model is make condition the learning process by following of the syntax, thus creating interaction between teacher, students and instructional media according to the characteristic of the Project-based Learning model. He then designed and developed the seven steps of Project Based learning. This model was validated by expert. The seven steps of PBL model consists of three main stages (primary) then they are

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³⁸ Poonpon, K. (2011). Enhancing English skills through project-based learning. *The English Teacher*, 40(1).

broken down into seven stages (secondary). The primary stages consist of 1) skill competences debriefing, which aims to make students have an understanding about the expected outcome capabilities, have a high motivation because their project task to be solved in the real-world, have an understanding the concept of teaching material, and have the skills of essential learning content conducted, 2) Project work, the student assignment as a project work in PBL model lifted from real-world issues and processing of work stages realistic to a real workplace and relevant to learning outcome, and 3) evaluation, aims to reveal the achievement of the learning process and students competences, so that it becomes a matter for assessment and evaluation.³⁹

Furthermore, Nizwardi argued in project-based learning, students are the center of learning who are learning actively to improve their competences. Project-based learning is the method that places students at the center of the learning process. Learning resources on project-based learning models is multidimensional. The project task is lifted from the real problems to provide opportunities for students to improve their ability and to understand the implementation of the competence that is being studied. Project based learning (PJBL) provides opportunities for students to build these qualities, as well as more deeply learn traditional academic contents and understand how it applies to the real world.

³⁹ Jalinus, N., Nabawi, R. A., & Mardin, A. (2017, September). The seven steps of project-based learning model to enhance productive competences of vocational students. In *International Conference on Technology and Vocational Teachers (ICTVT 2017)* (pp. 251-256). Atlantis Press.

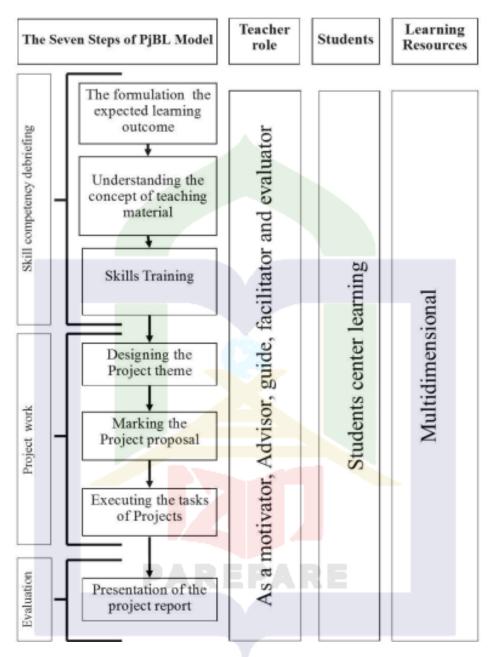


Figure 3. The seven steps of PBL model developed by Nizwardi⁴⁰

⁴⁰ Jalinus, N., Nabawi, R. A., & Mardin, A. (2017, September). The seven steps of project-based learning model to enhance productive competences of vocational students. In *International Conference on Technology and Vocational Teachers (ICTVT 2017)* (pp. 251-256). Atlantis Press.

Sutirman in his book "Media dan Model-model pembelajaran Inovatif", and Salamun et al. in a book entitled "Model-model Pembelajaran Inovatif" proposed that there are six steps in implementing Project-based learning in the classroom:

a. Phase 1: Start with the essential question

The question should contain a problem that needs to be solved and lead to a discovery or a product. The topic or theme should be relevant to real-world issues and encourage students to engage in deep investigation.

b. Phase 2: Create a project plan design

The planning is done collaboratively between the teacher and students. The plan includes the rules, the selection of activities that support answering the essential question by integrating various supporting subjects, and informing the tools and materials that can be utilized to complete the project.

c. Phase 3: Creating a schedule

The teacher and students work together to create a schedule for completing the project. The project completion time should be clear, and students should be guided to manage their time effectively. Students should be given freedom and opportunities to explore new ideas. However, the teacher should still monitor and remind students if they stray from the project's objectives.

d. Phase 4: Monitoring the progress of students and projects

The teacher is responsible for monitoring the students' activities while they are working on the project. This monitoring is done by facilitating students in each process. In other words, the teacher acts as a mentor for the students' activities. To ease the monitoring process, a rubric is created to record all important activities.

e. Phase 5: Assessing the results

Assessment is conducted to help teachers measure the achievement of competency standards, evaluate each student's progress, provide feedback on their level of understanding, and assist teachers in developing strategies for future lessons.

f. Phase 6: Reflection

At the end of the learning process, the teacher and students reflect on the activities and the results of the project. Reflection can be done individually or in groups. In this phase, students are asked to express their feelings and experiences during the project completion.

3. Perceptions

Perceptions is someone's insight into deciphering something. This term commonly used in the field of psychology. Perceptions can be defined as a process that involves people to organize and interpret their sensory impressions with the aim of giving meaning to their environment. Hornby stated that perceptions refers to an idea, belief, or an image that you have as a result od how you see or understand something. Furthermore Rundell defined perceptions as a particular way of understanding or thinking about something, the ability to notice something by seeing, hearing, smelling etc. and the ability to understand and make good judgement about something.

Perceptions is the process by which individuals interpret and make sense of sensory information from their environment. It involves organizing and interpreting sensory inputs (e.g., sights, sounds, and feelings) to understand and interact with the world around us. Perceptions is not merely passive; it is an active process shaped by one's prior experiences, beliefs, and expectations. In educational settings, perceptions play a crucial role as students and teachers form distinct viewpoints based on how they process learning experiences and instructional methods.

In this research, teachers' and students' perceptions refers to their point of view to Web 2.0 use in English class using project-based model. Perceptions can significantly influence students' motivation and engagement, as their interpretation of learning experiences can affect their enthusiasm and commitment to educational

⁴¹ Robbins, J. (2005). *Between "Hello" and "See you later"*. Development of strategies for interpersonal communication in English by Japanese EFL students. Published Dissertation. Ann Arbor. Michigan University Press.

 $^{^{\}rm 42}$ Hornby, A.S. (2005). Oxford Advanced Learners' Dictionary of Current English. Oxford: Oxford University Press.

⁴³ Rundel, M. (2007). *Macmillan English Dictionary for Advanced Learners, (2nd ed.).* Oxford: Macmillan.

activities.⁴⁴ Teachers' perceptions also plays a significant role in the teaching and learning process since they do not only influence teachers' decision making and teachers' actions, but also provide significant insights into many aspects of education.⁴⁵ Perceptions means how teachers and students perceive and interpret information based on their experiences and phenomena that occur in their surroundings. Teachers' perceptions in this case is how the teachers perceive Web 2.0 tools use in project-based learning during the teaching and learning process under kurikulum Merdeka whether it is positive or negative.

Slameto categorized perceptions into two namely Positive perceptions and negative perceptions. Perceptual forms are views based on an assessment of an object that occurs anytime, anywhere, if influenced by a stimulus.⁴⁶ Positive perceptions is the perceptions or view of an object and leads to a situation where the perceiving subject tends to accept the object that is captured because it is in accordance with his personality. Negative perceptions is the perceptions or view of an object and leads to a situation where the perceiving subject tends to reject the object being captured because it is not in accordance with his personality.

Positive perceptions refer to the favorable views or attitudes individuals hold towards a subject, which can lead to increased motivation, confidence, and satisfaction. In education, positive perceptions of teachers can enhance student engagement and learning outcomes. Negative perceptions, on the other hand, involves unfavorable views or attitudes, which can result in decreased motivation, lower self-esteem, and dissatisfaction. In the classroom, negative perceptions of

Nurhayati, F. K., Tarjana, S. S., & Hersulastuti, H. (2018, July). Teachers' perceptions toward the implementation of 2013 Curriculum. In *English Language and Literature International Conference (ELLiC) Proceedings* (Vol. 2, pp. 76-87).

⁴⁴ Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. *Frontiers in psychology*, *12*, 713057.

⁴⁶ Slameto, Belajar dan Faktor-faktor yang Mempengaruhinya. (Jakarta: Rineka Cipta, 2010) p.103-105

teachers can hinder student progress and create a less conducive learning environment.⁴⁷

When considering Web 2.0 tools in education, perceptions extend to how users view the ease of use, usefulness, and relevance of these tools. According to the Technology Acceptance Model (TAM), users' perceptions of a system's usefulness and ease of use significantly influence their acceptance and continued use of technology. Moakofhi et.al explained TAM concept as follows:

- a. Perceived Usefulness (PU) the degree to which a potential user believes that using the technology would enhance his or her work performance.
- b. And Perceived Ease of Use (PEOU) how effortless a potential user believes using the technology will be
- c. Attitude Toward Using (ATU) a potential user's positive or negative feeling associated with performing a specific behavior, and
- d. Behavioral Intention to Use (BI) the degree to which a potential user has formulated conscious plans to perform or not perform some specified future behavior.⁴⁸

The Technology Acceptance Model (TAM), introduced by Davis in 1986, It became most widely used models to explain user acceptance behavior. ⁴⁹ Davis argued that valid measurement scales for predicting user acceptance of computers are in short supply. Most subjective measures used in practice are unvalidated, and their relationship to system usage is unknown. Davis then developed and validated

⁴⁷ Kahveci, H. (2023). The Positive and Negative Effects of Teacher Attitudes and Behaviors on Student Progress. *Journal of Pedagogical Research*, 7(1), 290-306.

⁴⁸ Moakofhi, M. K., Phiri, T. V., Leteane, O., & Bangomwa, E. (2019). Using Technology Acceptance Model to Predict Lecturers' Acceptance of Moodle: Case of Botswana University of Agriculture and Natural Resources.

⁴⁹ Ma, Q., & Liu, L. (2004). The technology acceptance model: A meta-analysis of empirical findings. *Journal of Organizational and End User Computing (JOEUC)*, 16(1), 59-72.

new scales for two specific variables, perceived usefulness and perceived ease of use, which were hypothesized to be fundamental determinants of user acceptance.

In his research Davis referred Perceived usefulness to "the extent to which an individual believes that utilizing a specific system will improve their job performance." This concept aligns with the definition of "useful," which means "able to be utilized effectively or advantageously." a system perceived as highly useful is one where the user expects a positive connection between its usage and improved performance outcomes. Meanwhile Perceived ease of use is defined as "the extent to which an individual believes that using a particular system will require minimal effort." This definition stems from the meaning of "ease," which implies "absence of difficulty or significant exertion." Since effort is a limited resource that individuals distribute across their various responsibilities, a system perceived as easier to use is, all else being equal, more likely to gain user acceptance. ⁵⁰

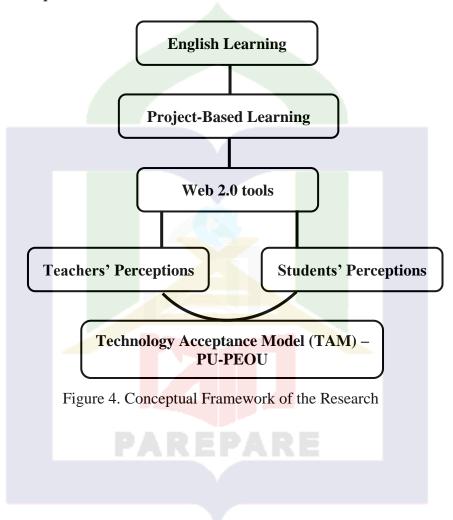
TAM has received considerable empirical support and has been tested with various applications in numerous studies. It is considered more parsimonious, predictive, and robust compared to other models.⁵¹ It can be concluded that when users perceive a technology as useful, they are more likely to use it, as they believe it will help them achieve their goals more efficiently. A high level of perceived usefulness leads to a stronger intention to use the technology. This intention is a significant predictor of actual usage behavior. Technologies that are perceived as easy to use are more likely to provide a positive user experience, encouraging users to engage with the technology without frustration. If a technology is easy to use,

⁵⁰ Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

⁵¹ Ma, Q., & Liu, L. (2004). The technology acceptance model: A meta-analysis of empirical findings. *Journal of Organizational and End User Computing (JOEUC)*, 16(1), 59-72.

the learning curve is shorter, making it more accessible to a broader range of users, regardless of the technical proficiency.

C. Conceptual Framework



CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

The research employed quantitative approach. It is appropriate for this research as it align with the objective of systematically exploring the perceptions of teachers and students regarding Web 2.0 tools in Project_Based Learning within Kurikulum Merdeka framework. In this case, the goal is to measure perceptions, which are inherently descriptive and quantifiable, focusing on dimensions such as perceived usefulness and ease of use as outlined in the Technology Acceptance Model (TAM).

This study utilized a descriptive quantitative approach, specifically employing a survey method with questionnaires for data collection. TAM theory specially on Perceived of Usefulness (PU) and Perceived of Ease of Use (PEOU) are accommodated to clear about teachers' and students' perceptions.

B. Location and Duration of The Research

This research was conducted in Kabupaten Pinrang, a regency in South Sulawesi, Indonesia, due to several key factors that make it a suitable location for the study. From researcher observation, Kabupaten Pinrang has a growing interest in integrating digital tools and technology in education, especially within its schools, as part of the broader national push for digital literacy in the classroom. This makes it an ideal setting for examining how Web 2.0 tools are utilized in English project-based learning under Kurikulum Merdeka. The region's diverse student population, including those from urban and rural areas, provides an opportunity to explore different perspectives on the adoption and perceptions of

using Web 2.0 tools. This research took one month in its process including initial study, research activity and data analysis.

C. Subject of The Research

The subjects of this research included both students and teachers engaged in using Web 2.0 tools in English Project-Based Learning (PBL) under Kurikulum Merdeka in Kabupaten Pinrang.

Elementary School	20
Junio <mark>r High S</mark> chool	10
Senior High School	3
	33

Table 3. Sekolah Penggerak Kab. Pinrang

The population consisted of students and English teachers, selected to provide comprehensive perceptions on the use of Web 2.0 tools in PBL contexts. This research used purposive sampling as this research requires participants with specific characteristic-teachers and students engaged in Project Based Learning using Web 2.0 tools under Kurikulum Merdeka. A sample size of 101 participants, including 70 students and 31 teachers, recruited through local educational institutions. Elementary students were not be included as participants due to developmental stage of these learners.

D. Research Instrument

A structured questionnaire used to assess teachers' and students' perceptions of Web 2.0 tools in Project Based Learning under Kurikulum Merdeka. This research used a closed questionnaire in which the answer provided in the form

of levels. The items are adopted from Technology Acceptance Model (TAM). There are 20 items, 10 items each for measuring Perceived of Use (PU) and perceived ease of use (PEOU) based on Technology Acceptance Model (TAM). The survey used Semantic Differential Scales, a scaling tool which has been used frequently for measuring social attitudes, particularly in the fields of linguistics and social psychology.⁵² It presents a continuum between two opposite adjectives or phrases, and participants rate their position on the scale 1-7. Since the category are provided participants can focus on the expected dimensions.

The researcher gathered responses from 15 teachers and students to test item validity and reliability. The results shows that the 20 items (10 PU items and 10 PeoU items) each for students and teachers are valid to use since the result show higher value rtable = 0.514. Furthermore, the test also show that the items are reliable as the value of each item are larger than 0,60. The results are shown in tables below.

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 $^{^{\}rm 52}$ Al-Hindawe, J. (1996). Considerations when constructing a semantic differential scale.

Item	Result	Descriptions	
Perceived Of Usefulness (PU)			
1	0.784	valid	
2	0.918	valid	
3	0.942	valid	
4	0.886	valid	
5	0.696	valid	
6	0.901	valid	
7	0.957	valid	
8	0.903	valid	
9	0.955	valid	
10	0.847	valid	
Item	Result	Descriptions	
Perceived Ease of Use (PEoU)			
1	0.882	valid	
2	0.868	valid	
2	0.072	1:1	
3	0.873	valid	
4	0.873	valid	
4	0.864	valid	
4 5	0.864 0.817	valid valid	
4 5 6	0.864 0.817 0.838	valid valid valid	
4 5 6 7	0.864 0.817 0.838 0.832	valid valid valid valid	

Table 4 Validity Items of teachers' questionnaire

Item	Result	Descriptions	
Perceived Of Usefulness (PU)			
1	0.696	valid	
2	0.720	valid	
3	0.519	valid	
4	0.842	valid	
5	0.610	valid	
6	0.662	valid	
7	0.772	valid	
8	0.576	valid	
9	0.725	valid	
10	0.834	valid	
Item	Result	Result Descriptions	
Perceived Ease of Use (PEoU)			
rceived Ease o	f Use (PEoU)		
rceived Ease o	f Use (PEoU) 0.786	valid	
		valid valid	
1	0.786		
1 2	0.786 0.802	valid	
1 2 3	0.786 0.802 0.731	valid valid	
1 2 3 4	0.786 0.802 0.731 0.498	valid valid valid	
1 2 3 4 5	0.786 0.802 0.731 0.498 0.897	valid valid valid valid valid	
1 2 3 4 5 6	0.786 0.802 0.731 0.498 0.897 0.731	valid valid valid valid valid valid	
1 2 3 4 5 6 7	0.786 0.802 0.731 0.498 0.897 0.731 0.826	valid valid valid valid valid valid valid	

Table 5 Validity Items of students' questionnaire

Item	Number of Item	Result	Descriptions
Teachers' questionnaire			
Perceived of Usefulness	10	0.966	Reliable
Perceived Ease of Use	10	0.949	Reliable
Students' questionnaire			
Perceived of Usefulness	10	0.879	Reliable
Perceived Ease of Use	10	0.922	Reliable

Table 6 Reliability of Teavhers' and students' questionnaire

E. Procedures of Collecting and Analyzing Data

The researcher developed questionnaire referring Technology Acceptance Model (TAM) developed by Davis. The questionnaire was distributed online to students and teachers. The researcher distributed the questionnaire by google form. The researcher then sent the link and asked participants to answer based on their perceptions on Usefulness and Ease of use of Web 2.0 tools in Project-Based Learning under Kurikulum Merdeka.

