

# Teachers' Pre-Service Programs Curriculum to Prepare Professional Teachers at Education Faculties

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#### Abstrak

The competency of teachers has a significant impact on the quality of education. The Education Faculties should prepare the teacher to be a professional teacher. The research aim is to find out the the program should preservice program at faculties to ensure the qualified teacher in the future. The research methodology relies on a review of the relevant literature. The research findingwere the curriculum of the Teachers' Pre-Service program should be considered are pedagogy and instructional strategies, subject matter expertise, child development and educational psychology, inclusive education, classroom management, assessment and evaluation, teaching practicum, ethics and professionalism, digital literacy and educational technology by combining theoretical knowledge and practical experiences, the teachers'' pre-service program at faculties of education prepares aspiring teachers to become certified educators.

Keywords: pre-service teacher, education Faculty

#### Abstrak

Kompetensi guru memiliki dampak yang signifikan terhadap kualitas pendidikan. Fakultas Pendidikan harus mempersiapkan guru untuk menjadi guru yang profesional. Tujuan penelitian adalah untuk mengetahui program prajabatan yang harus dilakukan di fakultas pendidian untuk memastikan guru yang berkualitas di masa depan. Metodologi penelitian bergantung pada tinjauan literatur yang relevan. Hasil penelitian ini adalah kurikulum program prajabatan guru terdiri dari pedagogi dan strategi instruksional, keahlian mata pelajaran, psikologi perkembangan anak dan pendidikan, pendidikan inklusif, manajemen kelas, asesmen dan evaluasi, praktikum pengajaran, etika dan profesionalisme, literasi digital dan pendidikan teknologi dengan menggabungkan pengetahuan teoritis dan pengalaman praktis, program prajabatan guru di fakultas pendidikan mempersiapkan calon guru untuk menjadi pendidik bersertifikat.

Kata Kunci: guru prajabatan, Fakultas pendidikan

#### **INTRODUCTION**

Education plays an indispensable role in shaping the future of society. The students must be nurtured and a well-rounded learning environment must be fostered by competent teachers. Accoding to Calderón et al., (2021), the quality of teachers is essential in determining the overall education quality of a school or institution. A skilled, knowledgeable, and devoted teacher can significantly influence the learning experiences and outcomes of their students.

One of the assessments of Education Quality is PISA scores. The Organisation for Economic Cooperation and Development (OECD) administers the Programme for International Student Assessment (PISA) to measure the reading, mathematics, and science literacy of 15-year-olds (He et al., 2017). It evaluates how well students apply their knowledge and skills to real-world situations and aims to shed light on the efficacy of education systems in participating nations. On a scale with a mean of 500 and a standard deviation of approximately 100, PISA scores are reported. This means that the average score for all participating nations is set at 500, and individual nations' scores can be compared relative to this mean. A country with a PISA mathematics score of 540 would be considered to have higher performance than the OECD average, whereas a country with a score of 460 would be considered to have lower performance (Anderson et al., 2007).

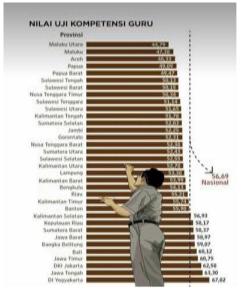
Every three years, PISA assessments are administered, and the results provide policymakers and teachers with valuable information to identify the strengths and weaknesses of their education systems, make improvements, and learn from the successful approaches of other nations(Karakolidis et al., 2016).

According to the results of the 2018 International Student Assessment Program (PISA) survey conducted by the Organization for Economic Cooperation and Development (OECD), Indonesia ranks 72nd out of 77 countries. In fact, the ability of students in Indonesia has declined over the past three years, as Indonesia ranked 62nd out of 72 countries on the 2015 PISA(KEMENDIKBUD, 2019).



Figure 1: PISA Scores

In 2018, the Indonesian Ministry of Education and Culture did a test for all teacher in Indonesia. The 2018 UKG (Teacher Competency Test) score was to test the teacher's competency. The Ministry of Education and Culture aims for the 2018-2019 school year to have an average UKG score of 70. The UKG national average, based on UKG results 2018, is 56.67, The information in the picture below pertains to the Teacher Competency Test (*Nilai Hasil UKG Dan PPG Se Indonesia*, 2028).



