

## Digital Competence of Educators (DigCompEdu): Level of Digital Competence of English Pre-service Teacher in Indonesia

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### Abstract

*The European Framework for Educators' Digital Competence (DigCompEdu) is a scientifically solid framework that defines what it means to be digitally competent as an educator. DigCompEdu organizes 22 competencies into six areas. The emphasis is not on technical abilities. The framework aims to show how teachers may utilize digital technologies to improve and reinvent education and training. The preservice teaching experience is intended to create a controlled learning environment in which the future teacher may put the ideas and practices gained. Based on the 6 level of students of pre service teacher that have analyzed, the researcher identified 102 students of English education in the data. In the overall calculation, there are 33 universities which are 14 private and 19 public university. Then, 86 females and 16 males, the majority of the respondents in this study were female English education students. The majority of respondents (approximately 48 percent) have level B2, indicating that They fluently, creatively, and critically apply a variety of digital technologies to boost your professional operations. They actively choose digital technology for certain scenarios and attempt to comprehend the advantages and disadvantages of various digital tactics. They are inquisitive and open to new ideas, aware that there are many things they have yet to try. They employ experimentation to extend, structure, and consolidate your arsenal of techniques as a pre-service teacher.*

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### ABSTRAK

*Kerangka Kerja Eropa untuk Kompetensi Digital Pendidik (DigCompEdu) adalah kerangka kerja yang solid secara ilmiah yang mendefinisikan apa artinya menjadi kompeten secara digital sebagai seorang pendidik. DigCompEdu menyelenggarakan 22 kompetensi ke dalam enam bidang. Penekanannya bukan pada kemampuan teknis. Kerangka kerja ini bertujuan untuk menunjukkan bagaimana guru dapat memanfaatkan teknologi digital untuk meningkatkan dan menemukan kembali pendidikan dan pelatihan. Pengalaman mengajar calon guru dimaksudkan untuk menciptakan lingkungan belajar yang terkontrol di mana guru masa depan dapat menempatkan ide dan praktik yang diperoleh. Berdasarkan 6 tingkat siswa guru pra-layanan yang telah menganalisis, peneliti mengidentifikasi 102 siswa pendidikan bahasa Inggris dalam data. Dalam perhitungan keseluruhan, terdapat 33 perguruan tinggi yang merupakan 14 perguruan tinggi swasta dan 19 perguruan tinggi negeri. Kemudian, 86 perempuan dan 16 laki-laki, mayoritas responden dalam penelitian ini adalah perempuan mahasiswa pendidikan bahasa Inggris. Mayoritas responden (sekitar 48 persen) memiliki level B2, menunjukkan bahwa Mereka dengan lancar, kreatif, dan kritis menerapkan berbagai teknologi digital untuk meningkatkan operasi profesional Anda. Mereka secara aktif memilih teknologi digital untuk skenario tertentu dan berusaha memahami kelebihan dan kekurangan dari berbagai taktik digital. Mereka ingin tahu dan terbuka terhadap ide-ide baru, sadar bahwa ada banyak hal yang belum mereka coba. Mereka menggunakan eksperimen untuk memperluas, menyusun, dan mengkonsolidasikan gudang Teknik sebagai calon guru.*

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## 1. INTRODUCTION

The teacher is the essential player who plays a role in education. Teachers are considered "key persons" in the educational process. The term was chosen because the teacher's role is so crucial that

it is regarded as a key. The success of school education is determined by teachers' ability to engage students in the learning process in the classroom (Kompri, 2016). The teacher might choose a teaching approach that is appropriate for the topic during the learning process. In addition, the teacher should employ relevant media to teach the content. As a result, a teacher skilled in managing educational activities must possess teaching competence (Dangnga dan Muis, 2015). Teachers should possess pedagogical competence, personality competence, professional competence, and social competence (Ramadhan et al., 2019). Digital competence is now regarded as a marker of 21st-century education understanding (Maderick, Zhang, Hartley, & Marchand, 2016). Its role in participating in 21st-century communities and economies is growing (Napal-Fraile, Peñalva-Vélez, & Mendióroz-Lacambra, 2018). Digital usages are the informed applications of digital skills in real-life situations (Santosa, 2021). These involve using digital technologies to seek, find, and process information before developing a product or solution that addresses the task or problem. This will catalyze future action in actual life (Jahoor, 2020).

In a professional education program, preservice teaching is a required experience. Preservice teaching gives future teachers the chance to experience the challenging and gratifying process of taking substantial teaching duties. The ultimate aim for a preservice teacher is to demonstrate mastery in entry-level teaching abilities (Plodkaew & Tanamai, 2014). It is widely acknowledged that preservice teachers should be sufficiently prepared to integrate ICT into their teaching practice. Several studies have looked at the growing value of integrating digital technology into pre-service teacher preparation programs (Tondeur, Aesaert, Prestridge, Consuegra, 2018). The ultimate aim for a preservice teacher is to demonstrate mastery in entry-level teaching abilities (Plodkaew & Tanamai, 2014). It is widely acknowledged that pre-service teachers should be sufficiently prepared to integrate ICT into their teaching practice. Several studies have looked at the growing value of integrating digital technology into pre-service teacher preparation programs (Tondeur, Aesaert, Prestridge, Consuegra, 2018). To find out the level of digital competence of pre-service teachers in Indonesia, the researcher will use The European Framework for Educators' Digital Competence (DigCompEdu). DigCompEdu is a scientifically solid framework that defines what it means to be digitally competent as an educator.