After calculating the data based on the questionnaire that the researcher has distributed, the researcher then calculated the average score (Mean), and deviation standard (SD). The researcher then scored each item based on participants' answer on questionnaire. The scoring scale can be seen as follows:

Score Range	Statements
1.0-2.5	Not Useful / Not Easy
2.6-4.0	Useful Enough / Easy Enough
4.1-5.5	Useful / Easy
5.6-7.0	Very Useful / Very Easy

Table 7 Scoring Indicator



CHAPTER IV FINDINGS AND DISCUSSION

This chapter consists of two sections namely findings and discussions. The findings of this research present the data of teachers' and students' perceptions of Web 2.0 tools Use in English Project-Based Learning under Kurikulum Merdeka. In addition, the discussion of this research of this research explains the findings and supported theories as the result of this research.

A. Research Findings

1. Teachers' Perceptions

The participants of this research were 31 English teachers who engaged in using Web 2.0 tools in English Project-Based Learning (PBL) under Kurikulum Merdeka in Kabupaten Pinrang. The demographic information of the participants has been presented in the table below:

inted in the table below.		
Demographic Details —	Responses	
Demographic Details	F	%
Age		
<30 years	21	67.7
31-40 years	8	25.8
41-50 years	2	6.5
Gender		
Male	5	16.1
Female	26	83.9
PARE	ΡĂΚ	{ = 55.0
Years of Experience		
<6 years	21	67.7
6-10 years	6	19.4
11-15 years	$\frac{2}{2}$	6.5
16-20 years	2	6.5
Education Level		
Bachelor's Degree (S1)	27	87.1
Master's Degree (S2)	4	12.9
Level of Teaching		
Elemantary Schools	16	51.6
Junior High Schools	8	25.8
Senior High Schools	7	22.6

Table 8 Demographic Information of Participants (teachers)

It can be seen in the Table that the majority of respondents were under 30 years old (67.7%), followed by those aged 31–40 years (25.8%), and only a small proportion were aged 41–50 years (6.5%). In terms of gender distribution, the respondents were predominantly female (83.9%), with male teachers accounting for only 16.1%. Regarding teaching experience, most respondents had less than 6 years of teaching experience (67.7%), while 19.4% had between 6 and 10 years, and 6.5% had 11–15 years and 16–20 years of teaching experience, respectively. Additionally, a significant majority of the respondents held a bachelor's degree (87.1%), with 12.9% holding a master's degree. When categorized by the level of teaching, 16 respondents (51.6%) were elementary school teachers, 8 respondents (25.8%) were junior high school teachers, and 7 respondents (22.6%) were senior high school teachers.

Since some participants may not be familiar with the term 'Web 2.0 tools,' even though they use these tools in their daily activities, to provide an overview, in this research teachers also were asked about Web 2.0 tools that they used to support their teaching activity in project-based learning classroom. The results were presented in the graph below:

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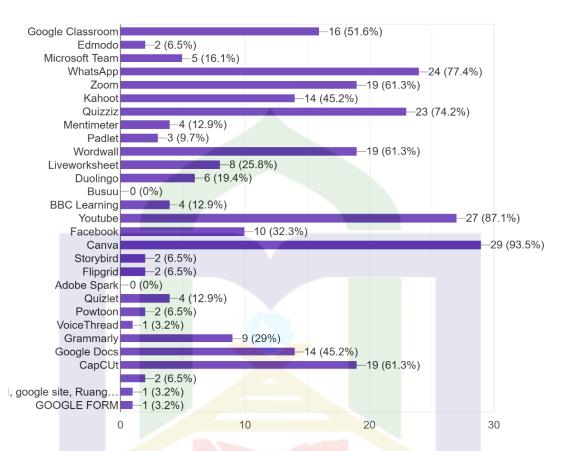


Figure 5 Web 2.0 Tools used by teachers to support project-based learning activities under "Kurikulum Merdeka"

The graph illustrates the usage of various Web 2.0 tools by teachers to support project-based learning activities under the "Kurikulum Merdeka." Among the tools, Canva emerges as the most utilized platform, with 93.5% of teachers adopting it, followed by YouTube at 87.1%. WhatsApp and Quizziz also enjoy high usage rates of 77.4% and 74.2%, respectively, showcasing their popularity for communication and interactive learning.

Tools like Zoom, Wordwall, and Google Docs are moderately utilized, with around 45-61% of teachers incorporating them into their teaching practices. Platforms such as Mentimeter, Liveworksheet, and Quizlet have relatively lower usage rates, ranging from 12.9% to 29%, indicating a more niche application.

Interestingly, some tools like Busuu and Adobe Spark show no reported usage, while others like VoiceThread, Storybird, and Flipgrid are minimally adopted (3.2%-6.5%). This indicates a varying degree of adoption influenced by the specific needs of the curriculum and project-based learning activities.

In this research teachers were asked about their perceptions on Usefulness and Ease of Use of Web 2.0 Tools in English Project-Based Learning under Kurikulum Merdeka. The Results are reported in the table below:

Dome a grankia Dataila	Mean			
Demographic Details -	PU	PEoU	Statements	
Age				
<30 years	6.126	5.829	very useful/ very easy	
31-40 years	6.174	5.884	very useful/ very easy	
41-50 years	5.174	5.428	very useful/ easy	
, and the second			, and a	
Gender				
Male	6.064	5.788	very useful/ very easy	
Female	6.174	5.883	very useful/ very easy	
Years of Experience				
<6 years	6.048	ARE 5.700	very useful/ very easy	
6-10 years	5.894	5.629	very useful/ very easy	
11-15 years	6.260	5.820	very useful/ very easy	
16-20 years	5.714	5.429	very useful/ easy	
Education Level				
Bachelor's Degree (S1)	6.160	5.853	very useful/ very easy	
Master's Degree (S2)	5.722	5.378	very useful/ easy	
Level of Teaching				
Elemantary Schools	6.077	5.832	very useful/ very easy	
Junior High Schools	6.080	5.760	very useful/ very easy	
Senior High Schools	6.163	5.883	very useful/ very easy	
			·	

Table 9 Teachers' perceptions based on Demographic category

The table illustrates teachers' perceptions of the usefulness (PU) and ease of use (PEoU) of Web 2.0 tools across various demographic categories. Regarding age, teachers under 30 years reported the highest mean score for perceived usefulness (6.126), while those aged 31-40 years recorded the highest score for

perceived ease of use (5.884). Teachers aged 41-50 years had slightly lower perceptions in both categories, indicating some variability in perceptions across age groups.

In terms of gender, female teachers reported slightly higher mean scores for both perceived usefulness (6.174) and ease of use (5.883) compared to their male counterparts, who scored 6.064 and 5.788, respectively. This suggests that female teachers may find Web 2.0 tools more useful and easier to use than male teachers.

Teachers with 11-15 years of experience reported the highest mean scores for perceived usefulness (6.260) and ease of use (5.820). This finding highlights that mid-career teachers may be more confident in integrating these tools into their teaching practices, compared to those with less than six years of experience, who reported lower mean scores (6.048 for PU and 5.700 for PEoU).

Regarding education level, teachers with a Bachelor's degree scored higher on perceived usefulness (6.160) and ease of use (5.853) than those with a Master's degree (5.722 for PU and 5.378 for PEoU). This could indicate that additional qualifications do not necessarily translate to higher perceptions of these tools' utility and ease of use.

In terms of teaching levels, senior high school teachers recorded the highest scores for both perceived usefulness (6.163) and ease of use (5.883), followed closely by junior high school teachers and elementary school teachers. This trend suggests that the teaching context and level may influence how teachers perceive the practicality and simplicity of Web 2.0 tools.

	F	%			
Perceived of Usefulness (PU)					
Not Useful	-	-			
Useful Enough	2	6.5			
Useful	4	12.9			
Very Useful	25	80.6			
Downsiyad Face of Uc	o (DE oU)				
Perceived Ease of Use	e (FEOU)				
Not Easy		-			
Easy Enough	1	3.2			
Easy	8	25.8			
Very Easy	22	70.9			

Table 10. Frequency and distribution of Teachers' perceptions

Table above highlights the frequency and percentage distribution of teachers' perceptions regarding the usefulness (PU) and ease of use (PEoU) of Web 2.0 tools. For perceived usefulness, the majority of teachers (80.6%) rated Web 2.0 tools as "very useful," while 12.9% found them "useful." A smaller proportion (6.5%) rated them as "useful enough," and none of the respondents perceived them as "not useful." These findings underscore a strong consensus among teachers regarding the high utility of Web 2.0 tools in enhancing their teaching practices.

In terms of perceived ease of use, the majority (70.9%) of teachers rated the tools as "very easy" to use, while 25.8% found them "easy." A minimal percentage (3.2%) rated them as "easy enough," and no respondents indicated that these tools were "not easy" to use. This distribution reflects a positive reception of Web 2.0

tools among teachers, emphasizing their accessibility and ease of integration into project based-learning under Kurikulum Merdeka.

Item	Mean	SD
Perceived of Usefulness (PU)	Wican	50
	c 450	0.010
Web 2.0 tools help me prepare and implement project-based learning more effectively.	6.452	0.810
Using Web 2.0 tools improves student learning outcomes in projects.	6.032	1.048
Web 2.0 tools enable better collaboration between students and teachers in projects.	6.290	0.938
Web 2.0 tools speed up the planning and implementation process of project-based learning.	6.065	1.181
Using Web 2.0 tools increases my productivity as an educator.	6.484	0.811
Web 2.0 tools help students understand English concepts better through projects.	6.032	1.016
Web 2.0 tools support contextual and applicable learning through projects.	6.258	0.930
With Web 2.0 tools, I can provide more efficient feedback and communication in projects.	6.194	1.014
Scheduling and monitoring projects become easier with Web 2.0 tools.	5.968	1.169
Web 2.0 tools provide relevant tools for developing students' critical and creative thinking skills.	5.968	1.048
Perceived Ease of Use (PEoU)		
Operating Web 2.0 tools is easy for me.	5.839	0.934
I find it easy to integrate Web 2.0 tools into English project-based learning activities.	5.839	1.186
Web 2.0 tools are easy to use and have an intuitive interface.	5.806	0.980
I can use Web 2.0 tools well without much technical assistance.	5.613	1.022

Web 2.0 tools are flexible and easy to adapt to project-based learning needs.	6.065	1.063
The design and features of Web 2.0 tools make them simple to use in project-based learning.	5.935	0.892
I feel confident in solving problems when using Web 2.0 tools in project-based learning.	5.935	1.031
Web 2.0 tools do not require much time to learn and master.	5.710	1.039
The features of Web 2.0 tools are clear and easy to understand for use in project-based learning.	6.000	0.894
Web 2.0 tools integrate well with the Kurikulum Merdeka approach and other PBL activities.	6.097	0.908

Table 11 Descriptive Statictic of Teachers' Perceptions

The table presents descriptive statistics summarizing teachers' perceptions of the Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of Web 2.0 tools in project-based learning. The data includes the mean and standard deviation (SD) for each item related to these perceptions.

For PU, the highest-rated item is "Using Web 2.0 tools increases my productivity as an educator," with a mean score of 6.484 (SD = 0.811), highlighting strong agreement on the tools' ability to enhance teacher productivity. Similarly, "Web 2.0 tools help me prepare and implement project-based learning more effectively" scored a high mean of 6.452 (SD = 0.810). Items such as "Web 2.0 tools enable better collaboration between students and teachers in projects" (mean = 6.290, SD = 0.938) and "Web 2.0 tools support contextual and applicable learning through projects" (mean = 6.258, SD = 0.930) further emphasize their perceived benefits. However, the lowest-rated items under PU, with means of 5.968, are "Scheduling and monitoring projects become easier with Web 2.0 tools" and "Web 2.0 tools provide relevant tools for developing students' critical and creative thinking skills," suggesting slightly less consensus on these aspects.

For PEOU, teachers also expressed positive perceptions, with "Web 2.0 tools integrate well with the Kurikulum Merdeka and other PBL activities" receiving the highest mean of 6.097 (SD = 0.908). Items like "Web 2.0 tools are flexible and easy to adapt to project-based learning needs" (mean = 6.065, SD = 1.063) and "The features of Web 2.0 tools are clear and easy to understand for use in project-based learning" (mean = 6.000, SD = 0.894) also received favorable responses. On the lower end, "I can use Web 2.0 tools well without much technical assistance" had a mean of 5.613 (SD = 1.022), and "Web 2.0 tools do not require much time to learn and master" scored 5.710 (SD = 1.039), indicating some variation in perceived ease of independent usage.

Overall, the data reflects a generally positive perceptions of Web 2.0 tools in terms of both usefulness and ease of use, with teachers acknowledging their potential to enhance productivity and integrate effectively into project-based learning environments.

	Perceived Of Usefulness	Perceived Ease of Use
	(PU)	(PEoU)
Mean	6.174	5.884
Median	6	6
Mode	7	6
SD	1.005	0.995

Table 12. overall Mean Score and SD of Teachers Perceptions

For Perceived Usefulness, the mean score is 6.174, which falls within the range of 5.6 - 7.0, categorized as "Very Useful." This indicates that teachers strongly believe Web 2.0 tools significantly enhance their ability to achieve teaching goals, support collaborative activities, and improve learning outcomes,

particularly in the context of Project-Based Learning (PBL). The standard deviation of 1.005 suggests moderate variation in responses, indicating that while most teachers perceive the tools as highly useful, a few may have differing opinions.

Similarly, the Perceived Ease of Use of Web 2.0 tools have a mean score of 5.883, also falling within the "Very Easy" category on the scoring scale. This reflects that teachers generally find these tools user-friendly, intuitive, and manageable for their educational activities. The standard deviation of 0.995 highlights consistent agreement among teachers, with most finding the tools easy to operate.

2. Students' Perceptions

The participants of this research were 70 students who engaged in using Web 2.0 tools in English Project-Based Learning (PBL) under Kurikulum Merdeka in Kabupaten Pinrang. The demographic information of the participants has been presented in the table below:

PAREP	Resp	Responses					
Demographic Details	F	%					
Gender							
Female	56	80					
Male	14	20					

Education Level Senior High Schools 52 74.3 Junior High Schools 18 25.7

Table 13. Demographic Information of Participants (Students)

The table above shows that the majority of the respondents are female, comprising 80% (56 individuals) of the total sample, while male students represent 20% (14 individuals). Regarding the educational level, 74.3% (52 students) are from Senior High Schools, and the remaining 25.7% (18 students) are from Junior High Schools. This demographic distribution highlights a predominantly female student sample with a higher representation from Senior High Schools.

To provide an overview, in this research students were asked about Web 2.0 tools that they used to support their learning activities in project-based learning classroom. The results were presented in the graph below:

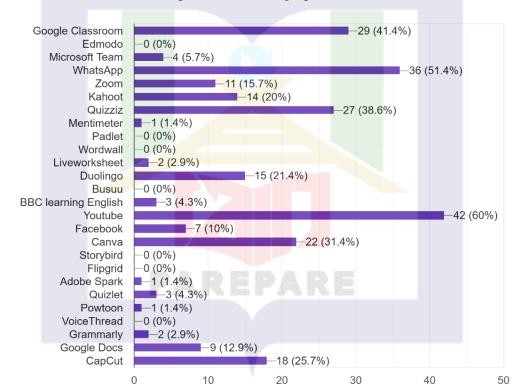


Figure 6 Web 2.0 Tools used by students to support project-based learning activities under "Kurikulum Merdeka"

The graph illustrates various Web 2.0 tools used by students to support their project-based learning activities. Among the tools, Youtube emerges as the most utilized, with 60% of students incorporating it into their learning processes.

WhatsApp follows with 51.4% usage, indicating its popularity for communication and collaboration. Google Classroom was used by 41.4% of students, reflecting its significant role in managing classroom activities. Quizizz (38.6%) and Canva (31.4%) are also prominently used, showing their effectiveness in interactive learning and creative projects, respectively.

Other notable tools include CapCut, utilized by 25.7% of students for video editing, and Duolingo, used by 21.4% for language learning. Kahoot, Zoom, and Google Docs are employed by 20%, 15.7%, and 12.9% of students, respectively, facilitating quizzes, virtual meetings, and document collaboration. Less commonly used tools like BBC Learning English (4.3%), Grammarly (2.9%), and Liveworksheet (2.9%) indicate their niche applications in specific learning scenarios. Tools such as Edmodo, Padlet, and Storybird show no usage among the surveyed students, suggesting limited adoption or awareness.