Sources: Indonesian ministry of education

It conforms that the competence of teachers has a significant impact on the quality of education. A competent teacher possesses the knowledge, abilities, and attitudes necessary to facilitate learning and create a positive and productive learning environment(Dalinger et al., 2020). The competency of teachers has a significant impact on the quality of education because teachers are at the center of the educational process. They play a significant role in shaping the learning experiences and outcomes of students(Nousheen et al., 2020).

Competence is essential for providing a quality education. Not only do effective teachers impart knowledge, but they also motivate and equip students to become lifelong learners(Nousheen et al., 2020). They are capable of molding young minds, influencing students' attitudes toward learning, and preparing them for success in both academic and personal endeavors. To improve the quality of education, it is crucial to recruit, train, and support teachers who can have a positive impact on students' lives (Alanko, 2018).

That why the Education Faculties should prepare the teacher to be a professional teacher. Teachers play a crucial role in shaping the future of education; therefore, education faculties must prepare them to be professional teachers(Halamish, 2018). By providing aspiring teachers with the necessary knowledge, skills, and experiences, education faculties ensure that teachers are wellequipped for professional success. These faculties emphasize pedagogy, subject matter expertise, child development, classroom management, and inclusive education in order to cultivate competent and effective teachers(Rahmadi et al., 2020a). Teaching practicums provide students with handson experience under the supervision of a mentor, preparing them for real-world challenges(Schina & Valls-Bautista, 2021). A focus on ethics and professionalism encourages responsible teaching practices, continuous whereas professional development promotes lifelong learning. Education faculties ensure that teachers meet entry-level standards for the profession by requiring certification(Baxter & Jack, 2015). Overall, it is the responsibility of education faculties to cultivate a generation of skilled and devoted teachers who will have a positive impact on the lives of students and contribute to the advancement of the education system (Calderón et al., 2021).

The responsibility of education faculties is to equip prospective teachers with the necessary knowledge, skills, and competencies to excel in the classroom. They provide a thorough and wellrounded education that extends beyond subject matter expertise. Professional teachers must have a comprehensive understanding of pedagogy and teaching techniques (Ahmed Abdulwahed Ismail & Mohamed Jarrah Asst, 2019). Prospective teachers are instructed in a variety of instructional strategies and techniques designed to engage students and foster effective learning experiences by faculties of education.(Awad & Barak, 2018)

Teachers must have a comprehensive understanding of child development and psychology in order to create supportive learning environments. Education programs emphasize the significance of understanding how students learn and develop at various ages. Modern education is significantly impacted by inclusive education. Education faculties prepare teachers to address the needs of diverse students, ensuring that every student feels included and appreciated(Anderson et al., 2007). Management of the classroom is a crucial ability for maintaining an organized and productive learning environment. Education programs instruct aspiring teachers on how to discipline, establish routines, manage and encourage positive behavior. Evaluation and feedback are essential for monitoring student providing development and constructive direction(Rahmadi et al., 2020b). Education programs instruct aspiring teachers on how to assess student learning and provide constructive encourage feedback to growth. Teaching practicums provide prospective teachers with invaluable hands-on experience, allowing them to apply their knowledge in actual classroom settings under the supervision of experienced mentors(Ö. Demirkan, 2019). Professionalism and ethics are fundamental to the teaching profession. To ensure responsible and respectful teaching practices, education programs instill ethical values and professional standards in future teachers(Koşar, 2021).

The previous reseach which was done by Angela (2005) focused the using of technology in preservice curricum. Fackler, S., Sammons, P., & Malmberg (2021) focus on clasroom management for preservice teacher instructios. Both of the resercher did not give the comprehensive appoach for preservice teacher curriculum. It is needed to comprehensive reseach about what the preservice teacher need in teacher training faculties to developt the future professional teachers.

Teacher pre-service programs' curriculum is vital for preparing professional teachers who can offer high-quality education, adapt to varied classroom contexts, and continuously improve their teaching skills. These programs are crucial to the functioning of the education system and the creation of well-rounded, knowledgeable, and effective educators. By getting professional teacher, theIndonesian education quality would increase and get better.