The European Framework for Educators' Digital Competence (DigCompEdu) is a scientifically solid framework that defines what it means to be digitally competent as an educator (Redecker, 2017). It serves as a broad framework for developing educator-specific digital competencies across Europe. DigCompEdu is aimed at educators at all levels of education, from pre-kindergarten to higher and adult education, including general and vocational education and training, special needs education, and non-formal learning environments. DigCompEdu organizes 22 competencies into six areas. The emphasis is not on technical abilities. The framework aims to show how teachers may utilize digital technologies to improve and reinvent education and training.

In a professional education program, preservice teaching is a required experience. Preservice teaching gives future teachers the chance to experience the challenging and gratifying process of taking substantial teaching duties. Other college courses, events, and practice provide information and experience to the potential teacher. The preservice teaching experience is intended to create a controlled learning environment in which the future teacher may put the ideas and practices gained in the Virginia Wesleyan College Teacher Education Program into reality. The ultimate aim for a preservice teacher is to demonstrate mastery in entry-level teaching abilities (Plodkaew & Tanamai, 2014). It is widely acknowledged that pre-service teachers should be sufficiently prepared to integrate ICT into their teaching practice. Several studies have looked at the growing value of integrating digital technology into pre-service teacher preparation programs (Tondeur, Aesaert, Prestridge, Consuegra, 2018).

The focus of this research is to determine the level of digital competence among EFL preservice teachers. As future instructors, students must be technologically savvy. Based on the

identification above, the researcher limits the research area to only English Foreign Language pre-service teachers in digital competence of students at several colleges.



**Figure 1.** European DigiCompEdu framework for teachers (Vuorikari et al, 2017)

The researcher formulates the research in a question:

“What is the digital competence level of an English Foreign Language Pre-Service Teacher?”

The objective of this research is found out the level of Digital Competence of EFL Pre-service Teacher. This research is also expected to provide some important findings, both theoretically and practically. Theoretical Benefit: The researcher hopes that pre-service teachers and teachers will be able to participate in activities that will help them enhance their digital skills: Practical Benefits: will help English teachers gain a better understanding of digital technology; Intended for educational institutions to make a favourable contribution to improving instructor quality; Another researcher who desire to perform English research might use the research as a reference; the information about the degree of digital competence will be presented to the readers as a consequence of the results.

## 2. RESEARCH METHOD

The study design is a coherent, explicit, and thorough approach for gathering, analyzing, and interpreting data. "All the procedures necessary in the planning and execution of the study, from the preparation phase through the production stage of the report" (Rosali, 2020). In this research, the researcher will use descriptive and interpretative analysis is an integrated strategy to evaluating qualitative data with the goal of identifying and analyzing patterns in the data by separating meaning units and categorizing them.

This is a qualitative study hence the location of the study is unidentified because the researcher used an internet approach to distribute the questionnaire. This research will be place between March and April 2022. It includes collecting data, analyzing data, and drafting a report. This research use purposeful sampling is a sampling approach used by qualitative researchers to identify individuals who can give in-depth and thorough information on the topic under inquiry. It is also known as purposive and selected sampling (Phornprasert, 2021). The subject in this research is English Education Students from several university in Indonesia.

This research will also use a questionnaire instrument to address the research questions. Based on The European Framework for the Digital Competence of Educators, the question will answer the first research question concerning the degree of digital competence of pre-service teachers (DigCompEdu). The interpretation of questionnaire and framework data generated in the form of descriptive writing will also be used to answer the second research question concerning proposed actions to improve teacher digital competence.

Each university's data will be collected using a Google form, and the link will be given to each student participating in infield practice. It will be delivered using the google form link (asker). It takes four weeks to collect all of the data for this project. The students of university will be given a link to a Google form. After all of the data from each university and each student has been collected, the data will examine one by one to ensure that the results are correct and legitimate.

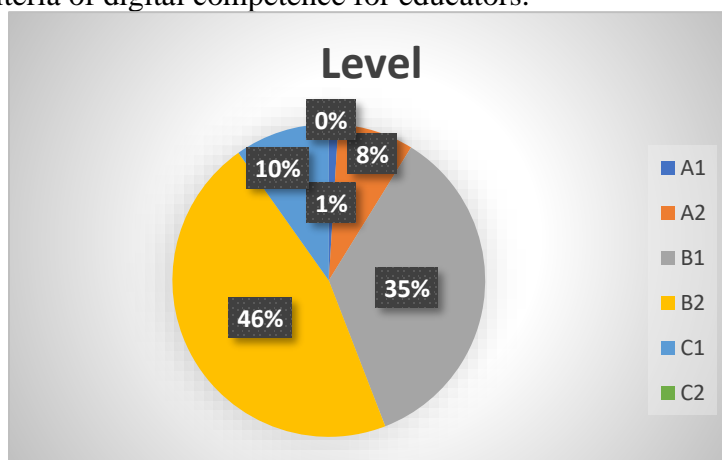
### 3. FINDINGS AND DISCUSSION

The research's results are presented and discussed in this chapter. The purpose of this study was to identify and examine the digital literacy of pre-service teachers. The information below was obtained using questionnaires distributed to several Indonesian universities. students who have participated in professional placement or who have been chosen from semesters 7 and 8. To find the data, the researcher used a purposeful method using a Google form. The outcomes revealed that:

#### 3.1. Findings

The data from research problems is presented in this part. What levels of digital competence students who have taken part in professional placement or who have been chosen from semesters 7 and 8 have as pre-service English foreign language teachers have.