In this research students also were asked about their perceptions on Usefulness and Ease of Use of Web 2.0 Tools in English Project-Based Learning under Kurikulum Merdeka. The Results are reported in the table below:

D 11 D 1 11		M	ean
Demographic Details	PU	PEoU	Statements
Gender			
Female	5.225	5.098	useful / easy
Male	5.685	5.471	very useful / easy
Education Level			
Junior High Schools	4.975	4.887	useful / easy
Senior High Schools	5.229	5.095	useful / easy

Table 14 Students' perceptions based on Demographic category

The table illustrates students' perceptions of Web 2.0 tools categorized by gender and education level, focusing on Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Regarding gender, male students rated both PU (mean = 5.685) and PEOU (mean = 5.471) higher compared to female students, who scored 5.225 and 5.098, respectively. This indicates that male students perceive Web 2.0 tools as slightly more useful and easier to use, with their statements characterized as "very useful/easy" compared to the "useful/easy" perspective of female students.

In terms of education level, senior high school students reported higher ratings for both PU (mean = 5.229) and PEOU (mean = 5.095) compared to junior high school students, who scored 4.975 and 4.887, respectively. This suggests that senior high school students find Web 2.0 tools more useful and easier to use than their junior counterparts, though both groups expressed general agreement with their usefulness and ease of use.

scrumess and case of use.		
	F	%
Perceived of Usefulness (PU)		
Not Useful	4	5.71
Useful Enough	10	14.29
Useful	20	28.57
Very Useful	36	51.43
Perceived Ease of Use (PEoU)	7	
Not Easy	2	2.86
Easy Enough	14	20.00
Easy	27	38.57
Very Easy	27	38.57

Table 15. Frequency and distribution of Students' perceptions

The table illustrates the frequency and percentage distribution of students' perceptions regarding the Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of Web 2.0 tools. In terms of Perceived Usefulness (PU), a majority of the students found the Web 2.0 tools to be very useful, as indicated by 36 respondents (51.43%). This is followed by 20 students (28.57%) who rated the tools as useful. Meanwhile, 10 students (14.29%) perceived the tools as useful enough, and only 4 students (5.71%) considered them not useful. These results suggest that most students acknowledge the benefits of Web 2.0 tools in supporting their learning activities.

Regarding Perceived Ease of Use (PEoU), the perceptions are relatively distributed between "easy" and "very easy," with 27 students (38.57%) in each category. This indicates that a significant proportion of students found the tools to be intuitive and straightforward to use. However, 14 students (20.00%) rated the tools as easy enough, while a smaller number, 2 students (2.86%), found them not easy to use. These findings highlight the overall positive reception of Web 2.0 tools in terms of usability, although a minority of students encountered some challenges.

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Item	Mean	SD
Perceived of Usefulness (PU)		
Web 2.0 tools help me achieve project learning goals more effectively.	4.957	1.929
Using Web 2.0 tools improves the quality of English project learning outcomes.	5.243	1.756
Web 2.0 tools make collaboration with friends easier in English project-based learning activities.	5.243	1.853
Web 2.0 tools speed up task completion within the project framework.	5.343	1.768
Using Web 2.0 tools increases my productivity during project-based learning.	5.457	1.7
Web 2.0 tools help me understand English concepts better through project-based learning.	5.286	1.762
With Web 2.0 tools, I can apply knowledge in the real world through project-based learning.	5.171	1.711
Feedback and communication in projects become more efficient with Web 2.0 tools.	5.257	1.847
Web 2.0 tools make project scheduling and monitoring easier.	5.043	1.861
Web 2.0 tools provide useful resources for critical and creative thinking in projects.	5.257	1.783
Perceived Ease of Use (PEoU)		
Learning to use Web 2.0 tools is easy for me.	4.929	1.756
I find it easy to integrate Web 2.0 tools into project-based learning activities.	5.057	1.65
Web 2.0 tools are easy to use and have an intuitive interface.	4.986	1.628
I can use Web 2.0 tools well without much technical assistance.	4.829	1.728
Web 2.0 tools are easily accessible and can be adjusted to my learning needs.	5.286	1.598
The design and features of Web 2.0 tools make them simple to use in English projects.	5.3	1.582

I feel confident in solving minor issues when using Web 2.0 tools.	5.2	1.656
Web 2.0 tools require minimal time to master in project activities.	5.057	1.423
The features of Web 2.0 tools are clear and easy to understand for use in projects.	5.186	1.662
Web 2.0 tools integrate well with other resources and activities in PBL.	5.157	1.585

Table 16. Descriptive Statistics of Students' perceptions

The table presents descriptive statistics for students' perceptions of Web 2.0 tools in terms of Perceived Usefulness (PU) and Perceived Ease of Use (PEoU). Regarding PU, students rated "Using Web 2.0 tools increases my productivity during project-based learning" the highest (mean = 5.457, SD = 1.7), highlighting its perceived effectiveness in enhancing productivity. Other highly rated items include "Web 2.0 tools speed up task completion within the project framework" (mean = 5.343, SD = 1.768) and "Web 2.0 tools help me understand English concepts better through project-based learning" (mean = 5.286, SD = 1.762). However, "Web 2.0 tools make project scheduling and monitoring easier" received a slightly lower mean score (mean = 5.043, SD = 1.861), suggesting room for improvement in this area.

For PEoU, students found "The design and features of Web 2.0 tools make them simple to use in English projects" most favorable (mean = 5.3, SD = 1.582), closely followed by "Web 2.0 tools are easily accessible and can be adjusted to my learning needs" (mean = 5.286, SD = 1.598). Additionally, "I feel confident in solving minor issues when using Web 2.0 tools" (mean = 5.2, SD = 1.656) reflects students' growing confidence in tool usage. Items such as "I can use Web 2.0 tools well without much technical assistance" (mean = 4.829, SD = 1.728) and "Learning to use Web 2.0 tools is easy for me" (mean = 4.929, SD = 1.756) were rated slightly

lower, suggesting a need for improved support in technical independence and initial learning phases.

Overall, students generally perceive Web 2.0 tools as both useful and easy to use, with particularly strong endorsements for productivity and accessibility, though certain areas like technical independence and scheduling could benefit from enhancement.

	Perceived Of Usefulness	Perceived Ease of Use
	(PU)	(PEoU)
Mean	5.226	5.099
Median	6	5
Mode	7	7
SD	1.792	1.625

Table 17 Mean Score and SD of Students' Perceptions

The descriptive analysis of students' perceptions regarding the use of Web 2.0 tools reveals insightful findings. The mean score for Perceived Usefulness is 5.226, with a standard deviation of 1.792. According to the scoring scale, this average falls within the range of 4.1 to 5.5, indicating that students generally find the tools useful. This indicates that students recognize Web 2.0 tools as effective in supporting their learning, enhancing collaboration, and aiding their understanding of English concepts in Project-Based Learning (PBL). However, the standard deviation of 1.792 suggests a relatively high variation in responses, indicating that while many students find these tools useful, others may have less favorable perceptions.

For Perceived Ease of Use, the mean score is 5.099, also categorized as "Easy" within the range of 4.1 - 5.5. This reflects that students generally find Web

2.0 tools manageable and user-friendly for their educational activities. However, the standard deviation of 1.625 also indicates a notable variability in responses, suggesting that some students may have encountered challenges in using the tools effectively.

B. Discussion

The findings of this study highlight the significant perceptions of both teachers and students regarding the use of Web 2.0 tools in project-based learning under the Kurikulum Merdeka framework. Teachers, with a mean score of 6.174 (very useful) for perceived usefulness and 5.883 (very easy) for ease of use, generally found these tools highly beneficial and easy to incorporate into their teaching practices. It can Indicate their high level of acceptance and confidence in using Web 2.0 tools for educational purposes especially in Project-Based learning settings. This aligns with their professional experiences and exposure to technology integration in teaching practices. Teachers' familiarity with digital tools, coupled with their understanding of pedagogical frameworks like PBL, likely contributed to their positive perceptions.

Similarly, students recognized the usefulness of these tools, reflected in a mean score of 5.226 (useful) for usefulness and 5.099 (easy) for ease of use. However, students on the other hand, displayed more variability in their perceptions. While the majority of students found the tools beneficial, their responses suggest differing levels of digital literacy and access to technology. For instance, students with greater exposure to technology in their personal or academic lives may find Web 2.0 tools more intuitive and engaging, whereas those with limited access may encounter challenges. This discrepancy highlights the

influence of external factors, such as socioeconomic conditions and infrastructure, on students' ability to maximize the potential of Web 2.0 tools in PBL contexts.

The study's findings revealed distinct patterns in teachers' perceptions of Web 2.0 tools based on their demographic profiles. Age, years of teaching experience, education level, and teaching level all played a role in shaping teachers' perceptions of the usefulness and ease of use of these tools. Younger teachers (<30 years) reported slightly lower scores for perceived usefulness (PU) and perceived ease of use (PEoU) compared to their older counterparts. This could be attributed to their ongoing adjustment to integrating Web 2.0 tools into their instructional practices. In contrast, teachers aged 31–40 years reported the highest scores, likely reflecting a balance of technological familiarity and professional experience. Interestingly, teachers over 40 years demonstrated lower scores compared to their middle-aged peers, suggesting potential challenges in adopting newer technologies due to generational differences or limited exposure to digital tools.

Teachers with 6–10 years of experience reported the highest scores for PU and PEoU, indicating their comfort and confidence in using Web 2.0 tools. These teachers may have benefited from prior professional development opportunities and are at a stage in their careers where they actively seek innovative teaching approaches. On the other hand, teachers with less than six years of experience showed slightly lower scores, reflecting their limited exposure and ongoing learning process in integrating technology. Surprisingly, those with over 16 years of experience showed lower scores compared to mid-career teachers, possibly due to resistance to change or limited access to technology during earlier stages of their careers.

Teachers with master's degrees (S2) demonstrated higher scores for PU but slightly lower scores for PEoU compared to those with bachelor's degrees (S1).

This finding suggests that advanced education may enhance teachers' awareness of the pedagogical value of Web 2.0 tools but does not necessarily correlate with ease of use.

Teachers at the senior high school level reported the highest scores for both PU and PEoU, followed by junior and elementary school teachers. This pattern could be linked to the curriculum demands and the maturity level of students at different educational stages. Senior high school teachers may find Web 2.0 tools more suitable for facilitating collaborative and complex projects, while elementary school teachers may encounter challenges in adapting the tools for younger learners.

The findings also highlight differences in students' perceptions of Web 2.0 tools based on their demographic characteristics. Factors such as age, digital literacy, and access to technology appeared to influence their perceptions of the tools' usefulness and ease of use. Although specific age groups were not detailed, it can be inferred that younger students, especially those in junior high schools, may face challenges in navigating Web 2.0 tools due to limited experience. Conversely, senior high school students, who are more likely to have been exposed to digital tools through social media, online learning, or other platforms, may find these tools more intuitive and engaging. Senior high school students showed a greater tendency to perceive Web 2.0 tools as highly useful and easy to use, aligning with their developmental stage and the complexity of projects in their curriculum. In contrast, students in junior high schools may require more guidance and support to use these tools effectively. Variability in students' responses also reflects disparities in access to technology. Students from under-resourced areas may encounter difficulties, impacting their ability to engage effectively in projectbased learning. Students with more familiarity and prior exposure to the tools tend to rate Web 2.0 tools as "very useful" and "very easy to use." This finding underscores the importance of prior exposure and familiarity in shaping students' perceptions.

The differences observed across demographic categories underscore the need for tailored strategies to enhance the adoption of Web 2.0 tools. For teachers, professional development programs should address specific challenges faced by different demographic groups, such as providing advanced training for senior teachers or beginner-friendly resources for less experienced teachers. For students, initiatives to improve digital literacy and equitable access to technology are crucial to ensuring that all learners can benefit from the potential of Web 2.0 tools in project-based learning.

The study also revealed notable differences in the specific Web 2.0 tools preferred by teachers and students. Teachers predominantly utilized tools like Canva, YouTube, and WhatsApp, which align with their need for creating visually engaging content and facilitating communication. Canva, used by 93.5% of teachers, stands out as a preferred tool for designing educational materials, while YouTube (87.1%) serves as a vital resource for instructional videos. WhatsApp (77.4%) is frequently used for maintaining direct communication with students. On the other hand, students showed a preference for tools like Youtube, WhatsApp, and Google Classroom, indicating their inclination towards platforms that support social interaction and organized learning environments. Youtube was the most utilized tool among students (60%), followed by WhatsApp (51.4%) and Google Classroom (41.4%), which reflects their need for collaborative and structured learning spaces.

The frequency and distribution data indicate that teachers predominantly perceived Web 2.0 tools as both "very useful" and "very easy to use." Specifically,

80.6% of teachers rated Web 2.0 tools as "very useful" under the perceived usefulness (PU) category, reflecting a strong acknowledgment of the tools' potential to enhance teaching practices. Meanwhile, 70.9% of teachers rated the tools as "very easy to use" under the perceived ease of use (PEoU) category, suggesting that the majority of teachers find these tools user-friendly and adaptable to their teaching context.

The minority of teachers who rated Web 2.0 tools as "useful enough" or "easy enough" may indicate some barriers to adoption. These barriers could stem from varying levels of technological proficiency, access to resources, or familiarity with the tools. Notably, no teachers categorized Web 2.0 tools as "not useful" or "not easy to use," further underscoring the overall positive reception among educators.

This distribution aligns with the goals of Kurikulum Merdeka, which encourages the integration of innovative technologies to support active and meaningful learning. However, the smaller proportion of teachers expressing moderate levels of usefulness and ease of use highlights the need for ongoing professional development and technical support to ensure that all teachers feel equally empowered to utilize these tools effectively.

The distribution of students' perceptions similarly reflects a positive outlook on Web 2.0 tools, albeit with slightly more variation than teachers. Under the perceived usefulness (PU) category, 51.43% of students rated Web 2.0 tools as "very useful," while another 28.57% found them "useful." This demonstrates that a majority of students recognize the value of these tools in facilitating project-based learning. However, a smaller percentage of students (14.29%) categorized the tools as "useful enough," and 5.71% rated them as "not useful," indicating a divergence in their experiences or expectations.

For perceived ease of use (PEoU), 38.57% of students rated Web 2.0 tools as "very easy to use," and an equal percentage (38.57%) found them "easy." A smaller fraction (20%) categorized the tools as "easy enough," and only 2.86% rated them as "not easy." These findings suggest that while most students are comfortable using Web 2.0 tools, a small group may face challenges due to limited digital literacy, unfamiliarity with the tools, or technical barriers.

These findings strongly align with the objectives of Kurikulum Merdeka, which emphasizes the use of technology to foster independent and student-centered learning. The overall positive reception suggests that Web 2.0 tools have significant potential to support project-based learning, particularly in fostering collaboration, creativity, and critical thinking. However, the data also highlight the importance of addressing the needs of those who face challenges, ensuring that the integration of these tools benefits all stakeholders equitably.

These findings aligned with the Technology Acceptance Model (TAM), which posits that perceived usefulness and ease of use significantly influence technology adoption. Teachers' higher ratings compared to students may indicate their greater familiarity with Web 2.0 tools in instructional contexts or their ability to adapt these tools to suit their teaching goals. The high scores for perceived usefulness among teachers can be attributed to their professional development and the integration of technology within the curriculum, which aligns with the goals of Kurikulum Merdeka. The variability in students' perceptions highlights the need for targeted support to bridge the digital literacy gap, ensuring that all students can equally benefit from these technological tools. This suggests that while the tools are generally appreciated, there is room for improving accessibility and training to maximize their potential.

This study's findings align with prior research, such as Mujahidah et.al that found the students' acceptance of Artificial Intelligence is very good, whereas, the Students' Perceptions of AI Perceived Ease of Use (PEU) is mostly high, and using AI seems easy to operate, use, and access for the students and in the same time the Students' Perceived Usefulness (PU) of AI is helpful.⁵³ It is also consistent with Priyatmojo et al. which emphasized the positive role of Web 2.0 tools in fostering collaborative and interactive learning environments.⁵⁴

This aligns with the findings of Michael, who observed that teachers generally perceive Web 2.0 tools as beneficial for language teaching but require more support and training for effective integration. Similarly, Shahrokni reported that while teachers acknowledged the effectiveness of these tools, external factors like insufficient training and poor infrastructure were significant barriers to their adoption. Additionally, Ustun and Guler found that pre-service teachers were generally positive about using Web 2.0 tools and expressed a willingness to integrate them into their future classrooms, although they noted challenges like language barriers and technical issues. Similarly, Ergül Sönmez and Çakır found that these tools significantly enhance academic performance by promoting student engagement and active learning.

⁵³ Mujahidah, Salija Kisman., & Rahman, M.A. (2023). The Students' Perceptions of Artificial Intelligence-Based Instruction in Speaking Class .ELITE Journal.,5(3), 593-604.

⁵⁴ Priyatmojo, A., Rohani, R., & Anjaniputra, A. (2022, June). Web 2.0 and Project-Based Learning To Improve Students' 21st Century Skills. In Proceedings of the 10th UNNES Virtual International Conference on English Language Teaching, Literature, and Translation, ELTLT 2021, 14-15 August 2021, Semarang, Indonesia.

⁵⁵ Shahrokni, S. A., & Sadeqjoola, L. (2015). Iranian EFL Teachers' Perceptions, Familiarity and Use of Web 2.0 Tools in TEFL. Teaching English with Technology, 15(3), 31-46.

⁵⁶ Ustun, A. B., & Guler, T. (2022). Pre-service teachers' opinions on learning, designing, utilizing web 2.0 tools in education. Journal of Interdisciplinary Education: Theory and Practice, 4(2), 83-97.