Continuing professional development is essential for teachers to remain abreast of the most recent educational research and best practices. Education departments emphasize the significance of lifelong learning as a means of sustaining continuous growth and development. Typically, meeting certification requirements is required to become a teacher(Karakolidis et al., 2016). Education departments assist aspiring teachers in meeting the necessary requirements to become certified teachers(Papadakis & Kalogiannakis, 2019). Education faculties play a crucial role in preparing teachers to be professionals by providing them with the knowledge, skills, and experiences necessary to excel in the classroom and positively influence the lives of their students. It is needed to explore the strategies in pre-service program at faculties of education. The reseach aim is to elucidate the comprehensive curriculum that teachers' training faculty should have to improve the pre service teacher skill ang prepare the future professional educators.

# METODE

The research methodology is based on a literature review. It used descriptive approach. The collection method data using the documentation method, where the author views or collects research in advance to collect information objectively and systematically. To collect the necessary data, the author will, at a later stage, collect books and other scientific works pertinent to the study of the teachers' pre-service program at faculties of education.

Within the framework of a literature review research methodology, the principal aim is to methodically scrutinize and assess extant academic literature pertaining to a certain subject or research inquiry. In contrast to empirical research, which entails the collection of novel data, a literature review entails the synthesis of facts, hypotheses, and viewpoints from preexisting academic sources. The preliminary literature review plays a crucial role in the research process by providing a fundamental stage in establishing the existing body of knowledge on the topic matter.

The participants in a literature review study consist of the academic sources that are being examined. The sources included in this collection are diverse, encompassing a broad array of resources such as peer-reviewed journal articles, books, conference papers, reports, and other scholarly works. The sources chosen for this study are determined based on their pertinence to the research inquiry and their potential to enhance the current understanding of the subject matter. The aforementioned sources jointly serve as the foundation around which the literature review is constructed.

The research approach employed for a literature review adheres to a systematic methodology. The initial step involves establishing a precise research topic or objective that serves as a guiding principle throughout the entirety of the evaluation process. Following this, a methodical approach is devised to effectively identify pertinent scholarly literature from academic databases, libraries, and other reliable sources. The establishment of selection criteria serves the purpose of determining the inclusion or exclusion of sources in the review. Upon selection, the designated materials are arranged and amalgamated in order to present a full overview of the subject matter.

Within the context of a literature review, the principal "materials" refer to the academic sources employed in the study. The selection of these with is conducted meticulous materials consideration of their congruence with the study question and aims. In contrast to empirical research, literature reviews do not utilize instruments or methods for the purpose of data collection. The primary objective of literature reviews is to analyze and interpret existing information, rather than to gather new data through means such as surveys, experiments, or observations.

The process of data collecting within a literature review entails the extraction of relevant information from the chosen scholarly sources. This encompasses significant discoveries, research approaches, conceptual frameworks, and any more pertinent information that enhances comprehension of the research subject. The data obtained from these sources functions as the primary material for further analysis.

The process of analysis within a literature study entails the amalgamation and elucidation of material acquired from the chosen sources. Common analysis techniques in academic research encompass content analysis, which entails the identification of prevalent themes and patterns within the existing literature; comparative analysis, which involves the juxtaposition of findings and arguments from diverse sources; critical appraisal, which entails the evaluation of the quality and credibility of sources; and the construction of conceptual frameworks or models based on the synthesized information. The primary objective of conducting an analysis within a literature review is to generate valuable insights, discover areas of research that have not been adequately explored, and present a cohesive narrative that contributes to the advancement of knowledge in the respective field of study.

The literature review research methodology entails a methodical examination and integration of pre-existing scholarly works pertaining to a particular subject or research query, wherein the focal point of investigation is the academic sources themselves. The process encompasses a systematic approach, gathering data from these aforementioned sources, and employing diverse analysis methodologies to extract significant findings and augment the current knowledge base within a specific discipline.

## **RESULT AND DISCUSSION**

The teachers' pre-service program at faculties of education lays the groundwork for aspiring

teachers to embark on their journey to become professional teachers. By combining theoretical knowledge with practical experiences, the program ensures that future teachers will be well-equipped to meet the challenges and seize the opportunities presented by the dynamic and constantly evolving field of education(Bedir, 2019). The teachers' preservice program at faculties of education is designed to prepare aspiring teachers to become professionals. This comprehensive program equips students with the knowledge, skills, and competencies necessary for professional success in the teaching field(Kamaruddin et al., 2022).