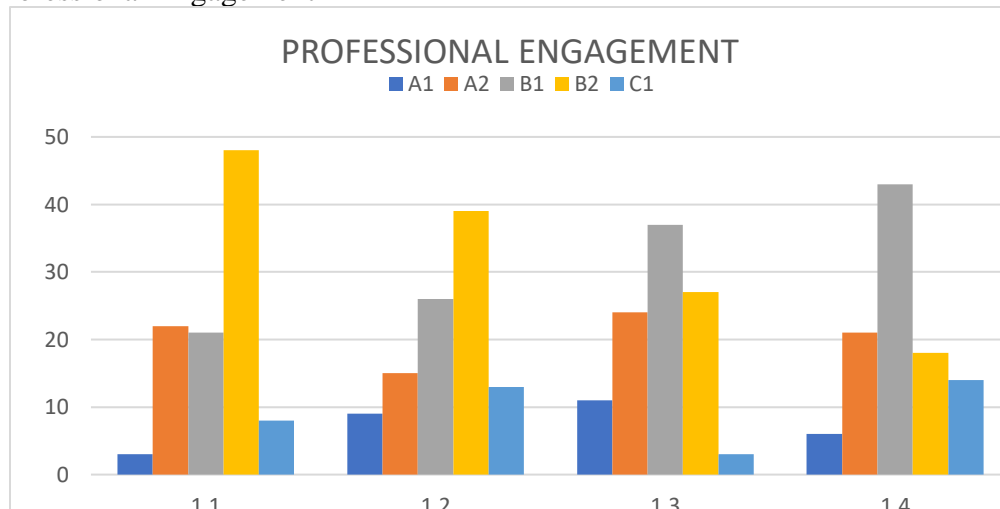
To find out how the pre-service teacher digital competence, the researcher conducted observation to attain the data by making questionnaire based on DIGCOMPEDU question level. Based on data collection process here's the finding of the research. It divided to six categories based on the criteria of digital competence for educators.



The bar shows various types of digital competence level English student as a pre service teacher in several university in Indonesia. the most respondent have level B2, around 48% it means they have the good level of digital competence as a pre-service teacher. On other levels, there are variances. As we can see at the B1 level, up to 35% of the remaining students have the highest level, indicating that they are qualified to become instructors in the present. The third is a 10% C1 level with digital preparation that can accommodate all of the applications of cutting-edge technology in teaching materials. The lowest level, A1, has a presentation of 1% and is at the A2 level, which has an 8 percent presentation.

The questions were consisting of 22 competences with 22 questions and 6 level to know the categories what the student have based on the DIGCOMPEDU framework, concerning standars of digital competence of educators. After having the data, the researcher would obtain it through an analysis below:

1. Professional Engagement



When it comes to using digital technologies, most students can provide responses similar to those described below.

a. Organisation Communication Competence

As we can see from the chart, each responder has a different level and responds to questions in accordance with their degree of competence. The majority of respondents in this part (48 out of 102) are on level B2, which indicates that they routinely choose, modify, and mix various digital communication tools. Then, at a different level, the A2 level received responses from roughly 22 out of 102 respondents about the use of basic digital communication channels. According to 21 out of 102 respondents, they combine several communication methods to teach subject at the B1 level. 8 out of 102 respondents said that they reflect on, talk about, and proactively improve their communication strategy at the C1 level. 3 out of 102 respondents to the Level A1 questionnaire indicated that they seldom ever utilize digital communication channels.

b. Professional collaboration

Respondents were asked to provide information on their collaborative work in this area. According to the graphic, 39 out of 102 students are at level B2, indicating that they interact and share ideas and resources with academics outside of their organization. With 26 of 102 students responding that they collaborate with coworkers or utilize shared drives, the B1 level is the next level down in significance. They successfully completed 15 out of 102 questions at the A2 level. Occasionally, they share resources with their peers. At the C1 level, around 13 out of 102 students' responses indicated that they collaborate with other academics in an online network to produce content. A1 level is the last with the fewest responses around 9 of 102; while responding on this skill, students rarely receive the chance to work with other academics.