⁵⁷ Sönmez, E. E., & Çakir, H. (2021). Effect of Web 2.0 technologies on academic performance: A meta-analysis study. International Journal of Technology in Education and Science, 5(1), 108-127.

responses parallels findings by Selevičienė and Burkšaitienė, who noted that students' positive attitudes towards Web 2.0 tools were tempered by challenges in technical proficiency.⁵⁸

This discrepancy could be attributed to the specific context of Kurikulum Merdeka, which actively promotes the integration of digital tools in teaching, providing more training and resources for teachers. By examining these perceptions within a unique educational framework, this research contributes new insights into the factors influencing technology adoption in Indonesian schools, thereby enriching the existing literature on educational technology. Furthermore, it highlights the importance of contextual factors, such as curriculum mandates and professional development opportunities, in shaping the successful integration of technology in educational settings.

Nevertheless, this study is not without its limitations. The focus on Kabupaten Pinrang may limit the generalizability of the findings to other regions with different socio-economic and technological contexts. Additionally, the reliance on self-reported data could introduce bias, as participants may overstate or understate their actual usage and perceptions of Web 2.0 tools.

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⁵⁸ Selevičienė, E., & Burkšaitienė, N. (2015). University students' attitudes towards the usage of Web 2.0 tools for learning ESP. A preliminary investigation. Socialinių mokslų studijos: mokslo darbai= Societal studies: research papers/Mykolo Romerio universitetas. Vilnius: Mykolo Romerio universitetas, 2015, Nr. 7 (2).

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

This study examined the perceptions of teachers and students regarding the use of Web 2.0 tools in project-based learning under the Kurikulum Merdeka framework in Kabupaten Pinrang. The findings underscore the critical role of these tools in enhancing educational experiences, with both teachers and students recognizing their usefulness and ease of use. Teachers reported higher scores for perceived usefulness and ease of use, likely due to their professional experience and familiarity with integrating technology into their instructional practices. Students, while also finding these tools beneficial, exhibited greater variability in their responses, suggesting differences in digital literacy and access to technology.

The study's results also support the Technology Acceptance Model (TAM), affirming that perceived usefulness and ease of use significantly influence the adoption of technology in educational settings. The alignment with prior research highlights the potential of Web 2.0 tools to foster collaborative and interactive learning environments. However, the findings also reveal the need for targeted support to address the digital divide and enhance students' digital literacy.

B. Suggestion

Providing continuous professional development programs for teachers is essential. These programs should not only focus on improving technical skills, such as navigating digital platforms, but also emphasize pedagogical strategies for maximizing the educational potential of Web 2.0 tools. Hands-on workshops, peer-learning sessions, and blended learning models can ensure that teachers are well-equipped to leverage these tools effectively in their instructional practices.

Improving students' digital literacy is another critical area of focus. Schools should implement targeted initiatives, such as workshops, digital safety courses, and access to digital resources, to ensure students can fully engage with Web 2.0 tools. These efforts are crucial in bridging gaps in digital proficiency and fostering equitable access to technology-enhanced learning experiences for all students.

Investment in technological infrastructure is equally important, particularly in rural and under-resourced areas. Reliable internet connectivity and access to digital devices, such as laptops or tablets, are foundational for the successful adoption of Web 2.0 tools. Public-private partnerships could be explored to address infrastructure challenges and ensure that all schools, regardless of location, have the resources needed for technology-driven education.

Tailored support for diverse learning needs is another key recommendation. Recognizing that students have varying levels of digital proficiency, schools should provide personalized learning plans and adaptive technologies. For instance, beginner-friendly tutorials can help students with limited exposure to technology, while more advanced tools and challenges can cater to those with higher levels of digital literacy. This approach ensures that all students can benefit from Web 2.0 tools regardless of their starting point.

Looking ahead, further investigation could explore the long-term impacts of Web 2.0 tool integration on student learning outcomes and engagement. Additionally, future studies could examine the influence of digital literacy on the effectiveness of these tools, particularly in rural and under-resourced areas. Expanding research to include a broader range of educational contexts and stakeholders will provide deeper insights into the challenges and opportunities of integrating digital tools into project-based learning. Such research will be

instrumental in shaping policies and practices that support equitable and effective technology use in education.



BIBLIOGRAPHY

- Akhyar, M., Ihsan, F., Suharno, S., Tamrin, A. G., & Purwanto, P. (2024). Development of problem and project-based learning syntax to improve vocational student learning outcomes. *Jurnal Pendidikan Teknologi dan Kejuruan*, 30(1), 01-19.
- Alhayat, A., Mukhidin, M., Utami, T., & Yustikarini, R. (2023). The Relevance of the Project-Based Learning (PjBL) Learning Model with "Kurikulum Merdeka Belajar". *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, 7(1), 105-116.
- Al-Hindawe, J. (1996). Considerations when constructing a semantic differential scale.
- Almeida, F. (2018). Strategies to perform a mixed methods study. European Journal of Education Studies.
- Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. *Frontiers in psychology*, 12, 713057.
- Arievitch, I. M. (2020). Reprint of: The vision of Developmental Teaching and Learning and Bloom's Taxonomy of educational objectives. Learning, culture and social interaction, 27, 100473.
- Aşıksoy, G. (2018). ELT Students' Attitudes and Awareness Towards the Use of Web 2.0 Technologies for Language Learning. Journal of Language and Linguistic Studies, 14(2), 240-251.
- Bloom, B. S. (1956). Taxonomy of. Educational Objectives.
- Boss, S., & Krauss, J. (2007). Real projects in a digital world. Principal Leadership, 8(4), 22-26.
- Bower, M. (2016). Deriving a typology of Web 2.0 learning technologies. *British Journal of Educational Technology*, 47(4), 763-777.
- Budiharti, R., & Aristiyaningsih, L. (2016, January). Syntax construct validity of Project Based Learning ofglobal warming material. In Proceeding of International Conference on Teacher Training and Education (Vol. 1, No. 1).
- C. V. Katemba., Teachers' perceptions in implementing technologies in language teaching and learning. Journal of English Language Pedagogy, Literature and Culture, 5, no. 2, pp. 123-136, (2020).
- Cahyadi, A., Hendryadi, Widyastuti, S., & Suryani. (2022). COVID-19, emergency remote teaching evaluation: the case of Indonesia. Education and Information Technologies, 27(2), 2165-2179.
- Carstens, Kaite J., Jamie M. Mallon, Mohamed Bataineh, and Adel Al-Bataineh. "Effects of Technology on Student Learning." Turkish Online Journal of Educational Technology-TOJET 20, no. 1 (2021): 105-113.
- Cocco, S. (2006). Student leadership development: the contribution of project-based learning. Unpublished Master's thesis. Royal Roads University, Victoria, BC.

- Conole, G., McAndrew, P., & Dimitriadis, Y. (2011). The role of CSCL pedagogical patterns as mediating artefacts for repurposing Open Educational Resources. In *Techniques for fostering collaboration in online learning communities: Theoretical and practical perspectives* (pp. 206-223). IGI Global.
- Creswell, J., Plano, C., Gutmann, M., & Hanson, W (2003). Advances in mixed methods research designs. In: Tashakkori A, Teddlie C (eds), *Handbook of mixed methods in social and behavioral research* (209-240). SAGE; Thousand Oaks, CA.
- Crook, C., Cummings, J., Fisher, T., Graber, R., Harrison, C., Lewin, C., ... & Sharples, M. (2008). Web 2.0 technologies for learning: The Current landscape: Opportunities, challenges and tensions.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Degirmenci, R. (2021). The Use of Quizizz in Language Learning and Teaching from the Teachers' and Students' Perspectives: A Literature Review. Language Education and Technology (LET Journal), 1(1), 1-11.
- Dohn, N. B. (2009). Web 2.0: Inherent tensions and evident challenges for education. *International journal of computer-supported collaborative learning*, 4, 343-363.
- E. H. Baz., Attitudes of Turkish EFL student teachers towards technology use. TOJET: The Turkish Online Journal of Educational Technology, 15, no. 2, pp. 1-10, (2016).
- Ellis, M. (2011). The social web (Web 2.0). In Managing and Growing a Cultural Heritage Web Presence: A Strategic Guide (pp. 117–148). chapter, Facet.
- Ergul Sonmez, E., & Cakir, H. (2021). Effect of Web 2.0 technologies on academic performance: A meta-analysis study. International Journal of Technology in Education and Science (IJTES), 5(1), 108-127. https://doi.org/10.46328/ijtes.161
- Fried-Booth, D. L. (1997). Project work. (8th Ed.) Oxford: Oxford University Press.
- Gaweł, H. (2022). Web 2.5 as a safe shift from Web 2.0 to Web 3.0: A definition of Web 2.5 in informatological approach.
- Ginusti, G. N. (2023). The Implementation of Digital Technology in Online Project-Based Learning during Pandemic: EFL Students' Perspectives. J-SHMIC: Journal of English for Academic, 10(1), 13-25.
- Grippa, F., Secundo, G., & Passiante, G. (2009). An integrated model to monitor and evaluate Web 2.0 project-based learning (pp. 50-59). Springer Berlin Heidelberg.
- Guillén, G., Sawin, T., & Avineri, N. (2020). Zooming out of the crisis: Language and human collaboration. Foreign Language Annals, 53(2), 320-328.
- Hendrickson, L. (2023, February 6). Web 1.0 to Web 2.0: The evolution of the World Wide Web. Identity. Retrieved January 15, 2025, from https://www.identity.com/web1_and-
 - $\frac{web2/\#:\sim:text=Web\%\,201.0\%\,20introduced\%\,20the\%\,20early, the\%\,20groundwor}{k\%\,20for\%\,20other\%\,20developments}.$

- Hornby, A.S. (2005). Oxford Advanced Learners' Dictionary of Current English. Oxford: Oxford University Press.
- Ismael, N. J., Putra, R. R., & Siregar, A. A. (2022). Project based learning-computational thinking (PBL-CT) product development in mobile programming courses. Journal of Positive School Psychology, 2478-2493.
- Jalinus, N., Nabawi, R. A., & Mardin, A. (2017, September). The seven steps of project based learning model to enhance productive competences of vocational students. In *International Conference on Technology and Vocational Teachers (ICTVT 2017)* (pp. 251-256). Atlantis Press.
- Johnson, L., Levine, A., Smith, R., & Stone, S. (2010). *The 2010 Horizon Report*. New Media Consortium. 6101 West Courtyard Drive Building One Suite 100, Austin, TX 78730.
- Kahveci, H. (2023). The Positive and Negative Effects of Teacher Attitudes and Behaviors on Student Progress. *Journal of Pedagogical Research*, 7(1), 290-306.
- Kitchenham, A.D. (2005). Adult learning principles, technology and elementary teachers and their students: A perfect blend? Education, Communication, & Information, 5(3), 285-302.
- Krajcik, J. S., & Blumenfeld, P. C. (2006). Project-based learning (pp. 317-34).
- Lestari, D., Asbari, M., & Yani, E. E. (2023). Kurikulum Merdeka: Hakikat kurikulum dalam pendidikan. Journal of Information Systems and Management (JISMA), 2(6), 85-88.
- Liu, J. (2009). A survey of EFL learners' attitudes toward Information and Communication Technologies. English Language Teaching, 2(4). Retrieved October 23, 2013, from http://ccsenet.org/journal/index.php/elt/article/download/4455/3797/
- M. A. Jarrah and A. A. Alzubi, Arab postgraduates' readiness towards and effectiveness of utilizing Web 2.0 in language learning. *International Journal of Instruction*, 14, no. 1, pp. 673-690, (2021).
- M. Amer., Language learners' usage of a mobile learning application for learning idioms and collocations, CALICO Journal, 31, no.3, pp. 285-302, (2014).
- Ma, Q., & Liu, L. (2004). The technology acceptance model: A meta-analysis of empirical findings. Journal of Organizational and End User Computing (JOEUC), 16(1), 59-72.
- McCain, T., Jukes I. Windows on the Future: Education in the Age of Technology. Corvin Press, 2001, p. 104.
- Michael, M. (2023). Language Teachers' Perspectives on Web 2.0 in Education. In E3S Web of Conferences (Vol. 388, p. 04047). EDP Sciences.
- Moakofhi, M. K., Phiri, T. V., Leteane, O., & Bangomwa, E. (2019). Using Technology Acceptance Model to Predict Lecturers' Acceptance of Moodle: Case of Botswana University of Agriculture and Natural Resources.
- Mofareh, Alqahtani. "The Use of Technology in English Language Teaching." Frontiers in Education Technology, vol. 2, no. 3, 2019, pp. 173-174. SCHOLINK INC.

- Mohammed, T. A., Assam, B. N., & Saidi, M. (2020). The use of Web 2.0 tools in the foreign language classroom. *Journal of Educational and Social Research*, 10(2), 177-190.
- Mujahidah, Salija Kisman., & Rahman, M.A. (2023). The Students' Perceptions of Artificial Intelligence-Based Instruction in Speaking Class .ELITE Journal.,5(3), 593-604.
- Muzayanah, U., Muawanah, S., Wibowo, A. M., & Shofwan, I. (2022). Emergency curriculum during COVID-19 pandemic.
- N. Cowie. And K. Sakui., Assessment and elearning: Current issues and future trends. jaltcalljournal, 11, no. 3, pp. 271-281, (2015).
- Nagy, T. (2021). Using technology for foreign language learning: The teacher's role. Central European Journal of Educational Research, 3(2), 23-28.
- Nugraha, T. S. (2022). Kurikulum merdeka untuk pemulihan krisis pembelajaran. *Inovasi Kurikulum*, 19(2), 251-262.
- Nurhayati, F. K., Tarjana, S. S., & Hersulastuti, H. (2018, July). Teachers' perceptions toward the implementation of 2013 Curriculum. In *English Language and Literature International Conference (ELLiC) Proceedings* (Vol. 2, pp. 76-87).
- O'Reilly, T. (2005, September 30). What is Web 2.0? O'Reilly Media. Retrieved January 12, 2025, from https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html?page=1.
- O'reilly, T. (2009). What is web 2.0. "O'Reilly Media, Inc.".
- Poonpon, K. (2011). Enhancing English skills through project-based learning. *The English Teacher*, 40(1).
- Priyatmojo, A., Rohani, R., & Anjaniputra, A. (2022, June). Web 2.0 and Project-Based Learning To Improve Students' 21st Century Skills. In Proceedings of the 10th UNNES Virtual International Conference on English Language Teaching, Literature, and Translation, ELTLT 2021, 14-15 August 2021, Semarang, Indonesia.
- Putri, N. L. P. N. S., Artini, L. P., & Nitiasih, P. K. (2017). Project-based learning activities and EFL students' productive skills in English. *Journal of Language Teaching and Research*, 8(6), 1147-1155.
- Redhana, I. W. (2019). Mengembangkan Keterampilan Abad Ke-21 Dalam Pembelajaran Kimia. Jurnal Inovasi Pendidikan Kimia, 13(1), 2239 2253.
- Robbins, J. (2005). *Between "Hello" and "See you later"*. Development of strategies for interpersonal communication in English by Japanese EFL students. Published Dissertation. Ann Arbor. Michigan University Press.
- Rundel, M. (2007). *Macmillan English Dictionary for Advanced Learners*, (2nd ed.). Oxford: Macmillan.
- Salamun, et al. 2023. Model-model Pembelajaran Inovatif. Penerbit Yayasan Kita Menulis

- Seddon, G. M. (1978). The properties of Bloom's taxonomy of educational objectives for the cognitive domain. Review of educational research, 48(2), 303-323.
- Selevičienė, E., & Burkšaitienė, N. (2015). University students' attitudes towards the usage of Web 2.0 tools for learning ESP. A preliminary investigation. Socialinių mokslų studijos: mokslo darbai= Societal studies: research papers/Mykolo Romerio universitetas. Vilnius: Mykolo Romerio universitetas, 2015, Nr. 7 (2).
- Shafaa, Y. W., & Daulay, S. H. (2024). Teachers' Perceptions On Project Based Learning Method In Teaching English Lesson. Didaktika: Jurnal Kependidikan, 13(2), 2389-2398.
- Shahrokni, S. A., & Sadeqjoola, L. (2015). Iranian EFL Teachers' Perceptions, Familiarity and Use of Web 2.0 Tools in TEFL. Teaching English with Technology, 15(3), 31-46.
- Slameto, *Belajar dan Faktor-faktor yang Mempengaruhinya*. (Jakarta: Rineka Cipta, 2010) p.103-105
- Solomon, G. (2003). Project-based learning: A primer. Technology & Learning, 23, 20-27. Srikrai, P. (2008). Project-based learning in an EFL classroom. Journal of Humanities and Social Sciences, Khon Kean University, 25, 85 111.
- Sönmez, E. E., & Çakir, H. (2021). Effect of Web 2.0 technologies on academic performance: A meta-analysis study. International Journal of Technology in Education and Science, 5(1), 108-127.
- Stoller, L. S. (1997). Project work: A means to promote language content. Forum, 35(4), 2-18. Retrieved September 25, 2011.
- Sügümlü, Ü., & Aslan, S. (2022). The Use of Web 2.0 Tools in Mother-Tongue Instruction: Teachers' Experiences. *International Journal of Education and Literacy Studies*, 10(1), 124-137.
- Sutirman. 2013. Media & Model-model Pembelajaran Inovatif. Yogyakarta: Graha Ilmu.
- Ustun, A. B., & Guler, T. (2022). Pre-service teachers' opinions on learning, designing, utilizing web 2.0 tools in education. Journal of Interdisciplinary Education: Theory and Practice, 4(2), 83-97.
- Zhao, Y. (2015). Research in technology and second language learning. IAP Publishing