In recent decades, however, teacher preparation has undergone significant changes. The demand for more effective teaching strategies and the acknowledgement of the significance of ongoing professional development have led to the development of more sophisticated pre-service programs.According to Bedir (2019) The Pre-Service Program for Teachers in the Twenty-First Century takes into account modern advancements in education, technology, and research, ensuring that teachers are adequately prepared to face the challenges of the 21st-century classroom. The preservice program should cover the program imparts a thorough comprehension of educational theories, learning models, and best practices. The curriculum of the Teachers' Pre-Service Program is balanced between theory and practice. Typical components include the following;

#### Pedagogy and Instructional Strategies

Prospective teachers learn about various pedagogical approaches and instructional strategie is importat. Students are introduced to methods supported by empirical evidence that promote active learning, critical thinking, and student engagement.

Pedagogy and instructional strategies are fundamental educational components that aim to improve the teaching and learning process. Pedagogy is the science and art of teaching, which includes the methods, techniques, and approaches used by educators to facilitate effective learning experiences for students. Instructional strategies, on the other hand, are techniques and practices that teachers employ to deliver content and meaningfully engage students(Angeli, 2005).

According to (Sulistyawati & Kuswandono, 2022) Understanding the developmental stages of students and adapting teaching strategies to meet their cognitive, emotional, and social needs constitute pedagogy. It takes into account students' varied learning styles and preferences, recognizing that individuals learn differently and adapting instruction accordingly.

Accoding to Carter & Nunan (2001) Effective instructional techniques include lectures, discussions, demonstrations, hands-on activities, group work, and multimedia presentations, among others. Teachers may use direct instruction to impart information explicitly or inquiry-based strategies to encourage student exploration and discovery.

Integration of technology is gaining importance in contemporary pedagogy. Teachers use educational technology tools such as interactive whiteboards, online resources, and learning management systems to enhance instruction, develop interactive lessons, and facilitate blended or online learning (Karami et al., 2013).

Education's pedagogy and instructional strategies are dynamic and ever-changing fields. Effective educators are lifelong learners who continuously investigate new research and best practices to create engaging and meaningful learning environments for their students.

# Subject Matter Expertise

The program focuses on developing in-depth knowledge of the subjects that future teachers will instruct. Whether it's mathematics, science, languages, or social studies, aspiring teachers gain a firm grasp of the subject matter they will teach their students.

Subject matter expertise for teachers is a thorough and in-depth comprehension of the subject matter they are responsible for teaching in the classroom. It is a crucial aspect of effective teaching that enables educators to provide highquality instruction, engage students, and facilitate meaningful learning experiences. Subject matter expertise includes in-depth knowledge of the subject matter, familiarity with the curriculum, and the ability to convey complex concepts to students effectively.

A teacher has accumulated extensive knowledge in a specific field or topic, which is demonstrated by the person's degree, licensure, and/or years of professional experience with the subject.

Expertise in the subject matter is essential to effective teaching. It empowers teachers to deliver accurate and engaging instruction, foster critical thinking skills, and motivate students to develop a deeper appreciation for the subject. Subject matter expertise significantly contributes to the success of both teachers and students, ultimately enhancing the quality of education as a whole.

## Child Development and Educational Psychology

Child Development and Educational Psychology is effective teaching requires an understanding of how children learn and develop. Prospective teachers study child development and educational psychology in order to cater their lessons to the cognitive, social, emotional, and physical needs of their students.

Child development and educational psychology are two closely related disciplines that seek to comprehend how children grow, learn, and develop within the educational context. Both fields of study are necessary for educators and parents to create effective learning environments and foster the holistic development of children(Turdimurodov, 2021). Child development is the study of the physical, cognitive, emotional, and social changes that occur between infancy and adolescence in children. It investigates how the skills, abilities, and behaviors of children change over time(Mozahem et al., 2021)

Accoding to Turdimurodov (2021), child growth focuses on the changes in children's physical growth, motor skills, and overall health. It includes crawling, walking, and the development of fine motor skills, such as grasping objects and writing. Cognitive development is the study of how children acquire knowledge, problem-solving skills, and thinking abilities. It includes concepts such as memory, language development, attention span, and abstract concept comprehension. Emotional development is the study of children's emotional expression and regulation. It entails recognizing emotional cues, managing emotions, and cultivating empathy and self-awareness. Social development is the study of how children acquire social skills, establish relationships, and interact with others. It acquisition entails the of social norms. communication abilities, and cooperation.