c. Reflective practice

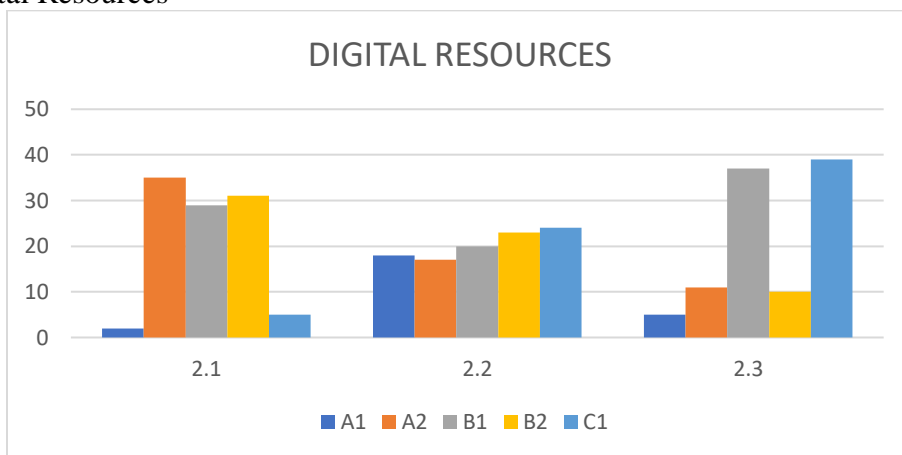
Participants were asked questions about how reflective practice has evolved into a crucial part of professional development in this area. According to the figure, 37 out of 102 students are at level B1, which indicates that they use a variety of tools to improve their digital teaching abilities. The B2 level, with 27 of 102 student responses, is the next level down, where students discuss with peers how to employ digital technology to improve educational practice. With a total of 24 out of 102 correct answers at the A2 level, I can develop my abilities via trial and reflection. About 11 out of 102 students at the A1 level had the time to work on their digital teaching techniques. Level C1, which has the

final and fewest answers (3 out of 102), is where candidates who assist colleagues in creating their digital teaching methods submit their answers.

d. Digital continuous

Respondents were asked in this area about how frequently they used digital sources and resources for professional development. According to the chart, 43 out of 102 students who are at level B1 have taken at least one or two online training sessions. The A2 level comes in second place with 21 of 102 student responses, and while they haven't participated yet, they are definitely interested. They had tested out a variety of different online training possibilities at the B2 level, completing a total of 18 out of 102 questions. Around 14 out of 102 students at the C1 level indicated in their responses that they often engaged in various forms of online training. The last competency with the fewest responses is the A1 level, which received 6 out of 102; in their response, they explain that this is a new area they have not yet examined.

2. Digital Resources



a. Selecting digital resources

Participants were asked questions about how to find, assess, and select digital teaching and learning resources in this area. According to the diagram, 35 out of the 102 students are at level A2, which indicates that they use search engines and resource platforms to discover pertinent information. The B2 level comes in a close second position with 31 of 102 student responses that compare resources using a variety of relevant criteria. They completed 29 out of 102 questions at level B1 and evaluated and chose resources based on how well they fit their learner group. Around 5 out of 102 students at the C1 level responded that they have advised colleagues on appropriate search tactics and resources. The A1 level, which has the fewest answers (2 out of 102), comes last. In answering questions related to this ability, students seldom ever utilize the internet to search resources.

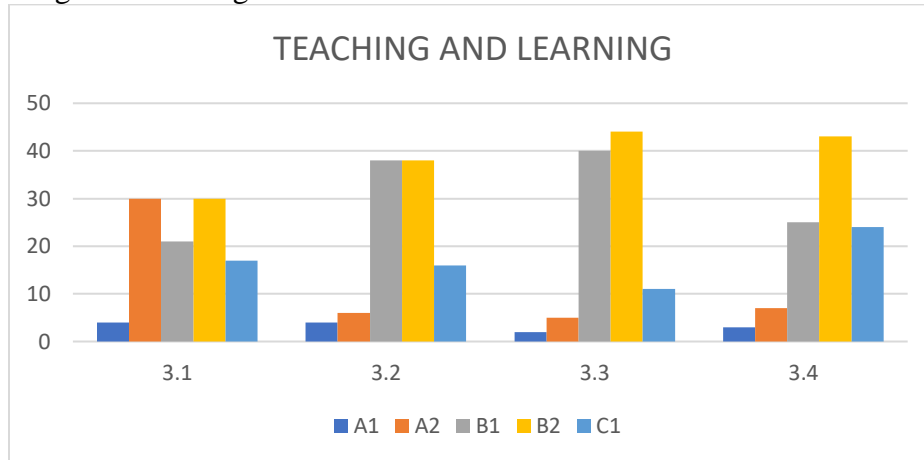
b. creating and modifying digital resources

Views of respondents about developing digital resources and organizing their use in this area. According to the figure, out of 102 students, 24 are on level C1, meaning they set up and modify complicated interactive resources. The B2 level takes second place with 23 out of 102 student responses stating they produce and adapt various materials. They produced digital presentations at level B1 with a total of 20 out of 102 answers, but not much more. Around 18 out of 102 students who took the A1 test said they did not make their own digital resources. The A2 level comes in last with 17 out of 102 answers. For this skill, students do use computers to make lecture notes or reading lists, but they print them out afterwards.

c. Managing, protecting and sharing digital resources

Respondents were asked on how to effectively protect sensitive digital data in this area. According to the graphic, 39 out of 102 pupils are level C1 students, indicating that they fully secure personal data. Level B1 is the next lowest level, with 37 out of 102 students responding that they safeguard some personal data. They avoided electronic storage of personal data at the A2 level, answering 11 out of a possible 102 questions. About 10 out of 102 pupils at level B2 said that they password protect files with personal data. The A1 level, which has the fewest answers (5 of 102), comes last. They did not need to comment on this skill because the department takes care of it.