Appendix	1 Respondent	(Teachers)
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PEoU 10	7	9	9	7	9	7	2	7	7	9	7	2	7	7	7	4	2	9	9	7	4	9	2	9	7	9	2	9	7	9	9
PEoU 9	7	9	9	7	7	7	9	7	9	9	7	2	7	7	7	4	2	9	9	7	2	2	4	9	9	2	2	9	9	9	9
PEoU 8	7	9	9	4	7	7	7	7	9	9	9	2	7	7	7	4	2	2	9	7	2	4	2	2	2	2	4	9	2	2	9
PEoU 7	7	9	9	7	7	7	9	7	2	9	9	2	9	7	7	4	4	9	9	7	2	2	4	9	7	2	4	9	7	7	9
PEoU 6	7	9	7	9	7	9	2	7	9	7	9	2	7	7	7	4	5	9	9	9	2	2	2	9	9	2	4	9	7	9	9
PEoU 5	7	9	7	7	7	9	4	7	7	7	9	9	7	7	7	4	2	9	9	9	က	2	9	9	7	2	2	9	7	7	9
PEoU 4	9	9	9	2	7	7	2	7	9	5	9	2	9	9	7	4	4	9	2	7	က	2	2	9	2	2	4	9	9	7	9
PEoU 3	9	9	9	9	9	9	4	7	9	7	7	2	9	7	7	4	2	9	9	9	4	9	4	9	7	2	4	9	9	7	9
PEoU 2	7	9	7	2	7	9	4	7	7	2	9	2	9	7	7	4	2	9	9	7	2	9	2	9	7	9	4	9	9	7	9
PEoU	7	9	9	2	7	7	9	7	9	9	9	2	9	7	9	2	4	9	9	9	က	2	2	7	9	9	2	9	9	7	ည
PU 10	7	9	9	9	7	7	4	9	7	9	7	7	9	7	7	4	2	9	9	7	က	9	4	9	7	9	9	9	9	9	വ
PU 9	7	9	9	7	7	2	4	7	9	7	7	7	7	7	7	4	2	9	9	7	က	9	4	2	7	2	2	9	7	7	ω
PU 8	7	9	7	7	7	7	2	7	9	7	7	7	9	7	7	4	2	9	9	7	4	9	2	9	7	2	4	9	7	7	7
PU 7	9	7	7	7	7	9	9	7	7	9	7	7	9	7	7	4	2	9	7	7	4	9	2	9	7	2	2	9	7	7	7
PU 6	9	9	7	7	9	2	9	9	9	9	7	7	9	7	7	4	2	9	7	9	က	9	2	9	7	9	4	9	7	7	7
PU 5	9	9	7	7	7	7	7	7	7	9	7	7	7	7	7	4	9	7	7	9	9	9	4	7	7	9	9	9	7	7	7
PU 4	9	9	7	7	7	9	2	9	9	2	7	7	7	7	7	4	9	9	7	9	7	2	4	7	7	7	2	9	7	7	9
PU 3	7	9	7	7	7	9	2	7	9	9	7	7	2	7	7	4	9	7	7	7	4	7	2	9	7	9	2	9	7	7	7
PU 2	7	9	7	7	7	9	2	7	7	2	9	7	9	7	7	4	2	2	9	9	က	9	2	9	7	2	2	9	7	7	7
P. 1	7	9	7	7	7	9	9	7	7	9	7	7	7	7	7	4	2	7	7	7	9	9	2	7	7	9	2	9	7	7	7
Jidikan akhir	S2	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S2	S1	S2	S1	S1	S1	S1	S1	S2	S1	S1	S1	S1
Pendidi																															
Pengalaman Mengajar	tahun	tahun	tahun	hun	tahun	tahun	tahun	hun	hun	hun	hun	hun	hun	hun	hun	hun	hun	hun	11-15 tahun	16-20 tahun	tahun	hun	11-15 tahun								
	6- 10 tahun	6- 10 tahun	6- 10 tahun	< 6 tahun	6- 10 tahun	6- 10 tahun	16-20 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	< 6 tahun	11-15	16-20	6- 10 tahun	< 6 tahun	11-15								
Jenis Kelamin	nan	nan	nan	nan	nan		nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan		nan		nan		nan		nan						
Jenis	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan	Laki-laki	Perempuan	Laki-laki	Perempuan	Laki-laki	Perempuan						
Umur	31-40 tahun	31-40 tahun	31-40 tahun	<30 tahun	31-40 tahun	41-50 tahun	<30 tahun	<30 tahun	<30 tahun	31-40 tahun	<30 tahun	31-40 tahun	41-50 tahun	31-40 tahun	<30 tahun	31-40 tahun															
Responden	-	2	9	4	2	9	7	8	6	10	1	12	13	14 3	15 4	16 ^	17	18	19 3		21 <										

Appendix 2 Respondent (Students)

Responden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10
1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2	3	5	4	2	4	6	3	5	7	6	5	4	2	2	6	3	6	2	4	2
3	5	4	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4
4	5	3	4	2	1	6	3	5	2	5	2	3	6	1	4	5	2	5	2	4
5	3	3	1	5	2	5	3	7	1	3	3	1	7	3	5	2	5	4	2	4
6	7	7	7	6	7	6	7	7	5	7	7	7	7	6	6	6	6	6	6	6
7	7	7	7	7	6	7	6	7	6	7	6	6	5	5	6	7	7	7	6	6
8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10	7	5	7	7	7	7	6	7	7	7	5	6	6	6	7	7	6	5	7	7
11	3	6	7	5	7	4	5	6	4	4	6	4	4	3	5	5	6	4	4	5
12	7	6	6	6	6	6	6	6	6	6	4	7	4	4	6	7	6	6	6	6
13	4	7	7	7	7	3	6	7	2	6	5	5	5	2	3	4	5	5	4	5
14	5	3	6	2	5	1	5	7	4	3	1	5	2	4	3	6	5	7	2	5
15	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
16	2	4	5	3	7	5	4	2	5	2	5	6	7	5	2	5	4	3	7	2
17	5	7	7	7	7	5	5	7	6	7	5	7	7	1	7	3	7	4	4	7
18	3	7	2	5	5	5	3	5	3	5	3	4	5	5	6	4	6	6	5	4
19	6	6	5	6	6	6	6	6	5	6	6	5	6	2	6	6	6	4	6	6
20	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	6	7
21	7	6	7	7	7	7	7	7	7	7	5	6	7	6	6	7	7	6	7	7
22	7	7	7	7	7	5	5	5	6	3	7	7	7	7	7	7	7	7	7	7
23 24	1 7	1 5	1 6	1 7	1 7	7	1 7	1 7	1 7	1 7	1 5	1 6	2 5	4 5	2	1 5	3 6	3 5	2 5	6
25	4	5	6	4	7	2	7	3	4	5	2	3	4	5	4	7	2	2	3	4
26	6	5	7	7	6	5	6	7	6	7	5	5	6	7	7	6	7	5	7	4
27	4	4	4	5	5	5	6	6	5	4	4	4	4	5	5	2	3	4	5	6
28 29	4 6	3 6	4 7	4 6	4	2	5 6	4	5 6	6	1	2 6	3 5	4 5	4 6	4 6	6	3 5	4 5	3 6
30	5	4	4	4	6 4	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4
31	6	7	6	4	7	7	1	, i	1	1	1	1	4	7	7	7	5	6	7	7
32	3	2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
33 34	1 4	1 3	1	1	1	1	1	1	1	1	7 5	7	1 5	2 7	2	3	2	2	1	1
35	1	7	5	6	5 7	4	4 6	7	6	7	6	4 5	6	6	7	7	6	6	6	7
36	6	7	7	7	6	6	6	7	7	7	6	6	6	6	7	7	6	6	7	7
37	2	5	7	6	6	4	6	5	4	7	2	2	6	7	3	5	7	3	6	4
38	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	4	4
39 40	5 7	6 7	5 5	7 6	5 6	6	6 7	5 7	6	5 5	5	5	4 5	4 6	5	6 4	4	4	5 4	6 4
41	6	5	4	5	4	5	3	4	4	5	4	5	4	4	5	4	5	4	5	4
42	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
43	5	7	7	7	7	7	6	5	7	7	7	7	7	6	7	7	7	7	7	7
44 45	7 5	6	7 7	7 4	6 5	5 4	6 5	5 4	7 4	7	6	6 4	4	6 4	7 6	7 5	7	5 5	6 5	5
46	6	5	2	6	4	5	4	5	6	6	5	5	2	2	6	5	2	4	4	2
47	5	6	5	5	5	7	3	3	3	6	5	5	3	3	4	4	4	5	4	6
48	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
49 50	5 6	5 5	4 6	3 6	6 5	4	5 7	7	7	5	4 7	5 6	6	3	5	5 5	7	4 5	7 5	4 5
51	4	4	4	4	4	4	4	3	3	5	3	4	2	4	3	5	3	4	3	4
52	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
53	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
54 55	7 7	7 7	7 7	7 7	6 7	7 7	7 7	7 7	7 7	7 7	7 5	7 6	7 5	7 6	7 6	6	7 5	7 6	7 6	7
56	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4 7	7	7	7	7
57	4	4	5	5	4	4	5	5	4	5	5	4	5	4	4	5	4	5	4	3
58	4	6	5	7	7	4	6	4	6	6	6	5	5	6	6	6	6	5	6	4
59 60	6	5 6	6	5 6	7 6	6	6	6	5 6	6	7 5	6	6 5	6	7 5	6	6	6	6	6
61	4	4	4	4	4	6 4	6 4	4	4	4	5 4	6 4	4	4	4	6 5	4	4	4	4
62	7	4	5	7	6	7	6	6	6	7	6	6	6	7	7	7	7	6	6	6
63	7	6	4	6	6	6	5	6	5	5	6	5	4	5	6	5	5	5	5	5
64	5	7	5	6	5	7	3	6	4	5	5	6	5	4	5	7	6	6	7	5
65 66	7 7	7 7	7 6	7 4	7 5	7 7	7 5	7 4	7 7	7 5	5 7	6	6	7	7 5	7 6	7	7 6	7	7 6
67	6	6	5	6	6	6	6	6	5	6	5	5	6	5	6	5	6	5	5	5
68	1	2	4	4	5	5	6	4	5	4	1	3	2	4	3	5	3	5	6	5
69	1	1	1	1	1	1	1	1	3	2	3	1	3	2	2	3	2	3	3	3
70	4	5	4	5	5	6	5	6	5	6	6	6	6	5	6	5	5	6	6	5 .

Appendix 3 Validity Test Results (teachers)

Responden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	Total
1	7	7	7	7	7	7	7	7	7	6	69
2	7	7	7	7	7	6	7	7	7	7	69
3	6	6	6	6	7	5	6	7	5	7	61
4	7	7	7	7	7	7	7	7	7	7	70
5	5	5	6	6	6	5	5	5	5	5	53
6	7	5	7	6	7	6	6	6	6	6	62
7	7	6	7	7	7	7	7	6	6	6	66
8	7	6	7	6	6	6	7	7	7	7	66
9	6	3	4	2	6	3	4	4	3	3	38
10	6	6	7	5	6	6	6	6	6	6	60
11	5	5	5	4	4	5	5	5	4	4	46
12	6	5	6	7	6	6	5	5	5	6	57
13	5	5	5	5	6	4	5	4	5	6	50
14	6	6	6	6	6	6	6	6	6	6	60
15	7	7	7	7	7	7	7	7	7	6	69
Correlation	0.784	0.918	0.942	0.886	0.696	0.901	0.957	0.903	0.955	0.847	
rtabel	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	
Keputusan	valid	valid	valid	valid	valid	valid	valid	valid	valid	valid	
	Value > rtab	ole = Valid									
	Value < rtab	ole = Invalid									

Responden	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10	Total
1	5	5	6	5	7	6	7	4	7	7	59
2	6	5	7	5	7	7	6	6	6	6	61
3	6	6	7	6	6	6	6	6	7	7	63
4	5	5	5	5	6	5	5	5	5	5	51
5	6	6	6	6	7	7	6	7	7	7	65
6	7	7	7	6	7	7	7	7	7	7	69
7	6	7	7	7	7	7	7	7	7	7	69
8	6	6	6	6	6	6	6	5	6	6	59
9	6	6	6	5	6	6	6	6	6	6	59
10	6	7	6	7	6	6	7	7	7	7	66
11	3	2	4	3	3	5	5	5	5	4	39
12	5	6	6	5	5	5	5	4	5	6	52
13	5	5	4	5	6	5	4	5	4	5	48
14	7	7	7	7	7	6	7	5	6	6	65
15	5	6	6	6	6	6	6	6	6	6	59
Correlation	0.882	0.868	0.873	0.864	0.817	0.838	0.832	0.652	0.838	0.899	
rtabel	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	
Keputusan	valid	valid	valid	valid	valid	valid	valid	valid	valid	valid	
	Value > rtal										

Appendix 4 Validity Test Results (Students)

Responden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	Total
1	7	5	7	7	7	7	6	7	7	7	67
2	5	3	6	2	5	1	5	7	4	3	41
3	7	7	7	7	7	7	7	7	7	7	70
4	2	4	5	3	7	5	4	2	5	2	39
5	6	6	5	6	6	6	6	6	5	6	58
6	7	7	5	6	6	6	7	7	4	5	60
7	6	5	4	5	4	5	3	4	4	5	45
8	5	7	7	7	7	7	6	5	7	7	65
9	7	6	7	7	6	5	6	5	7	7	63
10	5	6	7	4	5	4	5	4	4	4	48
11	6	5	2	6	4	5	4	5	6	6	49
12	5	6	5	5	5	7	3	3	3	6	48
13	4	4	5	5	4	4	5	5	4	5	45
14	4	6	5	7	7	4	6	4	6	6	55
15	6	5	6	5	7	6	6	6	5	6	58
Correlation	0.696	0.720	0.519	0.842	0.610	0.662	0.772	0.576	0.725	0.834	
rtable	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	
Keputusan	valid	valid	valid	valid	valid	valid	valid	valid	valid	valid	
	Value >	rtable =	Valid								
	Value <	rtable =	Invalid								

								_			
Responden	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10	Total
1	4	7	4	4	6	7	6	6	6	6	56
2	5	5	5	2	3	4	5	5	4	5	43
3	2	3	4	5	4	7	2	2	3	4	36
4	5	5	6	7	7	6	7	5	7	4	59
5	4	4	4	5	5	2	3	4	5	6	42
6	5	4	5	7	2	3	4	3	1	4	38
7	6	5	6	6	7	7	6	6	6	7	62
8	6	6	6	6	7	7	6	6	7	7	64
9	2	2	6	7	3	5	7	3	6	4	45
10	3	3	3	3	3	3	3	3	4	4	32
11	4	5	4	4	5	6	4	4	5	6	47
12	7	7	7	6	7	7	7	7	7	7	69
13	6	6	4	6	7	7	7	5	6	5	59
14	5	5	3	3	4	4	4	5	4	6	43
15	7	7	7	7	7	7	7	7	7	7	70
Correlation	0.786	0.802	0.731	0.498	0.897	0.731	0.826	0.892	0.832	0.700	
rtable	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	
Keputusan	Valid	Valid	Valid	invalid	Valid	Valid	Valid	Valid	Valid	Valid	
	V-live -	-1-1- \(\)									
		able = Val									
	Value < rt	able = Inva	alid								

Appendix 5 Reliability Test (Teachers)

Responden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	Total
1	7	7	7	7	7	7	7	7	7	6	69
2	7	7	7	7	7	6	7	7	7	7	69
3	6	6	6	6	7	5	6	7	5	7	61
4	7	7	7	7	7	7	7	7	7	7	70
5	5	5	6	6	6	5	5	5	5	5	53
6	7	5	7	6	7	6	6	6	6	6	62
7	7	6	7	7	7	7	7	6	6	6	66
8	7	6	7	6	6	6	7	7	7	7	66
9	6	3	4	2	6	3	4	4	3	3	38
10	6	6	7	5	6	6	6	6	6	6	60
11	5	5	5	4	4	5	5	5	4	4	46
12	6	5	6	7	6	6	5	5	5	6	57
13	5	5	5	5	6	4	5	4	5	6	50
14	6	6	6	6	6	6	6	6	6	6	60
15	7	7	7	7	7	7	7	7	7	6	69
Varian	0.638	1.210	0.924	1.981	0.667	1.352	1.000	1.210	1.495	1.267	
Jumlah Varian					11.7	743					89.781
Varian Total					89.7	781					
Keputusan	0.966			77		R	eliable				
	Cronbach's	Alpha > 0.60	= Reliabel								
		Alpha < 0.60									

Responden	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10	Total
1	5	5	6	5	7	6	7	4	7	7	59
2	6	5	7	5	7	7	6	6	6	6	61
3	6	6	7	6	6	6	6	6	7	7	63
4	5	5	5	5	6	5	5	5	5	5	51
5	6	6	6	6	7	7	6	7	7	7	65
6	7	7	7	6	7	7	7	7	7	7	69
7	6	7	7	7	7	7	7	7	7	7	69
8	6	6	6	6	6	6	6	5	6	6	59
9	6	6	6	5	6	6	6	6	6	6	59
10	6	7	6	7	6	6	7	7	7	7	66
11	3	2	4	3	3	5	5	5	5	4	39
12	5	6	6	5	5	5	5	4	5	6	52
13	5	5	4	5	6	5	4	5	4	5	48
14	7	7	7	7	7	6	7	5	6	6	65
15	5	6	6	6	6	6	6	6	6	6	59
Varian	0.971	1.638	1.000	1.114	1.124	0.571	0.857	1.095	0.924	0.838	
Jumlah Varian					10.	133					69.638
Varian Total					69.	638					
Keputusan	0.949					F	Reliable				
	Cronbach's	Alpha > 0.6	0 = Reliabel								
			0 = Unreliabl	le.							
	STOTIDAGITS	pria < 0.0	O III OII ADI								

