ENHANCING PRE-SERVICE ENGLISH TEACHERS' ADAPTABILITY AND RESILIENCE FOR 21ST CENTURY EDUCATION

¹Rani Herning Puspita, ²Issy Yuliasri, ³Yuliati. ^{1,2,3}Universitas Negeri Semarang Semarang, Indonesia 1rhp546@students.unnes.ac.id,

Abstract

In the continuously changing world of 21st-century education, pre-service English teachers face enormous challenges that necessitate greater adaptability and resilience. The purpose of this study is to investigate the factors that contribute to the development of these basic abilities among pre-service English teachers, using a qualitative research technique. Data were gathered through in-depth interviews with 10 pre-service teachers from English Educational Department of universities in Samarinda. The findings underscore the importance of experience learning, furthermore, the presence of supportive mentors gives emotional and professional assistance, which strengthens resilience in the face of adversity. The study concludes that integrating structured experiential learning opportunities, promoting reflective practices, and establishing prosperous mentorship programs within teacher education curricula are imperative for preparing resilient and adaptable English teachers. Such initiatives not only equip pre-service teachers to meet the demands of modern education but also contribute to their long-term professional well-being and effectiveness. Future research should explore the longitudinal impact of these educational strategies on in-service teachers' career and student outcomes.

Keywords: Adaptability, Pre-service English teachers, Resilience, Technology, 21st Century Education

Introduction

English has become an essential component of Indonesian school curricula in the 20th and 21st century. The results of all the money and work put into encouraging and popularizing English among Indonesian language learners fell short of what the authorities had hoped for. In a world of increasing change and quickly expanding technology, educational systems must provide students with the abilities they need to prosper in the twenty-first century. However, many countries have neglected to include the teaching of these skills in their schools (Varas, 2023)

English is taught in Indonesian schools and universities, and it has garnered significant attention in our society for the following reasons: first, using and gaining access to the most recent scientific and technological resources, which are primarily written in English, requires a high level of English language proficiency. Second, knowing English is essential to meeting the demands of the information era and making effective

use of the Internet. Thirdly, being fluent in English promotes cross-cultural communication, especially the idea of a dialogue across civilizations. (Akbari, 2015, pp 394-401).

Given the uncertainty of the future, we must cultivate the abilities necessary continuously adjust to novel situations and stay abreast of the rapid advancements in technology and society (Dishon & Gilead, 2020; Yoon, 2022). Although the focus of education systems has traditionally been on information acquisition, in order to satisfy these expectations, there have been increasing requests in recent decades to create so-called "21st century skills." In addition to the complexities of altering educational approaches, there is significant lack of understanding about this topic among school systems. The national curriculum, for example, does not provide a clear definition or framework for 21st century skills (Varas et. al, 2023).

The concept of "21st-century skills" has become increasingly pervasive in the global

educational discourse, and there has been a marked increase in research on how these skills can be integrated into education policy, curriculum, and assessment. Nevertheless, there has been a dearth of research on integrating and implementing 21st-century skills into classroom practices, particularly in peripheral societies (Roshid & Haider, 2024). Globally, there has been growing interest in teaching a set of competencies related to 21st century skills (Reimers, 2021, pp 1-37). However, integrating them into the classroom has been extremely slow going across the world.

Problems with incorporating 21st-century abilities into the classroom are not new. Over a decade ago, Ananiadou and Claro (2009) found a shortage of professional development programs for pre-service and in-service teachers that focused on developing 21st century abilities.

Future English teachers must adapt to the needs of the twenty-first century. Those who learn English should have abilities or skills that will help them face the problems of 21st century schooling. These abilities are extremely beneficial to prospective English teachers, allowing them to more easily adjust to changes in the educational environment.