3. Teaching and Learning



a. Teaching

Views of respondents about how to implement digital tools and resources in the educational process as well as how to plan for them in this section. As can be seen from the diagram, out of 102 students, 30 are on level A2, meaning they are using the equipment in a basic manner. Following that, the B2 level with 30 of 102 student responses is the following level with a similar number of responders and focuses on using digital technologies to methodically improve instruction. They completed 18 out of 102 questions at level B1 using a range of digital teaching techniques. Around 17 out of 102 students at the C1 level indicated in their replies that they employ digital technologies to apply cutting-edge pedagogical practices. The A1 level is the final one with the fewest responses (4 out of 102), and they claim that they actually rarely or never used technology in the classroom.

b. Guidance

Participants were questioned about using digital tools and services to enhance one-on-one and group interactions with learners both within and outside of formal learning sessions. According to the graph, 38 out of the 102 students are at level B1, meaning they occasionally check in on them and their conversations. The following level, level B2, had an identical number of responders, with 38 of the 102 student responses indicating that they constantly track and evaluate the internet behavior of my pupils. At the C1 level, where they completed 16 out of 102 questions, they frequently interjected with encouraging or remedial remarks. The final score was level A1, or 6 out of 102, and they advised me not to use digital settings with my kids.

c. Collaborative learning

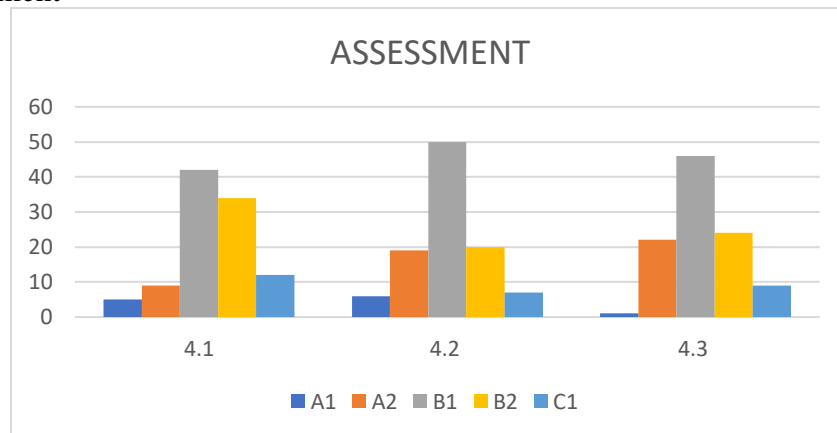
Respondents were questioned in this area regarding empowering students to use digital technology in group projects as a means of enhancing communication, cooperation, and collaborative knowledge creation. As can be seen from the diagram, 44 out of 102 students are at level B2, which implies that the assignment calls for groups of students to do online research and submit their findings in a digital format. Level B1, which has 40 of 102 student

responses, is the next level below. They advise groups of students to conduct online research or present their findings in digital format. In a cooperative online environment, students at the C1 level discuss arguments and collaboratively produce knowledge, scoring an overall 11 out of 102 correct answers. Around 5 of 102 answers at the A2 level. They are unable to incorporate digital tools into group projects. The A1 level, which had the fewest responses (2 out of 102), concludes that their pupils do not collaborate in groups.

d. Self-regulated learning

Respondents were asked to answer questions on Using digital technology to aid learners' self-regulated learning, that is, allowing learners to plan, monitor, and reflect on their own learning, offering proof of progress, sharing ideas, and developing new solutions. According to the graphic, 43 out of 102 students are at level B2, which indicates that they employ a range of digital resources to help pupils plan, record, or reflect on their learning. The B1 level is the next level below, with 25 of the 102 student responses, and they occasionally utilize quizzes for self-evaluation. A total of 24 out of 102 students at the C1 level successfully integrated various digital tools into their responses, enabling them to plan, monitor, and reflect on their progress. Students at the A2 level do reflect on their learning, but not using digital tools, as evidenced by the total of 7 out of 102 questions they correctly answered. The A1 level, which has the least responses (3 out of 102), comes last. In response to this skill, they indicate that it is not conceivable in their work environment.

4. Assessment



a. Assessment strategies

Respondents were questioned about how to evaluate pupils utilizing digital technology for both formative and summative reasons and use digital assessment formats to monitor student progress in this area. According to the graphic, 42 out of 102 pupils who were at level B1 responded correctly. They occasionally employ a digital tool, like a quiz, to evaluate the development of the students. The B2 level is the next level below, with 34 of the student responses to the 102 total questions used to track students' development. Around 12 out of 102 student responses at the C1 level were correctly answered. To systematically track student development. They do routinely check on pupils' progress at the A2 level using a 9 of 102 answer count, but not by digital methods. The A1 level, which has the fewest answers (5 out of 102), is last. At this competency, pupils' progress is not tracked.

b. Analysing evidence

In this part, respondents were questioned about how to produce, choose, critically analyze, and interpret digital data on learner activity, performance, and progress in order to inform teaching and learning. As can be seen from the figure, out of 102 pupils, 50 are on level B1, therefore when determining which children require further help, data on student activity