Appendix 6 Reliability Test Result (Students)

Responden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	Total
1	7	5	7	7	7	7	6	7	7	7	67
2	5	3	6	2	5	1	5	7	4	3	41
3	7	7	7	7	7	7	7	7	7	7	70
4	2	4	5	3	7	5	4	2	5	2	39
5	6	6	5	6	6	6	6	6	5	6	58
6	7	7	5	6	6	6	7	7	4	5	60
7	6	5	4	5	4	5	3	4	4	5	45
8	5	7	7	7	7	7	6	5	7	7	65
9	7	6	7	7	6	5	6	5	7	7	63
10	5	6	7	4	5	4	5	4	4	4	48
11	6	5	2	6	4	5	4	5	6	6	49
12	5	6	5	5	5	7	3	3	3	6	48
13	4	4	5	5	4	4	5	5	4	5	45
14	4	6	5	7	7	4	6	4	6	6	55
15	6	5	6	5	7	6	6	6	5	6	58
Varian	1.981	1.410	1.981	2.410	1.457	2.638	1.638	2.410	1.886	2.267	
Jumlah Varian					20.	076					96.352
Varian Total					96.	352					
Keputusan	0.8796			V			Reliable				
	Cronbacl	n's Alpha	a > 0.60	= Relia	bel						
	Cronbacl	n's Alpha	a < 0.60	= Unre	liable						

				EARLEAR	1						
Responden	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10	Total
1	4	7	4	4	6	7	6	6	6	6	56
2	5	5	5	2	3	4	5	5	4	5	43
3	2	3	4	5	4	7	2	2	3	4	36
4	5	5	6	7	7	6	7	5	7	4	59
5	4	4	4	5	5	2	3	4	5	6	42
6	5	4	5	7	2	3	4	3	1	4	38
7	6	5	6	6	7	7	6	6	6	7	62
8	6	6	6	6	7	7	6	6	7	7	64
9	2	2	6	7	3	5	7	3	6	4	45
10	3	3	3	3	3	3	3	3	4	4	32
11	4	5	4	4	5	6	4	4	5	6	47
12	7	7	7	6	7	7	7	7	7	7	69
13	6	6	4	6	7	7	7	5	6	5	59
14	5	5	3	3	4	4	4	5	4	6	43
15	7	7	7	7	7	7	7	7	7	7	70
Varian	2.495	2.352	1.781	2.743	3.410	3.267	3.029	2.352	3.029	1.552	
umlah Varian					26.	010					153.143
Varian Total					153	.143					
Keputusan	0.9224					F	Reliable				

Appendix 7 Result of Data Analysis (Teachers)

											,,,,											•	,			`			iC.		_				
Statement2	very easy	easy	very easy	very easy	very easy	very easy	easy	very easy	very easy	very easy	easy	easy	very easy	very easy	very easy	easy enough	easy	very easy	very easy	easy	easy	very easy	very easy	very easy											
Mean PEoU	6.8	9	6.3	5.9	6.8	9.9	5.2	7	6.2	6.1	6.3	5.1	6.5	6.9	6.9	4.1	4.7	5.9	5.9	9.9	თ. ი	2. 4	9	6.3	5.3	4.4	9	 	o 0.						
Statement	very useful	useful	very useful	useful enough	nseful	very useful	very useful	very useful	useful enough	very userui	very useful	very useful	very useful	nseful	very useful	very useful	very useful																		
Mean PU	09.9	6.10	6.80	06.9	06.9	6.10	5.30	6.70	6.50	00.9	06.9	7.00	6.30	7.00	7.00	4.00	5.30	6.20	09.9	09.9	3.80	9.00	6.20	7.00	5.70	2.00	00.9	6.90	6.50						
PEoU 10	7	9	9	7	9	7	2	7	7	9	7	2	7	7	7	4	2	9	9	7	4 0	ם ער	9	7	9	2	9	_ 0	و ه						
PEoU 9	7	9	9	7	7	7	9	7	9	9	7	r2	7	7	7	4	2	9	9	7	ın ı	0 4	9	9	2	2	9	9 0	0 0						
PEoU 8 P	7	9	9	4	7	7	7	7	9	9	9	co	7	7	7	4	2	2	9	7	ro 4	† rc	o LO	2	ω	4	9	o r	၈ ဖ						
PEoU 7	7	9	9	7	7	7	9	7	2	9	9	2	9	7	7	4	4	9	9	7	ın ı	n 4	9	7	2	4	9	٠ ١	- 9						
PEoU 6 P	7	9	7	9	7	9	c)	7	9	7	9	c)	7	7	7	4	c)	9	9	9	ıo ı	ט ני	9	9	c)	4	9	_ 0	o 0						
PEoU 5	7	9	7	7	7	9	4	7	7	7	9	9	7	7	7	4	2	9	9	9	m L	n (9	7	2	2	9	- 1	- 9						
PEoU 4 P	9	9	9	2	7	7	2	7	9	ις	9	2	9	9	7	4	4	9	2	7	m u	ם ע	9	2	2	4	9	1 0:	, 9						
PEoU 3	9	9	9	9	9	9	4	7	9	7	7	D.	9	7	7	4	c)	9	9	9	4 0	0 4	9	7	ß	4	9	1 0	- 9						
PEoU 2	7	9	7	S	7	9	4	7	7	ß	9	c)	9	7	7	4	S	9	9	7	0 0	טע	9	7	9	4	9	1 0	- 9						
PEoU 1	7	9	9	2	7	7	9	7	9	9	9	2	9	7	9	2	4	9	9	9	m L	ם ער	^	9	9	2	9	1 0	- 2						
PU 10	7	9	9	9	7	7	4	9	7	9	7	7	9	7	7	4	c)	9	9	7	m u	0 4	9	7	9	9	9	ه م	വ						
FU 9	7	9	9	7	7	co	4	7	9	7	7	7	7	7	7	4	ß	9	9	7	ကဖ	0 4	r LO	7	ß	c)	9	- 1	2 م	%	0.00				
PU 8	7	9	7	7	7	7	S.	7	9	7	7	7	9	7	7	4	2	9	9	7	4 0	טע	9	7	D.	4	9	- 1		ш	0	-	80	22	
PU 7	9	7	7	7	7	9	9	7	7	9	7	7	9	7	7	4	2	9	7	7	4 0	טע	9	7	2	2	9	- 1				r G		K	
PU 6	9	9	7	7	9	2	9	9	9	9	7	7	9	7	7	4	2	9	7	9	ကဖ	טעס	9	7	9	4	9	- 1		Category	Not Easy	Easy Enoug	Easy	Very Easy	
PU 5	9	9	7	7	7	7	7	7	7	9	7	7	7	7	7	4	9	7	7	9	9 4	0 4	- /	7	9	9	9	- 1							
PU 4	9	9	7	7	7	9	2	9	9	Ω	7	7	7	7	7	4	9	9	7	9	2 4	0 4	7	7	7	2	9	- 1	- 9	%	00.00				
PU 3	7	9	7	7	7	9	2	7	9	9	7	7	2	7	7	4	9	7	7	7	4 1	~ K	9	7	9	2	9	- 1		ш	0	2	4	25	
PU 2	7	9	7	7	7	9	ß	7	7	ß	9	7	9	7	7	4	c)	2	9	9	ကဖ	ט ע	9	7	2	2	9	- 1		λ	,5	hough		Inje	
PU 1	7	9	7	7	7	9	9	7	7	9	7	7	7	7	7	4	S	7	7	7	9	טע	^	7	9	ω	9	- 1		Category	Not Useful	Useful Enough	Useful	Very Useful	
Responden	-	7	က	4	2	9	7	80	6	10	1	12	13	14	15	16	17	18	19	20	21	3 57	24	25	26	27	28	29	3 20						

			4,	90	9	7	4						48 r	92	0 9	7.7															
			6.17	1.006			1914					L	5.884	0.995		1824															
		J.	Grand Mean	Grand SD	Median	Mode	Grand Total				i	PEOU	Grand Mean	Grand SD	Mode	Grand Total															
Mean	6.70	9.02	6.55	6.40	6.85	6.35	5.25	6.85	6.35	6.05	6.60	0.0	0.40	0 0	4.05	5.00	6.05	6.25	9.60	3.85	5.60	0.4	6.65	5.50	0.49	0.09	6.70			,	
Total	134	255	252	259	265	264	232	242	264	248	253	200	249	707	220	181	221	246	257	509	189	216	255	243	204	252	266	2			
PEoU 10	7	9	9	7	9	7	ı o	,	_ 0	9 1	7	1 0			- 4	2	9	9	7	4	9 1	n (۸ د	9	ın u	٥ ٨	9 4	189	6.097	0.908	
PEoU 9	7	9	9	7	7	7	9 1	7	9 0	9 1	_	1 0		, ,	- 4	2	9	9	7	2	ۍ د	1 (0	9	2	s o	0 9	9 9	186	0000	0.894	
PEoU 8 P	7	9	9	4	7	7	7	7	9 0	9 0	19 14	1 0			- 4	22	2	9	7	2	4 1	o u	o LO	2	4 0	0 10	ro a	24			
L	_	0	(0	7			(0.1																				7 9				
J6 PEoU		_																													
5 PEoU6	7	9	7	9	7	9	LO I	7	1 02	7	KO L	1 0															9 4				
PEoU 5	7	9	7	7	7	9	4	- 1	- 1	- 0	10 U	1 0	- 1		- 4	c)	9	9	9	က	വ	ρ w	۸ د	2	ın u	۸ ۵	7	188	6.065	1.063	
PEoU 4	9	9	9	2	7	7	ı o	,	ıo u	ഗ	KO L	0 (. 0	0 1	- 4	4	9	2	7	က	ı, ı	ဂ ဖ	O LO	2	4 0	0 0	r 4	174	5.613	1.022	
PEoU 3	9	9	9	9	9	9	4	٠ ،	ı 0:	- 1		n c	۸ ۵	- 1	- 4	ιΩ	9	9	9	4	9 4	4 (C	-	S	4 0	ο φ	L 3	180	5.806	0.980	
PEoU 2	7	9	7	2	7	9	4	- 1	٠ ،	ın o	10 11	n c	۸ ۵		- 4	2	9	9	7	2	9 1	n (۸ د	9	4 0	9	L 9	181	5.839	1.186	
PEoU 1	7	9	9	2	7	7	9 1	_	9 0	9 (KO L	n (9 1		വ	4	9	9	9	က	2	0 1	- 9	9	φ Q	9	۷ ح	181	5.839	0.934	
PU 10 P	7	9	9	9	7	7																					9 4				
8 PU9	7	9	9	7	7	u)	4		1 0		, ,	- 1	- 1		- 4												7	Г			
PU 8	7	9	7	7	7	7	0	_	1 0		7	- 0	0 1	, ,	- 4													ľ		1.014	
PU 7	9	7	7	7	7	9	9	- 1	- 0	9 1		- (9 1	- 1	- 4	10	9	7	7	4	φı	ဂ ဖ	^	2	ın q	۷ م		194	6.258	0.930	
PU 6	9	9	7	7	9	2	9	9 0	· O	9 1	- 1	- 0	0 1		- 4	2	9	7	9	က	9 1	n (o ~	9	4 0	٥ ٨	٠,	187	6.032	1.016	
PU 5	9	9	7	7	7	7	7	- 1		9 1		- 1			- 4	9	7	7	9	9	9 4	4 1-		9	9 4	٥ ٢	۲,	201	6.484	0.811	
PU4	9	9	7	7	7	9	ı,	9	<u>ب</u> م	ı n	,	- 1	, ,		- 4	9	9	7	9	2	ω·	4 1		7	ın u	۷ م	~ 9	188	6.065	1.181	
PU 3																															
PU 2			7																								٠ ٠				
PU1 F	7	9	7																								۷ /				
Responden	-	2	က	4	2	9	7	20 C	D 5	10	- ;	2 5	5 5	4 1	16	17	18	19	20	21	5 5	24 6	25	26	27	29	30	Total	Mean	SD	

Appendix 8 Result of Data Analysis (Students)

sponden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10	Mean PU	Statement	Mean PEoU	Statement
1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	very useful	7	very easy
2	3	5	4	2	4	6	3	5	7	6	5	4	2	2	6	3	6	2	4	2	4.5	useful	3.6	easy enoug
3	5	4	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4.8	useful	4	easy enoug
4	5	3	4	2	1	6	3	5	2	5	2	3	6	1	4	5	2	5	2	4	3.6	useful enough	3.4	easy enou
5	3	3	4	5	2	5	3	7	1	3	3	1	7	3	5	2	5	4	2	4	3.3	useful enough	3.6	easy enou
			-							7		-												
6	7	7	/	6	7	6	7	7	5		7	/	7	6	6	6	6	6	6	6	6.6	very useful	6.3	very eas
7	7	7	7	7	6	7	6	7	6	7	6	6	5	5	6	7	7	7	6	6	6.7	very useful	6.1	very eas
8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	very useful	7	very eas
9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	useful enough	4	easy enou
10	7	5	7	7	7	7	6	7	7	7	5	6	6	6	7	7	6	5	7	7	6.7	very useful	6.2	very eas
11	3	6	7	5	7	4	5	6	4	4	6	4	4	3	5	5	6	4	4	5	5.1	useful	4.6	easy
	-																							
12	/	6	6	6	6	6	6	6	6	6	4	7	4	4	6	7	6	6	6	6	6.1	very useful	5.6	very eas
13	4	7	7	7	7	3	6	7	2	6	5	5	5	2	3	4	5	5	4	5	5.6	very useful	4.3	easy
14	5	3	6	2	5	1	5	7	4	3	1	5	2	4	3	6	5	7	2	5	4.1	useful	4	easy enou
15	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	very useful	7	very eas
16	2	4	5	3	7	5	4	2	5	2	5	6	7	5	2	5	4	3	7	2	3.9	useful enough	4.6	easy
17	5	7	7	7	7	5	5	7	6	7	5	7	7	1	7	3	7	4	4	7			5.2	
	-					-	-														6.3	very useful		easy
18	3	7	2	5	5	5	3	5	3	5	3	4	5	5	6	4	6	6	5	4	4.3	useful	4.8	easy
19	6	6	5	6	6	6	6	6	5	6	6	5	6	2	6	6	6	4	6	6	5.8	very useful	5.3	easy
20	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	6	7	5	useful	5.4	easy
21	7	6	7	7	7	7	7	7	7	7	5	6	7	6	6	7	7	6	7	7	6.9	very useful	6.4	very eas
22	7	7	7	7	7	5	5	5	6	3	7	7	7	7	7	7	7	7	7	7	5.9	very useful	7	very eas
23	1	1	1	1	1	1	1	1	1	1	1	1	2	4	2	1	3	3	2	2	1	not useful	2.1	not eas
24	7	5	6	7	7	7	7	7	7	7	5	6	5	5	5	5	6	5	5	6	6.7	very useful	5.3	easy
25	4	5	6	4	7	2	7	3	4	5	2	3	4	5	4	7	2	2	3	4	4.7	useful	3.6	easy enou
26	6	5	7	7	6	5	6	7	6	7	5	5	6	7	7	6	7	5	7	4	6.2	very useful	5.9	very eas
27	4	4	4	5	5	5	6	6	5	4	4	4	4	5	5	2	3	4	5	6	4.8	useful	4.2	easy
28	4	3	4	4	4	2	5	4	5	2	1	2	3	4	4	4	2	3	4	3	3.7	useful enough	3	easy enou
29	6	6	7	6	6	7	6	6	6	6	6	6	5	5	6	6	6	5	5	6	6.2	very useful	5.6	very eas
30	5	4	4	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4	4.1	useful	4.2	easy
31	6	7	6	4	7	7	1	1	1	1	1	1	4	7	7	7	5	6	7	7	4.1	useful	5.2	easy
32	3	2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6.1	very useful	7	very eas
33	1	1	1	1	1	1	1	1	1	1	7	7	1	2	2	1	2	2	1	1	1	not useful	2.6	easy enou
34	4	3	1	6	5	4	4	1	1	3	5	4	5	7	2	3	4	3	1	4	3.2	useful enough	3.8	easy enou
35 36	6	7	5 7	6	7 6	6	6	7	6	7	6	5 6	6	6	7	7	6	6	6	7	5.9 6.6	very useful	6.2	very eas
37	0	5	7	6	6	4	6	5	4	7	2	2	6	7	3	5	7	3	6	4	5.2	very useful useful	6.4 4.5	very eas
38	1	1	1	1	1	4	1	1	4	1	3	3	3	3	3	3	3	3	4	4	1		3.2	
39	5	6	5	7	5	6	6	5	6	5	4	5	4	4	5	6	4	4	5	6	5.6	not useful very useful	4.7	easy enou
40	7	7	5	6	6	6	7	7	4	5	5	5	5	6	3	4	4	4	4	4	6	very useful	4.4	easy
41	6	5	4	5	4	5	3	4	4	5	4	5	4	4	5	4	5	4	5	4	4.5	useful	4.4	easy
42	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	very useful	7	very eas
43	5	7	7	7	7	7	6	5	7	7	7	7	7	6	7	7	7	7	7	7	6.5	very useful	6.9	very eas
44	7	6	7	7	6	5	6	5	7	7	6	6	4	6	7	7	7	5	6	5	6.3	very useful	5.9	very eas
45	5	6	7	4	5	4	5	4	4	4	4	4	3	4	6	5	4	5	5	3	4.8	useful	4.3	easy
46	6	5	2	6	4	5	4	5	6	6	5	5	2	2	6	5	2	4	4	2	4.9	useful	3.7	easy enou
47	5	6	5	5	5	7	3	3	3	6	5	5	3	3	4	4	4	5	4	6	4.8	useful	4.3	easy
48	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6.4	very useful	7	very eas
49	5	5	4	3	6	4	5	4	7	5	4	5	6	3	5	5	7	4	7	4	4.8	useful	5	easy
50	6	5	6	6	5	6	7	7	7	5	7	6	6	4	6	5	4	5	5	5	6	very useful	5.3	easy
51	4	4	4	4	4	4	4	3	3	5	3	4	2	4	3	5	3	4	3	4	3.9	useful enough	3.5	easy enou
52	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	4	useful enough	4.6	easy
53	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	very useful	7	very eas
54	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	6.9	very useful	6.9	very eas
55	7	7	7	7	7	7	7	7	7	7	5	6	5	6	6	4	5	6	6	6	7	very useful	5.5	easy
56	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	very useful	7	very eas
57	4	4	5	5	4	4	5	5	4	5	5	4	5	4	4	5	4	5	4	3	4.5	useful	4.3	easy
58	4	6	5	7	7	4	6	4	6	6	6	5	5	6	6	6	6	5	6	4	5.5	useful	5.5	easy
59	6	5	6	5	7 6	6	6	6	5	6	7	6	6	6	/	6	6	6	6	6	5.8	very useful	6.2	very eas
60 61	6	6	6	6	4	6	6	6	6	6	5 4	6	5 4	6	5 4	6	6	4	6	6	6	very useful	5.7 4.1	very eas
	4	4	5	7	6	7	6	6	6	7	6	6	6	7	7	7	7	6	6	6	6.1	useful enough	4.1 6.4	easy
62 63	7	6	4	6	6	6	5	6	5	5	6	5	4	5	6	5	5	5	5	5	5.6	very useful very useful	5.1	very easy
64	5	7	5	6	5	7	3	6	4	5	5	6	5	4	5	7	6	6	7	5	5.3	useful	5.6	very eas
65	7	7	7	7	7	7	7	7	7	7	5	6	6	7	7	7	7	7	7	7	7	very useful	6.6	very eas
66	7	7	6	4	5	7	5	4	7	5	7	6	4	2	5	6	2	6	3	6	5.7	very useful	4.7	easy
67	6	6	5	6	6	6	6	6	5	6	5	5	6	5	6	5	6	5	5	5	5.8	very useful	5.3	easy
68	1	2	4	4	5	5	6	4	5	4	1	3	2	4	3	5	3	5	6	5	4	useful enough	3.7	easy enou
69	1	1	1	1	1	1	1	1	3	2	3	1	3	2	2	3	2	3	3	3	1.3	not useful	2.5	not east
70	4	5	4	5	5	6	5	6	5	6	6	6	6	5	6	5	5	6	6	5	5.1	useful	5.6	very eas
	Category		F	%		Catana		_	0/															
	Category					Category		F	%															
	Not Useful		4			Not Easy		2																
	Useful End	ough	10	14.29		Easy Eno	ugh	14	20.00															
	Useful		20	28.57		Easy		27	38.57															
	Very Usefi	ul	36	51.43		Very Easy	v	27	38.57															