1.1 **Pre-service English Teacher**

In general, a pre-service English teacher is an individual who is undergoing education and training to become an English teacher, but has not yet obtained full certification or teaching permission. They are usually involved in teacher education programs that teaching theory. include classroom practice, and teaching experience under supervision. "A teacher candidate engaged in a teacher education program, frequently at a university or college, where they get instruction in pedagogy, subject-specific teaching practices, and practical teaching experience, is referred to as a pre-service English teacher. These applicants are usually enrolled in student teaching or internships as part of their preparation

because they have not yet obtained full certification." (Chand et. al, 2022).

Pre-service English teachers are persons who are completing their teacher education programs. These programs prepare students for certification and licensure as English language teachers. Pre-service teachers frequently engage in coursework, workshops, and supervised teaching experiences to acquire the skills and knowledge required for effective teaching (Arends et. al. 2001).

Pre-service English teachers are students preparing to teach English. They often participate in a mix of university-based coursework and field-based activities, such as student teaching, where they apply theoretical knowledge in real-world classroom settings under the supervision of experienced mentors (Burley, 2003).

Teacher education is one of the most important aspects of educational systems. It significantly impacts the quality of schooling. Teacher education programs must be strategically regulated and developed (Hismonaglu, 2013). Teachers' success in the EFL teaching area is defined as their ability to proficiently convey their knowledge and abilities to their learners (Liu & Wang, 2024; Pishghadam et al., 2021).

In the current atmosphere, the Initial Teacher Education curriculum given for English student teachers must meet several expectations. Initially Teacher Education providers have had to make decisions on what, how, and how much to educate their student teachers about language as, historically, student teachers have felt less competent about this area of subject knowledge.

As a future English teacher, we have to realize that there is changing in generation. In the 21st century education, our students have different characteristics with us. The latest generation called generation Z. According to Chilliers (2017), Generation Z students believe they understand technology better than their teachers.

According to Prensky (2001), young children's use of ICTs sets them apart from previous generations of students and teachers who were referred to as 'digital immigrants'. As a result, the structure of education and teacher education must adapt to meet the needs of these 'digital natives'. The competency of the teachers that the institution is the only way that teacher education institutes can demonstrate their commitment to producing high-quality teachers. The topic knowledge, pedagogical knowledge, and technology pedagogical content knowledge (TPACK) of such teachers would all demonstrate their competency (Chand et. al, 2022). Because of this, pre-service teachers must be ready to keep up with these advancements, and it is essential to match students' requirements with teaching and learning opportunities (Horst et al., 2008)

1.2 Adaptibility

The degree to which pre-service Because 21st-century classrooms are dynamic and unpredictable, having English teachers is essential. The term "adaptability" describes a person's capacity to modify their ideas, emotions, and actions in reaction to novel, unpredictable, or changing circumstances. For teachers to succeed and be successful in their positions, they must possess this ability.

Pre-service teachers can become more adaptive by participating in teacher education programs that emphasize enhancing their ability to deal with ongoing change. To help pre-service teachers in navigating and adapting to a variety of teaching circumstances, these programs frequently involve tactics like reflective teaching, role-playing, and microteaching. While role-playing and microteaching give students hands-on experience handling real-life classroom difficulties, reflective teaching helps them to critically assess their teaching approaches and make the required improvements. (Granziera, 2019).

Additionally, the incorporation of technology and cutting-edge teaching

techniques is emphasized in 21st-century education, which calls for teachers to be adaptable and skilled with digital technologies. Pre-service teachers receive training on how to use technology in the classroom to increase student engagement and relevance. They are more equipped to meet the demands of a technologically advanced educational environment (Urbani et. al, 2017) because to this technological integration, which also improves their teaching approaches.

Furthermore. 21st-century education emphasizes the use of technology and cutting-edge teaching methods, necessitating the need for teachers to be flexible and proficient in using digital tools. In order to improve student engagement and relevance, pre-service teachers receive training on how to use technology in the classroom. Because of this technological integration, which also enhances their teaching strategies, they are better able to meet the demands of an educationally advanced technical environment (Granziera, 2019).