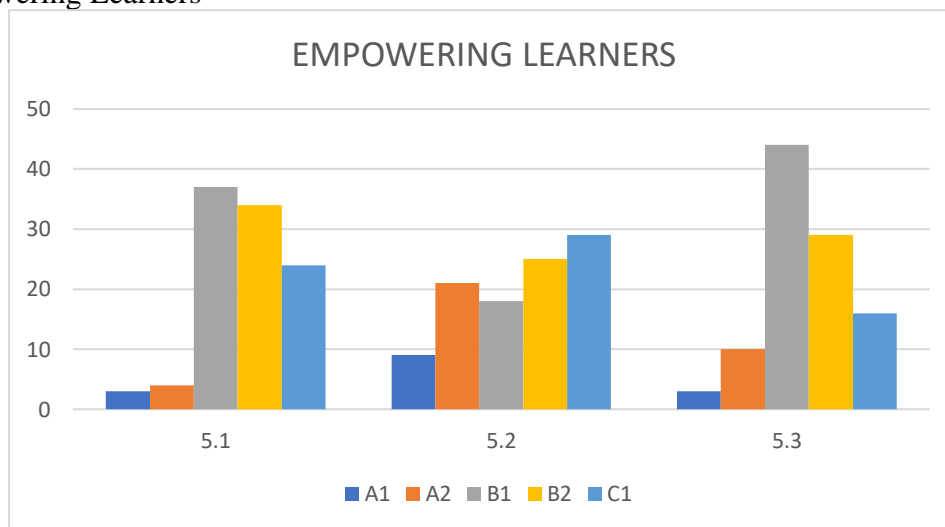


and behavior is also taken into account. The B2 level, which has 20 of 102 student responses, is the level after that. This level routinely screens all available evidence to identify pupils who require extra help. About 19 out of 102 pupils at the A1 level exclusively analyzed academically pertinent data, such as performance and grades, in their replies. They solved 7 out of 102 questions correctly at the C1 level by methodically analyzing the facts and immediately intervening. The last skill with the fewest answers was level A1, which scored 6 out of 102. In their response, they said that the competency's requirements were not met or that it was not their job to analyze the data.

c. Feedback and planning

In this section, respondents were asked to answer questions regarding using digital technology to deliver useful feedback. As seen in the picture, 46 out of 102 students are on level B1, meaning they answer questions. They occasionally employ digital tools to collect input, such as comments or "likes" in online forums or automated grades in online tests. The B2 level, which has 24 of 102 student responses and uses a variety of digital techniques for delivering feedback, is the next level below. About 22 out of 102 student responses at the A2 level were correct; however, feedback is not given to students digitally. They used a total of 9 out of 102 questions at the C1 level, and they consistently employ digital techniques to offer feedback. The last skill with the fewest answers is level A1, which has a score of 1 out of 102. They respond that their workplace does not require feedback.

5. Empowering Learners



a. Differentiation personalisation

Respondents were asked to answer questions on ensuring that all learners, including those with special needs, had access to learning materials and activities in this section. Learners' (digital) expectations, abilities, uses, and misconceptions, as well as their environmental, physical, or cognitive limitations in using digital devices, must all be examined and addressed.

As shown in the diagram, the majority of students on level B1 are about 37 of 102, indicating that they adjust the work to reduce obstacles. The B2 level is the next highest, with 34 of 102 student responding saying they address potential issues with pupils and suggest solutions. At level C1, approximately 24 of the 102 responses students provided allowed for diversity, e.g. I adjust the work, debate solutions, and suggest alternate methods for accomplishing the job. Students do not have difficulty using digital technology at the A2 level, with a total of 4 of 102 responses. The A1 level has the fewest answers (3 of 102), and they do not generate digital assignments for this ability.