sponden	PU 1	PU 2	PU 3	PU 4	PU 5	PU 6	PU 7	PU 8	PU 9	PU 10	PEoU 1	PEoU 2	PEoU 3	PEoU 4	PEoU 5	PEoU 6	PEoU 7	PEoU 8	PEoU 9	PEoU 10	Total	Mean
1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	140	7
2	3 5	5 4	4 5	2	4 5	6 5	3 5	5 5	7 5	6 4	5 4	4	2	2	6	3	6 4	2	4	2	81 88	4.05 4.4
	5	3	4	2	1	6	3	5	2	5	2	3	6	1	4	5	2	5	2	4	70	3.5
4 5	3	3	1	5	2	5	3	7	1	3	3	1	7	3	5	2	5	4	2	4	69	3.45
6	7	7	7	6	7	6	7	7	5	7	7	7	7	6	6	6	6	6	6	6	129	6.45
7	7	7	7	7	6	7	6	7	6	7	6	6	5	5	6	7	7	7	6	6	128	6.4
8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	140	7
9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	80	4
10	7	5	7	7	7	7	6	7	7	7	5	6	6	6	7	7	6	5	7	7	129	6.45
11	3	6	7	5	7	4	5	6	4	4	6	4	4	3	5	5	6	4	4	5	97	4.85
12	7	6	6	6	6	6	6	6	6	6	4	7	4	4	6	7	6	6	6	6	117	5.85
13	4	7	7	7	7	3	6	7	2	6	5	5	5	2	3	4	5	5	4	5	99	4.95
14	5	3	6	2	5	1	5	7	4	3	1	- 5	2	4	3	6	5	7	2	5	81	4.05
15	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	140	7
16	2	4	5	3	7	5	4	2	5	2	5	6	7	5	2	5	4	3	7	2	85	4.25
17	5	7	7	7	7	5	5	7	6	7	5	7	7	1	7	3	7	4	4	7	115	5.75
18	3	7	2	5	5	5	3	5	3	5	3	4	5	5	6	4	6	6	5	4	91	4.55
19	6	6	5	6	6	6	6	6	5	6	6	5	6	2	6	6	6	4	6	6	111	5.55
20	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	6	7	104	5.2
21	7	6	7	7	7	7	7	7	7	7	5	6	7	6	6	7	7	6	7	7	133	6.65
22	7	7	7	7	7	5	5	5	6	3	7	7	7	7	7	7	7	7	7	7	129	6.45
23 24	7	1 5	1 6	7	7	7	7	7	7	7	1 5	1 6	2 5	4 5	2 5	1 5	3 6	3 5	2 5	6	31 120	1.55 6
25	4	5	6	4	7	2	7	3	4	5	2	3	4	5	4	7	2	2	3	4	83	4.15
26	6	5	7	7	6	5	6	7	6	7	5	5	6	7	7	6	7	5	7	4	121	6.05
27	4	4	4	5	5	5	6	6	5	4	4	4	4	5	5	2	3	4	5	6	90	4.5
28 29	4 6	3 6	4 7	4 6	4 6	2 7	5 6	4 6	5 6	2 6	6	2 6	3 5	4 5	6	4 6	2 6	3 5	4 5	3 6	67 118	3.35 5.9
30	5	4	4	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4	83	4.15
31	6	7	6	4	7	7	1	1	1	1	1	1	4	7	7	7	5	6	7	7	93	4.65
32	3	2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	131	6.55
33	1	1	1	1	1 5	4	1	1	1	1	7 5	7	1 5	2 7	2	1	2	2	1	1	36	1.8
34 35	1	3 7	5	6 6	7	7	6	7	6	3 7	6	5	6	6	7	3 7	6	3 6	6	4 7	70 121	3.5 6.05
36	6	7	7	7	6	6	6	7	7	7	6	6	6	6	7	7	6	6	7	7	130	6.5
37	2	5	7	6	6	4	6	5	4	7	2	2	6	7	3	5	7	3	6	4	97	4.85
38 39	1 5	1 6	1 5	1 7	1 5	1 6	1 6	1 5	1	1 5	3	3 5	3	3	3 5	3 6	3	3	4 5	4	42 103	2.1 5.15
40	7	7	5	6	6	6	7	7	4	5	5	5	5	6	3	4	4	4	4	4	103	5.13
41	6	5	4	5	4	5	3	4	4	5	4	5	4	4	5	4	5	4	5	4	89	4.45
42	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	140	7
43	5	7	7	7	7	7	6	5	7	7	7	7	7	6	7	7	7	7	7	7	134	6.7
44 45	7 5	6	7	7	6 5	5	6 5	5	4	7	6	6	3	6 4	7	7 5	7	5 5	6 5	5 3	122 91	6.1 4.55
46	6	5	2	6	4	5	4	5	6	6	5	5	2	2	6	5	2	4	4	2	86	4.3
47	5	6	5	5	5	7	3	3	3	6	5	5	3	3	4	4	4	5	4	6	91	4.55
48	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	134	6.7
49 50	5 6	5 5	6	3 6	6 5	4	5 7	4	7	5 5	7	5	6	3	5 6	5	7	4 5	7 5	4 5	98 113	4.9 5.65
51	4	4	4	4	4	4	4	3	3	5	3	4	2	4	3	5	3	4	3	4	74	3.7
52	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	86	4.3
53	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	140	7
54 55	7	7 7	7	7 7	6 7	7	7	7	7	7	7 5	7	7 5	7 6	7 6	6	7 5	7 6	7 6	7 6	138 125	6.9 6.25
56	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	140	7
57	4	4	5	5	4	4	5	5	4	5	5	4	5	4	4	5	4	5	4	3	88	4.4
58	4	6	5	7	7	4	6	4	6	6	6	5	5	6	6	6	6	5	6	4	110	5.5
59 60	6	5 6	6	5 6	7 6	6	6	6	5 6	6	7 5	6	6 5	6	7 5	6	6	6	6	6	120 117	6 5.85
61	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	81	4.05
62	7	4	5	7	6	7	6	6	6	7	6	6	6	7	7	7	7	6	6	6	125	6.25
63	7	6	4	6	6	6	5	6	5	5	6	5	4	5	6	5	5	5	5	5	107	5.35
64 65	5 7	7 7	5 7	6 7	5 7	7 7	3 7	6 7	4 7	5 7	5 5	6 6	5 6	4 7	5 7	7 7	6 7	6 7	7	5 7	109 136	5.45 6.8
66	7	7	6	4	5	7	5	4	7	5	7	6	4	2	5	6	2	6	3	6	104	5.2
67	6	6	5	6	6	6	6	6	5	6	5	5	6	5	6	5	6	5	5	5	111	5.55
68	1	2	4	4	5	5	6	4	5	4	1	3	2	4	3	5	3	5	6	5	77	3.85
69 70	4	1 5	1	1 5	1 5	1 6	1 5	6	3 5	6	6	1 6	3 6	2 5	2 6	3 5	5	3 6	6	3 5	38 107	1.9 5.35
70 Γotal	347	367	367	374	382	370	362	368	353	368	345	354	349	338	370	371	364	354	363	361	101	5.55
/lean	4.957	5.243	5.243	5.343	5.457	5.286	5.171	5.257	5.043	5.257	4.929	5.057	4.986	4.829	5.286	5.300	5.200		5.186	5.157		
SD	1.929	1.756				1.762	1.711	1.847	1.861		1.756		1.628	1.728	1.598	1.582	1.656		1.662			
	DU						DE-11															
	PU Grand M	loan	5 220				PEoU Grand M	020	5 000													
	Grand N		5.226				Grand M		5.099													
	Grand S	U	1.792				Grand S	J	1.625													
	Median		6				Median		5													
	Mode	atal .	7				Mode	ata l	7													
	Grand T	otal	3658				Grand To	otal	3569													

Appendix 9 Questionnaires

KUISIONER PENELITIAN

Kepada responden yang terhormat,

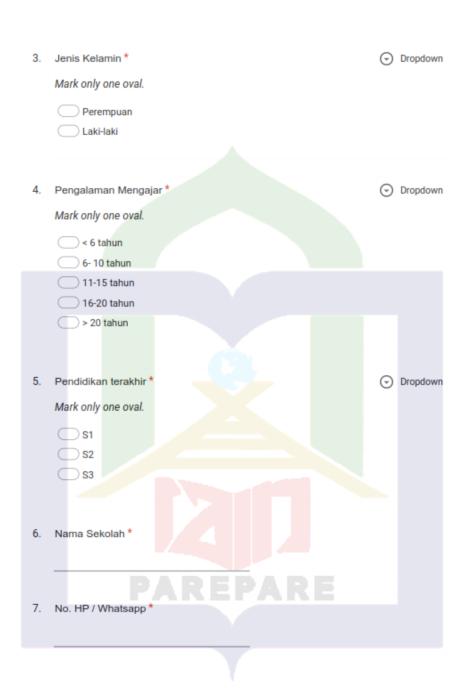
Dalam rangka melaksanakan penelitian thesis program Pascasarjana (S2) IAIN Parepare, Peneliti memerlukan informasi untuk mendukung penelitian dengan judul "TEACHERS' AND STUDENTS' PERCEPTIONS OF WEB 2.0 TOOLS FOR PROJECT-BASED LEARNING AT KURIKULUM MERDEKA-IMPLEMENTED SCHOOLS IN KABUPATEN PINRANG". Peneliti memohon kesedian Bapak/lbu/Sdr(i) untuk meluangkan waktu mengisi kuesioner yang dilampirkan. Jawaban yang anda berikan akan sangat membantu penelitian ini.

Seluruh data dan informasi yang Bapak/Ibu/Sdr(i) berikan akan dijaga kerahasiannya dan hanya akan digunakan untuk kepentingan akademis penelitian semata. Peneliti mengucapkan terima kasih kepada Bapak/Ibu/Sdr(i) yang telah bersedia meluangkan waktu untuk mengisi kuesioner ini secara objektif dan benar.

Peneliti, Kiki Rezki Ananda 2220203879102003

* Indicates required question

1	DENTITAS RESPONDEN		
1.	Nama (beserta gelar) *		
2.	Umur * Mark only one oval.	0	Dropdown
	<30 tahun 31-40 tahun		
	41-50 tahun		



Web 2.0 Tools Preference

Secara sederhana Web 2.0 tools adalah alat teknologi yang memungkinkan pengguna untuk menerima, berinteraksi, dan membuat konten secara daring.

Pada bagian ini silahkan Bapak/Ibu/ Sdr (i) memilih Web 2.0 tools yang pernah atau sering anda gunakan pada saat proses pembelajaran bahasa Inggris dengan metode Pembelajaran berbasis Projek.

Berikut adalah Web 2.0 tools yang pernah dan atau sering saya gunakan dalam *
pembelajaran bahasa Inggris berbasis proyek (anda bisa memilih lebih dari 1)

Check all that apply. Google Classroom Edmodo Microsoft Team WhatsApp Zoom Kahoot Quizziz Mentimeter Padlet Wordwall Liveworksheet Duolingo Busuu **BBC Learning** Youtube Facebook Canva Storybird Flipgrid Adobe Spark Quizlet Powtoon VoiceThread Grammarly Google Docs CapCUt Other:

PERCEPTIONS

- 1. Bacalah sejumlah pernyataan di bawah ini dengan teliti.
- Anda dimohon untuk memberikan penilaian mengenai persepsi anda terhadap kebermanfaatan (Usefulness) dan kemudahan penggunaan (Ease of Use) Web 2.0 tools dalam pembelajaran bahasa Inggris berbasis proyek dalam kurikulum Merdeka.
- Anda dimohon untuk memberikan jawaban sesuai dengan keadaan Anda secara objektif dengan memilih pada salah satu kriteria untuk setiap pernyataan yang menurut Anda paling tepat.
- Skor yang diberikan tidak mengandung nilai jawaban yang benar-salah melainkan menunjukkan kesesuaian penilaian Anda terhadap isi setiap pernyataan.
- 5. Dimohon dalam memberikan penilaian tidak ada pernyataan yang terlewatkan.
- Hasil penelitian ini hanya untuk kepentingan akademis saja. Identitas Anda akan dirahasiakan dan hanya diketahui oleh peneliti.
- Pilihlah jawaban yang tersedia. Semua pernyataan pada kuisioner ini merupakan pernyataan positif. Semakin besar nilai yang dipilih menunjukkan semakin sesuai pengalaman responden terhadap pernyataan tersebut.