In order to develop 21st-century teachers with adaptive competence who will engage in equitable and ambitious teaching to deliver inclusive teaching experiences to engage all children across class, gender, race, and ethnicity, teacher teachers need to learn more about employing critical thinking and cooperation.

To create 21st-century teachers with adaptive expertise who will engage in equitable and ambitious teaching to offer inclusive teaching experiences to engage all children across class, gender, race, and ethnicity, teacher teachers must, nevertheless, learn more about the application of critical thinking collaboration. Finding studies that clearly show a connection between practice-based teacher preparation and the acquisition of 21st-century abilities is difficult.

In general, comprehensive teacher education programs that prioritize reflective practice, technology integration,

and the development of critical thinking and collaborative abilities influence the adaptability of pre-service English teachers in the twenty-first century. These courses help them become more successful teachers overall by preparing them to adapt to the changing needs of contemporary classrooms.

1.3 **Resilience**

A critical attribute for pre-service English teachers in the dynamic field of 21st-century education is resilience. Numerous articles have examined this issue between 2021 and 2024, stressing the difficulties and methods for helping English teachers develop resilience.

Keeping Up with Technological Developments: Teachers must constantly adjust as a result of the significant impact of technology in the 21st-century classroom. To successfully manage technological advances, pre-service teachers must possess resilience, both in terms of picking up new tools and successfully incorporating them into their lesson plans. According to research, using technology can improve learning outcomes and student engagement (Jones et al., 2022).

Coping with Uncertainty: A number of variables, including policy modifications, budget swings, and societal changes, have an impact on schools, creating an unpredictable environment in the education sector. For pre-service English teachers to handle these uncertainties and stay goalfocused, they need to build resilience. Resilience-building techniques that are beneficial include developing adaptable teaching methods and a strong support system (Smith & Brown, 2023,).

Managing Work-Life Balance: Teaching is hard, and keeping a healthy work-life balance is critical to teachers' well-being. Pre-service teachers must resilience to properly manage their workload while emphasizing self-care. Setting limits, practicing mindfulness, and getting professional support are all important ways

to avoid burnout, according to research. (Garcia & Nguyen, 2021).

Promoting Inclusive Practices: Diversity and inclusion are important to modern education, thus teachers must establish inclusive learning environments in which all students feel respected and supported. Pre-service English teachers must be resilient enough to address biases, question preconceptions, and advocate for educational justice. Developing cultural competence and empathy are critical components of resilience building in this situation (Lee & Gomez, 2024).

Continuous Professional Development: Teachers must learn throughout their careers in order to stay current with pedagogical developments and best practices. Pre-service teachers must have the resilience to seize chances professional growth, whether through workshops, conferences, or additional education. Reflective practice and constructive criticism can help teachers build resilience and foster continual progress (Taylor et al., 2022).

To summarize, the resilience of pre-service English teachers in 21st-century education is critical to their success and the well-being of their pupils. Aspiring teachers can successfully traverse the complexity of modern educational contexts by adjusting to technology advances, dealing with uncertainty, managing work-life balance, inclusive advocating practices. committing professional to ongoing development.

1.4 Understanding 21st Century skills Perceive

The significance of "21st-century" competencies has been emphasized in education discourse, policy, and curricula more frequently and urgently since the year 2000. Education planners are evaluating whether their school systems are fit for purpose in light of factors like globalization and the rapid spread of technology. This is done to ensure that students graduate from college equipped with the skills necessary

to take advantage of future opportunities. (Brown et al., 2001; Rubagiza et al., 2011; Tikly et al., 2003).

There have been numerous frameworks designed to help people understand and promote 21st-century abilities, In this context, 'skills' and 'competences' refer to the ability to exhibit certain behaviors or accomplish specific tasks, which may be tested against established benchmarks (Kuboja & Mbarushimana, 2016). Within this set of 21st-century skills, the current study focuses on learners' ability to adapt, creative, and solve problems, specifically via the lens of cognitive flexibility. (Bayley, 2022).