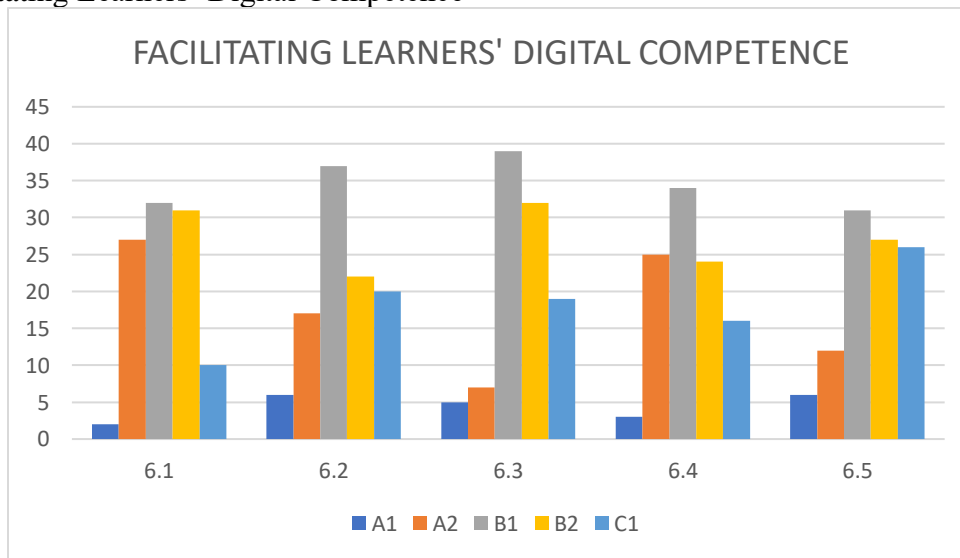
b. Accessibility and inclusion

Respondents were asked to answer questions on using digital technology to serve the specific learning needs of children by allowing them to proceed at varied levels and speeds, as well as follow their own learning pathways and objectives, in this area. As seen in the diagram, the majority of students on level C1 are about 29 out of 102, indicating that they systematically alter my teaching to match to students' particular learning requirements, preferences, and interests. The B2 level is the next highest, with 25 of 102 students responding that they use digital tools to give varied learning opportunities whenever feasible. At the A2 level, they do make recommendations for extra resources to around 21 of 102 students' replies. They give optional digital tasks for people who are advanced or trailing behind at level B1 with a total of 18 of 102 answers answered. Level A1 has the fewest answers (9 of 102), and they answer on this skill in their work environment; all students, regardless of level, are expected to undertake the same tasks.

c. Actively engaging learners

Respondents were asked to answer questions concerning digital technology in order for students to actively engage in lessons in this area. As seen in the figure, the majority of students on level B1 answer 44 out of 102 questions. They employ motivational stimuli, such as films, animations, and cartoons, while educating. The B2 level is the next highest, with 29 of 102 answers provided by students. My pupils use digital media in my classrooms, such as electronic worksheets, games, and quizzes. At the C1 level, approximately 16 of 102 students' responses were correct. My students use digital technology to study, discuss, and produce knowledge in a methodical manner. At the A2 level, they engaged pupils actively with a total of 10 of 102 answers, but not with digital technology. The A1 level has the fewest answers (3 of 102), and they answer on this competency. It is not feasible to effectively engage pupils in class at my workplace.

6. Facilitating Learners 'Digital Competence



a. Information and media literacy

Respondents were asked to answer questions on teaching children how to assess the dependability of information and identify misinformation and prejudice in this area. As noted in the diagram, the majority of students on level B1 are around 32 out of 102, indicating that they educate them how to distinguish between dependable and untrustworthy sources. The B2 level is the next highest, with 31 of 102 responses students provide. They explain with pupils how to verify the correctness of material. At the A2 level, approximately 27 of 102 students' answers were answered, and they were reminded

on occasion that not all online material is accurate. At the C1 level, they fully discuss how information is formed and can be manipulated, answering 10 of 102 questions. The A1 level has the fewest answers (2 of 102), and they answer on this competency. This is not feasible in my topic or in my workplace.

b. Digital communication and collaboration

Respondents were asked to answer questions on setting up assignments that require students to use digital tools to interact and work with one another or with an outside audience in this area. As observed in the diagram, the majority of students on level B1 are about 37 out of 102, indicating that they mostly employ digital communication and collaboration among themselves. The B2 level is the second most popular, with 22 of 102 student responses indicating that students utilize digital methods to interact and collaborate with one another and with an external audience. At the C1 level, they methodically provide assignments that allow students to gradually increase their skills, with roughly 20 of 102 students' replies replied. Only on rare instances are my students needed to converse or cooperate online at the A2 level, with a total of 17 of 102 responses. The A1 level has the fewest answers (6 of 102), and they answer on this competency. This is not feasible in my topic or in my workplace.

c. Digital content creation

Respondents were asked to answer questions on setting up assignments that required students to generate digital content in this area. According to the graphic, the majority of pupils on level B1 are approximately 39 out of 102, indicating that they answer Sometimes for diversion and inspiration. The B2 level is the second most popular, with 32 of 102 student responses indicating that students generate digital content as a vital component of their studies. At level C1, approximately 19 of 102 students responded This is an important component of their learning, and I gradually increase the level of difficulty to help them build their abilities. They answered 7 out of 102 questions at the A2 level. This is tough to put into practice with my kids. The A1 level has the fewest answers (5 of 102), and they answer on this competency. This is not feasible in my topic or in my workplace.

d. Responsible use

Respondents were asked to answer questions on teaching, how to behave safely and responsibly online in this area. As noted in the diagram, the majority of students on level B1 are approximately 34 of 102, indicating that they explain the fundamental norms for operating safely and responsibly in online situations. The A2 level is the second most popular, with 25 of 102 students responding. They advise kids to be cautious while sending personal information online. We debate and agree on the rules of behaviour at the B2 level, with around 24 of 102 students responding. At the C1 level, they replied methodically develop my pupils' usage of social rules in the many digital environments we utilize with a total of 16 of 102 responses. The A1 level has the fewest answers (3 of 102), and they answer on this competency. This is not feasible in my topic or in my workplace.

e. Digital problem solving

Respondents were asked to answer questions regarding encouraging pupils to use digital tools creatively to address tangible issues in this area. As seen in the diagram, the majority of students on level B1 answer 31 out of 102 questions. Occasionally, whenever an occasion presents itself. The B2 level is the second most popular, with 27 of 102 answers provided by students. We frequently test technical solutions to challenges. Around 26 of 102 students' replies at the C1 level systematically combine chances for innovative digital problem solving. With a total of 12 of 102 answers at the A2 level, they seldom have the opportunity to encourage pupils' digital problem solving. Level A1 has the fewest answers

(6 of 102), and they answer on this competency. This is not doable with my pupils or in my workplace.