9. Web 2.0 tools membantu saya mempersiapkan dan melaksanakan pembelajaran berbasis proyek lebih dengan efektif Mark only one oval. 1 2 3 4 5 6 7 San Sangat Efektif 10. Menggunakan Web 2.0 tools membantu meningkatkan hasil pembelajaran siswa dalam proyek. Mark only one oval. 1 2 3 4 5 6 7 San Sangat Membantu

11.	dalam proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mendukung Kolaborasi
12.	Web 2.0 tools mempercepat proses perencanaan dan pelaksanaan pembelajaran bahasa Inggris berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Cepat
13.	Penggunaan Web 2.0 tools meningkatkan produktivitas saya sebagai pendidik. *
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Produktif
14.	Web 2.0 tools membantu siswa memahami konsep bahasa Inggris lebih baik * melalui proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Membantu

15.	proyek.	
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Mendukung	
16.	Dengan Web 2.0 tools, saya dapat memberikan umpan balik dan komunikasi yang lebih efisien dalam proyek.	*
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Efisien	
17.	Penjadwalan dan pemantauan proyek menjadi lebih mudah dengan Web 2.0 tools.	*
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Mudah	
18.	Web 2.0 tools menyediakan alat yang relevan untuk pengembangan keterampilan berpikir kritis dan kreatif siswa.	*
	Mark only one ovail AREPARE	
	1 2 3 4 5 6 7	
	San Sangat Relevan	

Perceived Ease of Use (Kemudahaan pengoperasian)

19.	Mengoperasikan Web 2.0 tools adalah hal yang mudah bagi saya. *
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mudah
20.	Saya merasa mudah mengintegrasikan Web 2.0 tools dalam aktivitas proyek
20.	berbasis pembelajaran bahasa Inggris.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mudah
21.	Web 2.0 tools mudah digunakan dan memiliki antarmuka yang intuitif. *
21.	
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Intuitif
22.	Saya dapat menggu <mark>nak</mark> an Web 2.0 tools dengan baik tanpa banyak bantuan
	teknis.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mandiri

20.	pembelajaran berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Fleksibel
24.	Desain dan fitur Web 2.0 tools membuatnya sederhana untuk digunakan dalam pembelajaran berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Sederhana
25.	Saya merasa percaya diri dalam menyelesaikan masalah saat menggunakan * Web 2.0 tools dalam pembelajaran berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Percaya Diri
26.	Web 2.0 tools tidak memerlukan banyak waktu untuk dipelajari dan dikuasai. *
	Mark only one oval.
	1 2 3 4 5 6 7 PARE
	San Sangat Cepat Dipelajari dan Dikuasai

27.	Fitur Web 2.0 tools jelas dan mudah dipahami untuk digunakan dalam pembelajaran berbasis proyek.	*
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Mudah Dipahami	
28.	Web 2.0 tools terintegrasi dengan baik dengan pendekatan Kurikulum Merdeka dan aktivitas PBL lainnya.	*
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Terintegrasi	
	This content is neither created nor endorsed by Google.	
	Google Forms	

KUISIONER PENELITIAN

Kepada responden yang terhormat,

Dalam rangka melaksanakan penelitian thesis program Pascasarjana (S2) IAIN Parepare, Peneliti memerlukan informasi untuk mendukung penelitian dengan judul "TEACHERS' AND STUDENTS' PERCEPTIONS OF WEB 2.0 TOOLS FOR PROJECT-BASED LEARNING AT KURIKULUM MERDEKA-IMPLEMENTED SCHOOLS IN KABUPATEN PINRANG". Peneliti memohon kesedian adik-adik peserta didik untuk meluangkan waktu mengisi kuesioner yang dilampirkan. Jawaban yang anda berikan akan sangat membantu penelitian ini.

Seluruh data dan informasi yang diberikan akan dijaga kerahasiannya dan hanya akan digunakan untuk kepentingan akademis penelitian semata. Peneliti mengucapkan terima kasih kepada Adik-adik peserta didik yang telah bersedia meluangkan waktu untuk mengisi kuesioner ini secara objektif dan benar.

Peneliti, Kiki Rezki Ananda 2220203879102003

* Indicates required question

IE	DENTITAS RESPONDEN
1.	Nama *
2.	Umur *
3.	Jenis Kelamin * PAREPARE Dropdown Mark only one oval.
	Perempuan Laki-laki

4.	Jenjang Pendidikan *	0	Dropdown
	Mark only one oval.		
	SMP/sederajat		
	SMA/sederajat		
5.	Kelas *	0	Dropdown
	Mark only one oval.		
	◯VII		
	◯ VIII		
	□ IX		
	○x ○xi		
	OXII		
6.	Nama Sekolah *		
7.	No. HP / Whatsapp *		
V	Veb 2.0 Tools Preference		
	ecara sederhana Web 2.0 tools adalah a <mark>lat tekn</mark> ologi yang memungkinkan ntuk menerima, berinteraksi, dan membuat konten secara daring.	pengg	una
	rada bagian ini silahkan Adik-adik memilih Web 2.0 tools yang sering atau p	ernsh	anda
g	unakan pada saat proses pembelajaran bahasa Inggris dengan metode	ciliali	anda
P	lembelajaran berbasis Projek.		

Check all that apply.
Google Classroom
Edmodo
Microsoft Team
WhatsApp
Zoom
Kahoot
Quizziz
Mentimeter
Padlet
Wordwall
Liveworksheet
Duolingo
Busuu
BBC learning English
Youtube
Facebook
Canva
Storybird
Flipgrid
Adobe Spark
Quizlet
Powtoon
VoiceThread
Grammarly
Google Docs
CapCut

PERCEPTIONS

- 1. Bacalah sejumlah pernyataan di bawah ini dengan teliti.
- Anda dimohon untuk memberikan penilaian mengenai persepsi anda terhadap kebermanfaatan (Usefulness) dan kemudahan penggunaan (Ease of Use) Web 2.0 tools dalam pembelajaran bahasa Inggris berbasis proyek dalam kurikulum Merdeka.
- Anda dimohon untuk memberikan jawaban sesuai dengan keadaan Anda secara objektif dengan memilih pada salah satu kriteria untuk setiap pernyataan yang menurut Anda paling tepat.
- Skor yang diberikan tidak mengandung nilai jawaban yang benar-salah melainkan menunjukkan kesesuaian penilaian Anda terhadap isi setiap pernyataan.
- 5. Dimohon dalam memberikan penilaian tidak ada pernyataan yang terlewatkan.
- Hasil penelitian ini hanya untuk kepentingan akademis saja. Identitas Anda akan dirahasiakan dan hanya diketahui oleh peneliti.
- Pilihlah jawaban yang tersedia. Semua pernyataan pada kuisioner ini merupakan pernyataan positif. Semakin besar nilai yang dipilih menunjukkan semakin sesuai pengalaman responden terhadap pernyataan tersebut.

P	erceived of Usefulness (Kebermanfaatan)
9.	Web 2.0 tools membantu saya mencapai tujuan pembelajaran bahasa Inggris berbasis proyek dengan lebih efektif.
	Mark only one oval. 1 2 3 4 5 6 7 San Sangat Efektif
10.	Menggunakan Web 2.0 tools membantu meningkatkan kualitas hasil proyek
	pembelajaran bahasa Inggris. Mark only one oval. 1 2 3 4 5 6 7
	San Sangat Membantu

11.	Web 2.0 tools mempermudah kolaborasi dengan teman dalam aktivitas pembelajaran bahasa Inggris berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mendukung Kolaboras
12.	Web 2.0 tools mempercepat penyelesaian tugas dalam kerangka kerja proyek. *
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mempercepat
13.	Menggunakan Web 2.0 tools meningkatkan produktivitas saya selama
	pembelajaran bahasa Inggris berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Produktif
14.	Web 2.0 tools membantu saya memahami konsep bahasa Inggris lebih baik * melalui pembelajaran berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7 PARE
	San Sangat Membantu

 Dengan Web 2.0 tools, saya dapat mengaplikasikan pengetahuan di dunia nyata melalui pembelajaran bahasa Inggris berbasis proyek. 	*
Mark only one oval.	
1 2 3 4 5 6 7	
San Sangat Kontekstual	
 Umpan balik dan komunikasi dalam pembelajaran bahasa Inggris berbasis proyek menjadi lebih efisien dengan Web 2.0 tools. 	*
Mark only one oval.	
1 2 3 4 5 6 7	
San Sangat Efisien	
17. Web 2.0 tools mempermudah penjadwalan dan pemantauan proyek.*	
Mark only one oval.	
1 2 3 4 5 6 7	
San Sangat Mempermudah	
 Web 2.0 tools menyediakan sumber daya yang berguna untuk berpikir kritis dan kreatif dalam pembelajaran bahasa Inggris berbasis proyek. 	*
Mark only one oval.	
1 2 3 4 5 6 7	
San Sangat Berguna	
Perceived Ease of Use (Kemudahaan pengoperasian)	

19.	Belajar menggunakan Web 2.0 tools adalah hal yang mudah bagi saya.*
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mudah
20.	Saya merasa mudah mengintegrasikan Web 2.0 tools dalam aktivitas
	pembelajaran bahasa Inggris berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mudah
0.4	
21.	Web 2.0 tools mudah digunakan dan memiliki antarmuka yang intuitif. *
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Intuitif
22.	Saya dapat menggunakan Web 2.0 tools dengan baik tanpa banyak bantuan * teknis.
	Mark only one oval.
	1 2 3 4 5 6 7
	PAREFARE
	San Sangat Mandiri

23.	Web 2.0 tools mudah diakses dan dapat disesuaikan dengan kebutuhan belajar saya.	*
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Mudah Diakses	
24.	Desain dan fitur Web 2.0 tools membuatnya sederhana untuk digunakan dalam pembelajaran bahasa Inggris berbasis proyek.	*
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Sederhana	
25.	Saya merasa percaya diri dalam menyelesaikan masalah kecil saat menggunakan Web 2.0 tools dalam pembelajaran bahasa Inggris berbasis	*
	proyek.	
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Percaya Diri	
26.	Web 2.0 tools tidak memerlukan banyak waktu untuk dipelajari dan dikuasai	*
20.	dalam pembelajaran bahasa Inggris berbasis proyek.	
	Mark only one oval.	
	1 2 3 4 5 6 7	
	San Sangat Cepat Dikuasai	

27.	Fitur Web 2.0 tools jelas dan mudah dipahami untuk digunakan dalam pembelajaran berbasis proyek.
	Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Mudah dipahami
28.	Web 2.0 tools terintegrasi dengan baik dengan sumber daya dan aktivitas lain * dalam PBL. Mark only one oval.
	1 2 3 4 5 6 7
	San Sangat Terintegrasi
	This content is neither created nor endorsed by Google. Google Forms
	Google Forms

Appendix 10 Documentation



DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI PAREPARE NOMOR: 0/2 TAHUN 2024

PENUNJUKAN PEMBIMBING UTAMA DAN PENDAMPING TESIS PASCASARJANA IAIN PAREPARE

DENGAN RAHMAT TUHAN YANG MAHA ESA DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI PAREPARE

	nbar	

- a. Bahwa penulisan tesis merupakan salah satu syarat dalam penyelesaian studi pada jenjang S2 Pascasarjana IAIN Parepare, untuk itu dipandang perlu membuat keputusan tentang
- b. Bahwa saudara yang tertera namanya dalam surat keputusan ini dipandang cakap/mampu melaksanakan tugas tersebut.

 1. Undang-Undang Nomor: 20 Tahun 2003 tentang Sistem Pendidikan Nasional
 2. Undang-Undang Nomor 14 Tahun 2005 tentang Guru dan Dosen;

Mengingat

- Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi 3.
- Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi
- dan Pengelolaan Perguruan Tinggi Peraturan Pemerintah Nomor 4 Tahun 2022 tentang Perubahan atas Peraturan Pemerintah Nomor 57 Tahun 2021 tentang Standar Nasional Pendidikan;
- Peraturan Presiden Republik Indonesia Nomor 29 Tahun 2018 tentang Institut Agama Islam Negeri Parepare;
- Peraturan Menteri Agama Nomor 16 Tahun 2019 tentang Statuta Institut Agama Islam Negeri Parepare;
- Peraturan Pemerintah Nomor 46 Tahun 2019 tentang Pendidikan Tinggi Keagamaan
- Peraturan Menteri Agama Nomor 24 Tahun 2022 tentang Perubahan Atas Peraturan Menteri Agama Nomor 35 Tahun 2018 tentang Organisasi dan Tata Kerja Institut Agama Islam Negeri Parepare;
- 10. Keputusan Menteri Agama Nomor 387 Tahun 2004 tentang Petunjuk Pelaksanaan
- Reputusan Rektor Institut Agama Islam Negeri Parepare Nomor B-582/In.39/KP.07.6/05/2022 Tahun 2022 tentang Pengangkatan Jabatan Direktur Keputusan Pascasarjana Institut Agama Islam Negeri Parepare.

Memperhatikan

Keputusan Rektor Nomor 656 Tahun 2023 Tentang Penunjukan Pembimbing Tesis Pascasarjana Institut Agama Islam Negeri Parepare

MEMUTUSKAN

Menetapkan KESATU

Penunjukan Pembirnbing Utama dan Pendamping Tesis Pascasarjana Institut Agama Islam

Negeri Parepare KEDUA

1. Dr. Magdahalena Tjalia, M.Hum Menunjuk Saudara:

Dr. Zulfah, M.Pd masing-masing sebagai pembimbing utama dan pendamping bagi mahasiswa:

KIKI RESZKI ANANDA Nama Mahasiswa 2220203879102003 NIM Program Studi Tadris Bahasa Inggris

Exploring Web 2.0 Use in English Project Based Learning Judul Penelitian

Teachers' and Student's Perspective

KETIGA

Tugas pembimbing utama dan pendamping adalah membimbing dan mengarahkan mahasiswa mulai pada penyusunan sinopsis sampai selesai sebuah karya ilmiah yang

berkualitas dalam bentuk tesis

KEEMPAT

Segala biaya akibat diterbitkannya Surat keputusan ini dibebankan kepada Anggaran belanja

KELIMA

Surat Keputusan ini disampaikan kepada masing-masing yang bersangkutan untuk

dilaksanakan sebagaimana mestinya

Ditetapkan di : Parepare Pada Tanggal: 20 Februari 2024 p Direktur,

Dr. Hj. Darmawati,S.Ag.,M.Pd NIP 19720703 199803 2 001

Organia

Tembusan:

- Ka. Prodi Magister TBI
- Arsip



INSTITUT AGAMA ISLAM NEGERI PAREPARE

PASCASARJANA

Jalan Amal Bakti No. 8 Soreang, Kota Parepare 91132 Telepon (0421) 21307, Fax. (0421) 24404 PO Box 909 Parepare 91100 website: www.lainpare.ac.id, email: mail@iainpare.ac.id

Nomor : B-1431 /In.39/PPS.05/PP.00.9/12/2024

II Desember 2024

Lampiran Perihal

1 : -

Permohonan Izin Penelitian

Yth. Bapak Bupati Pinrang

Cq. Dinas Penanaman Modal Dan Pelayanan

Terpadu Satu Pintu

Di

Tempat

Assalamu Alaikum Wr. Wb.

Sehubungan dengan rencana penelitian untuk Tesis mahasiswa Pascasarjana IAIN Parepare tersebut di bawah ini :

Nama

: KIKI REZKI ANANDA

NIM

: 2220203879102003

Program Studi

Tadris Bahasa Inggris

Judul Tesis

: Teachers' and Students' Perceptions of WEB 2.0 Tools For

Project-Based

Learning

at Kurikulum

Merdeka-

Implemented Schools in Kabupaten Pinrang.

Untuk keperluan Pengurusan segala sesuatunya yang berkaitan dengan penelitian tersebut akan diselesaikan oleh mahasiswa yang bersangkutan. Pelaksanaan penelitian ini direncanakan pada bulan Desember s/d Februari Tahun 2024

Sehubungan dengan hal tersebut diharapkan kepada bapak/ibu kiranya yang bersangkutan dapat diberi izin dan dukungan seperlunya.

Assalamu Alaikum Wr. Wb.

Direktur

Or. H. Islamul Haq, Lc.,M.A NIP 198403 201503 1 004





KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI PAREPARE UNIT PELAKSANA TEKNIS BAHASA



Jalan Amal Bakti No. 8 Soreang, Kota Parepare 91132 Telepon (0421) 21307, Fax. (0421) 24404 PO Box 909 Parepare 91100,website: www.iainpare.ac.id, email: mail@iainpare.ac.id

SURAT KETERANGAN

Nomor: B-20/In.39/UPB.10/PP.00.9/01/2025

Yang bertanda tangan dibawah ini,

Nama

: Hj. Nurhamdah, M.Pd.

NIP

: 19731116 199803 2 007

Jabatan

: Kepala Unit Pelaksana Teknis (UPT) Bahasa

Dengan ini menerangkan bahwa berkas sebagai berikut atas nama,

Nama

: Kiki Rezki Ananda

Nim

: 2220203879102003

Berkas

: Abstrak

Telah selesai diterjemahkan dari Bahasa Indonesia ke Bahasa Inggris dan Bahasa Arab pada tanggal 10 Januari 2025 oleh Unit Pelaksana Teknis Bahasa IAIN Parepare.

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Parepare, 13 Januari 2025

Kepala,

H) Nuthamdah, M.Pd. MP 19731116 199803 2 007



KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI (IAIN) PAREPARE UPT. PERPUSTAKAAN

Jalan Amal Bakti No. 8 Soreang, Kota Parepare 91132 Telepon (0421) 21307, Fax. (0421) 24404 PO Box 909 Parepare 91100,website: www.lainpare.ac.id, email: perpustakaan@lainpare.ac.id

SURAT KETERANGAN BEBAS PUSTAKA No. :B-213/In.39/UPS.09/ PS.01/01/2025

Kepala UPT. Perpustakaan IAIN Parepare menerangkan bahwa mahasiswa dengan identitas berikut :

Nama : Kiki Rezki Ananda
NIM : 2220203879102003

Fakultas : Pascasarjana

Prodi : S2 Tadris Bahasa Inggris

Benar telah bersih dari pinjaman pustaka di UPT. Perpustakaan Institut Agama Islam Negeri (IAIN) Parepare. Bukti bebas pustaka ini dibuat dengan sebenarnya dan diberikan kepada yang bersangkutan untuk dipergunakan sebagaimana mestinya.

17 Januari 2025 Kepala UPT. Perpustakaan

Sirajuddin

Catatan : Mahasiswa yang mengambil cuti kuliah, jika aktif kembali harap membawa slip pembayaran SPP/ UKT semester berjalan ke Perpustakaan

PAREPARE



NIP

Jabatan

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