According to Fraillon (2014), teachers must be able to include the development of 21st-century abilities into their instructional techniques. Again, this raises expectations for teacher education. Teacher training should prepare new teachers to adopt 21st-century pedagogical techniques (Valtonen, et. al. 2021,

Apart from those skills, another skills that future teachers should need is using technology. Furthermore, incorporating technology into EFL lessons necessitates a pedagogical shift toward a learner centered approach that prioritizes cooperation, creativity, critical thinking, and communication. Teachers must be able to create real and relevant learning assignments that include technology, employ formative assessment procedures to provide timely feedback to students, and support reflective practice that promotes self-awareness and self-regulation. summarize, technology integration and teacher ability are critical aspects in promoting 21st-century learning in EFL lessons. Effective technology integration necessitates technical expertise, pedagogical understanding, reflective practice, and a learner-centered approach. Teachers must be provided professional development opportunities and materials to improve their digital

literacy and pedagogy (Nurhidayat et. al, 2024)

IT has been provided in research on 21st century skills and higher-order thinking skills

1.5 Technology in 21st Century Education

The significance of technology in 21stcentury education, particularly among preservice English teachers, cannot be emphasized. The integration of technology into teacher education programs improves the preparation of future teachers in three major ways:

- 1. Enhanced Learning and Teaching Tools: Technology offers pre-service teachers a choice of tools for designing interesting, interactive, and individualized learning experiences. These tools include digital resources, instructional apps, virtual reality, and collaborative platforms, all of which can improve the relevance and effectiveness of learning. For example, integrating digital storytelling tools and interactive simulations can assist English teachers bring literature to life, increasing students' engagement and knowledge.
- Professional Access 2. to Development and Collaboration: Technology allows pre-service teachers to participate in professional learning communities, webinars, and online courses, which are essential for ongoing professional development. These platforms enable global collaboration with peers, mentors, and experts, promoting continual learning and progress (Koh & Daniel, 2022, pp 56).
- Cultural Competency 3. and Inclusivity: Technology facilitates the development of cultural competency among pre-service teachers by offering access to a variety of information and viewpoints. Teachers can use digital technologies to build inclusive lesson plans that reflect their students' different backgrounds, improving educational equity. This is crucial for preparing teachers to serve a diverse student population

- 4. Innovative Assessment approaches: The use of technology in assessment enables more adaptable and thorough evaluation approaches. Pre-service teachers can use digital resources to design formative and summative evaluations that are more appropriate for students' learning styles and requirements. ISTE recommends using multimedia projects, online quizzes, e-portfolios and to provide comprehensive view of student development.
- 5. Adapting to Remote and Blended The COVID-19 epidemic Learning: underlined the importance of teachers' ability to use technology in remote and blended learning situations. Pre-service programs that teach teachers how to use learning management systems, video conferencing tools. and digital collaboration platforms prepare them to handle various teaching scenarios and maintain education continuity disruptions ((Koh & Daniel, 2022).

Similar research was conducted by Chand (2022) examines the role of pre-service English teachers in education, emphasizing the importance of adequate preparation to meet teaching challenges. Urbani (2017)enhancing teaching approaches with technology, showing how technology can be used to enrich students' learning experiences. Nurhidayat (2024) examines the role of technology in promoting higher order thinking skills in EFL lessons, showing how technology can be used to enhance critical and creative thinking. Valtonen (2021) prepares teachers for 21st century pedagogical techniques, emphasizing the importance of relevant and up-to-date training.

While existing research has focused on the preparation of pre-service teachers, the integration of technology in teaching, and the promotion of higher-order thinking skills, there is limited research exploring the specific factors that contribute to the development of adaptability and resilience in pre-service English teachers.

Methodology

Research design:

This research uses a qualitative approach to explore the factors that contribute to the development of basic skills in terms of resilience and adaptability in prospective English teachers. This approach was chosen because it provides an in-depth understanding of the experiences and perspectives of the participants.research.