### 3.2. Discussion

In discussion, the researcher tried to answer the research question consisted of: "What is the digital competence level of an English Foreign Language Pre-Service Teacher?". The description of those research questions is presented below:

Based on the 6 level of students of pre service teacher that have analyzed, the researcher identified 102 students of English education in the data. In the overall calculation, there are 33 universities which are 14 private and 19 public university. Then, 86 females and 16 males, The majority of the respondents in this study were female English education students.

Based on the 102 English Education Student that have level analyzed, the researcher identified 22 competences of digital competence. In the overall calculation, there are 22 questions which are considered as represented of competence. Then, based on the findings, the most respondent have level B2, around 48% it means they have the good level of digital competence as a pre-service teacher. On other levels, there are variances. As we can see at the B1 level, up to 35% of the remaining students have the highest level, indicating that they are qualified to become instructors in the present. The third is a 10% C1 level with digital preparation that can accommodate all of the applications of cutting-edge technology in teaching materials. The lowest level, A1, has a presentation of 1% and is at the A2 level, which has an 8 percent presentation.

Based on proficiency levels, characteristics apply to different competence stage:

Newcomer (level A1): if their score is between 0 and 17 this means they have the opportunity to start honing your digital technology abilities. This survey's responses have highlighted a variety of activities you may take. Choose one or two to begin with throughout the following learning session, with the goal of substantially improving your teaching skills. As they do so, they will advance to the next level of digital proficiency, the Explorer level.

Explorer (A2): if their score is between 18 and 35 This indicates they are aware of the possibilities of digital technologies and are eager to learn more about how to use them to improve pedagogical and professional practice. They have begun to use digital technology in some areas and will benefit from more regular use. They may improve their competency by interacting and exchanging ideas with colleagues, as well as expanding their repertoire of digital practices and abilities. This advances them to the next level of digital competence, Integrator.

Integrator (B1): if their score is between 36 and 53 This implies that you test digital technologies in a number of settings and for a variety of reasons, including them into many of your operations. You creatively apply them to various parts of your professional activity. You are keen to broaden your practicing repertoire. You will benefit from gaining a better grasp of which tools function best in specific contexts, as well as how to match digital technology to pedagogical ideas and methodologies. Expert, try to allow oneself more time for contemplation and adaptation, supplemented by collaborative encouragement and information sharing, before moving on to the next level (B2).

Expert (B2): if their score is between 54 and 69 This means you can confidently, creatively, and critically apply a variety of digital technologies to better your professional responsibilities. You consciously choose digital technology for certain scenarios and strive to comprehend the advantages and disadvantages of various digital tactics. You are inquisitive and open to new ideas, aware that there are many things you have yet to try. You employ experimentation to broaden, structure, and consolidate your arsenal of strategies. Share your knowledge with other [educators] and keep refining your digital methods to obtain the Leader (C1) level.

Leader (C1): if their score is between 70 and 87 This implies you have a consistent and complete strategy to enhancing pedagogical and professional practices with digital technology. You rely on a diverse set of digital methods from which you know how to select the best one for

each given occasion. You are always reflecting on and improving your methods. You stay up to speed on new discoveries and ideas by exchanging ideas with colleagues, and you assist other educators realize the potential of digital technology for improving teaching and learning. If you're willing to try new things, you'll be able to advance to the last level of expertise, Pioneer.

Pioneer (C2): if their score is above 88 This suggests you are questioning the efficacy of current digital and pedagogical techniques as a Leader. You are worried about the limitations or downsides of existing techniques and are motivated by the desire to further innovate education. You explore with cutting-edge, complicated digital technology and/or create fresh teaching techniques. You are a leader in innovation and a role model for other [educators]. You should examine your performance by area to better grasp your personal competency profile. Unfortunately, calculating a reliable score by area is difficult due to the low number of elements employed in this program. However, to provide you a starting point for determining your respective shortcomings and strengths.

With the exception of the first level, Newcomer, the evolution of proficiency levels for all competencies is cumulative in the sense that each higher-level descriptor includes all lower-level descriptors (A1). For example, being an Expert (B2) means being able to subscribe to all statements at levels A2 through B2, but not those at C1 and C2. The absence of specific competencies, i.e., knowledge, abilities, or attitudes, present at the A2 or higher levels, characterizes the Newcomer (A1) level. Thus, Explorers (A2) have overcome the issues or questions that were at the Newcomer (A1) level.

#### 4. CONCLUSION

Based on the finding and discussion about the representation of digital competence of English student as a pre-service teacher in several university in Indonesia, the researcher concluded that generally the English student as a pre-service teacher have the good level in digital competence in teaching. It was proven by 102 students have a participation in this research. The majority of respondents (approximately 48 percent) have level B2, indicating that They fluently, creatively, and critically apply a variety of digital technologies to boost your professional operations. They actively choose digital technology for certain scenarios and attempt to comprehend the advantages and disadvantages of various digital tactics. They are inquisitive and open to new ideas, aware that there are many things they have yet to try. They employ experimentation to extend, structure, and consolidate your arsenal of techniques as a pre-service teacher. There are differences on other levels.

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