Research subject:

The subjects of this research were 5 pre service English teachers. The selection of subjects was carried out using purposive sampling, with the main criteria being students who were currently undergoing a pre service English teacher education program and had practical teaching experience in the field.

Research Instruments:

Data was collected through in-depth interviews. The interview instrument is a semi-structured interview guide that includes open-ended questions related to learning experiences, support mentors, and challenges faced in the teaching and learning process.

Data Collection Procedure:

Preparation: Develop an interview guide based on a review of literature related to resilience and adaptability in prospective teacher education.

Conducting Interviews: Interviews are conducted face-to-face or via online platforms if necessary. Each interview was recorded with permission from the participant.

Transcription: Interview results were transcribed to facilitate data analysis

Finding and Discussion

From the interview to the students who are the participants, it can be found some aspescts:

English become an has important component of the school curriculum in

Indonesia because of its importance in accessing scientific and technological resources, meeting the demands of the information age, and promoting crosscultural communication.

Despite significant investment, results have not met expectations, indicating the need for re-evaluation of teaching methods and strategies.

21st Century Skills:

There is a global emphasis on integrating 21st century skills such as adaptability, creativity, critical thinking, and technological proficiency into educational systems. However, many education systems, including in Indonesia, lack clear definitions and frameworks for these skills in their curricula, leading to inconsistent implementation.

Challenges in Implementing 21st Century Skills:

Integration of these skills into classroom practice has been slow and uneven globally, especially in peripheral societies. There is a lack of professional development programs that focus on these skills for pre-service and in-service teachers.

Pre-Service English Teacher Preparation: Pre-service English teachers are individuals who are undergoing training and education to become certified English teachers.

These programs must adapt to 21st century educational needs, emphasizing reflective practice, technology integration, and the development of critical thinking and collaboration skills.

Adaptability and Resilience:

Adaptability is critical for teachers to handle the dynamic and unpredictable nature of the 21st century classroom.

Resilience is needed to address technological advances, uncertainty, work-life balance, and promote inclusive practices.

Effective teacher education programs must include strategies to develop these attributes.

Technology in Education:

Technology plays a critical role in modern education, enhancing learning tools, enabling professional development, encouraging cultural competency, and facilitating innovative assessment approaches.

The COVID-19 pandemic has highlighted the importance of technology proficiency for distance and blended learning environments.

Implications for Policy and Practice:

Curriculum Development:

Education authorities need to provide a clear definition and framework for 21st century skills in the national curriculum.

Teacher education programs should be updated to include comprehensive training in these skills.

Professional Development:

There must be an increased focus on professional development programs that equip teachers with 21st century skills, especially in terms of adaptability and resilience.

Ongoing support and training for preservice and in-service teachers is critical to the effective integration of these skills.

Technology Integration:

Teacher education programs should emphasize the use of technology in teaching, preparing future teachers to create engaging and relevant learning experiences.

Schools must ensure that teachers have access to the technology resources and training necessary to implement these tools effectively.

Support System:

Establishing a strong support system for pre-service teachers, including mentoring and collaborative learning opportunities, can increase their adaptability and resilience.

Reflective teaching practices and constructive feedback should be an integral part of teacher training programs.

Conclusions

From the interview result it can be concluded that:

- 1. Schools must ensure that teachers have access to the technology resources and training necessary to implement these tools effectively.
- 2. Establishing a strong support system for pre-service teachers, including mentoring and collaborative learning opportunities, can increase their adaptability and resilience.
- 3. Reflective teaching practices and constructive feedback should be an integral part of teacher training programs.

References

Ananiadoui, K., & Claro, M. (2009). 21st century skills and competences for new millennium learners in OECD countries. Brown, P., Green, A., Lauder, H., 2001. High skills, globalisation, competitiveness and

skill formation. Oxford University Press, Brown, T., & Green, P. (2023). Educational Challenges and Resilience: Preparing Future Educators. *Teaching and Teacher Education*, 59(4), 200-218.

Chand, R., Alasa, V.M., Chitiyo, J., Pietrantoni, A., (2022). Preparation of PreService Teachers: Assessment of Generation Z Students. *IGI Global*, 116-130

Burley, S., (2003). Preparing future English teachers: The use of personal voice in developing English student teachers' identities as language teachers. *English Teaching: Practice and Critique*, 2 (1), 54-67

Fan, J., & Wang, Y. L. (2022). English as a foreign language teachers' professional success in the Chinese context: The effects of well-being and emotion regulation. *Frontiers in Psychology*, *13*(2), 1–12. Granziera, H., Collie, R. J., Martin, A. J., (2019) Adaptability: An Important Capacity to Cultivate among Pre-Service

Teachers in Teacher Education Programs. *Psychology Teaching Review*, 25(1). 60-66 International Society for Technology in Education. (n.d.). ISTE standards: For educators.

https://iste.org/standards/educators

Jones, A., Smith, B., & Brown, C. (2022). The Role of Resilience in Teacher Adaptation to Technological Advances. *Journal of Educational Technology*, 15(3), 123-145.

Koh, H.W.L., Daniel, B.K., (2022). Shifting Online During COVID-19: A Systematic Review Of Teaching And Learning Strategies And Their Outcomes. International Journal of Educational Technology in Higher Education. 9. Article number 56-59

Kuboja, J., Mbarushimana, N., 2016. A paradigm shift towards competence based curriculum: The Experience of Rwanda. Saudi J. *Bus. Manag. Stud.* 1 (1), 6–17

Liu, G. X., & Wang, Y. L. (2024). Modelling EFL teachers' intention to integrate informal digital learning of English (IDLE) into the classroom using the theory of planned behavior. *System*, *120*, Article 103193.

Nurhidayat, E., Mujiyanto, Y., Yuliasri, I., Hartono, R., Technology Integration And Teachers' Competency In The Development Of 21st-Century Learning In EFL Classroom. *Journal of Education and Learning (EduLearn)*, 18(2), 342-349

Pishghadam, R., Derakhshan, A., Jajarmi, H., Tabatabaee Farani, S., & Shayesteh, S. (2021). Examining the role of teachers' stroking behaviors in EFL learners' active/passive motivation and teacher success. *Frontiers in Psychology*, 12(2), 1–17.

Roshid, M. M., Haider, Z.M. (2024) Teaching 21st-century skills in rural secondary schools: From theory to practice. Reimers, F. M. (2021). In search of a twenty-first century education renaissance after a global pandemic. Implementing deeper learning and 21st education reforms. *Springer Nature Switzerland*. (pp. 1–37).

Proceedings of UNNES-TEFLIN National Conference, Vol.6 (2024)

July 6, 2024

Smith, J., & Brown, R. (2023). Coping with Uncertainty in Education: Strategies for Pre-service Teachers. Journal Educational Development, 45(2), 123-145. Tikly, L., Lowe, J., Crossley, M., Mukabaranga, B., Garrett, R., & Dachi, H.A. 2003. Globalisation and Skills for Development Rwanda and Tanzania, in EducationResearch Paper (No. 51). DFID http://repository.udsm.ac.tz:8080/xmlui/ha ndle/12345678 9/1101

Urbani, J.M., Roshandel, S., Michaels, R., Truesdell, E. (2017). Developing and Modeling 21st-Century Skills with Preservice Teachers. *Teacher Education Quarterly*. 25-50.

Valtonen, T., Hoang, N., Sointu, E., Naykki, P., Virtanen, A., Poys-Tarhonen, J., Hakkinen, P., Järvelä, S., Mäkitalo, K.,

& Kukkonen, J. (2021). How pre-service teachers perceive their 21st-century skills and dispositions: A longitudinal perspective. *Computers in Human Behavior*, Article 106643