Educational psychology is the application of psychological principles and scientific research to the field of education. It seeks to comprehend how individuals learn and how educational practices and strategies can be optimized to promote effective learning. The following are key areas of educational psychology: educational psychologists investigate a variety of learning theories, including behaviorism, constructivism, and socio-cultural theory. These theories explain how students acquire knowledge and abilities (Cucu & Mardiyati, 2019).

Educational psychologists develop and analyze assessment methods to accurately measure students' knowledge and abilities. In addition, they investigate how assessment data can inform instructional decision-making. Educational psychology is primarily concerned with identifying and accommodating individual differences among students. It requires an appreciation of various learning styles, cognitive abilities, and cultural backgrounds (Sasmita & Wantini, 2023).

Relationships between Teachers and Students related to quality of teacher-student relationships has a significant impact on learning outcomes. Educational psychology investigates methods for establishing positive and supportive teacher-student relationships. Educational Interventions Educational psychologists design and evaluate interventions to assist students who are struggling, those with learning disabilities, and those with other special educational needs. Child development and educational psychology are essential to comprehending how children learn and develop. By applying knowledge from these disciplines, educators can develop inclusive and effective teaching practices that cater to students' individual needs, promote motivation, and promote their overall development and well-being.

#### Inclusive Education

The pre-service education program emphasizes the significance of inclusive practices. Teachers-to-be learn how to create diverse and equitable learning environments that accommodate students with varying abilities, backgrounds, and learning styles(Magnússon et al., 2019).

Inclusive education is a philosophy and approach to education that emphasizes providing equal opportunities and access to education for all students, regardless of their diverse backgrounds, abilities, or differences. It emphasizes the importance of creating a learning environment that embraces and values diversity, ensuring that all students can participate in the educational process alongside their peers(Sharma et al., 2020).

Every preservice teacher must understand and embrace the concept of inclusive education. It seeks to create learning environments in which all students, regardless of ability, background, or learning style, feel welcomed, supported, and included. Preservice teachers must be aware of the following key inclusive education principles and practices such as diversity and differencetiated instruction(Mamadjanovna et al., 2022). Understanding Diversity means Preservice teachers must recognize and respect their students' diverse characteristics and needs, including those with disabilities, cultural differences, and linguistic differences. They should cultivate an inclusive mindset that views diversity as a strength in the classroom. Differentiated Instruction refers to cater to individual learning styles and abilities, inclusive education necessitates differentiated teaching methods. Preservice teachers should be prepared to adapt their teaching strategies and materials to meet the diverse needs of their students(Dally et al., 2019).

The key principles of inclusive education include recognizing and respecting the uniqueness of each individual, promoting equitable access to education, fostering collaboration between teachers, parents, and support staff, and employing differentiated instruction to meet the diverse learning needs of students(Mieghem et al., 2020).

Inclusive education improves learning outcomes, promotes social integration, and prepares students to thrive in a diverse and inclusive society by celebrating diversity(Singal, 2019). It contributes to enhanced self-esteem, confidence, and social skills among students and fosters an accepting and nurturing environment for all students(Saloviita, 2020).

Inclusive education is a transformative strategy that fosters a more compassionate and inclusive society in which every student has the opportunity to learn, grow, and succeed. It serves as a foundation for constructing a more equitable and harmonious educational landscape, which benefits both individual students and the larger community. The preservice techer must have adequate insigt about the inclunsive education.

### **Classroom Management**

Effective classroom management is indispensable for sustaining a positive and productive learning environment. Aspiring teachers are taught techniques for establishing routines, managing student behavior, and fostering a respectful learning environment.

Effective classroom management techniques are essential for fostering an environment conducive to learning(Fackler et al., 2021). Educational psychology offers insights into positive behavior promotion and discipline techniques(Kaya & Selvitopu, 2019).

classroom Teachers use management strategies and techniques to create a positive and conducive learning environment for their students. It involves maintaining discipline, encouraging student participation, and fostering a safe and respectful environment that facilitates effective teaching and learning. Effective classroom management maximizing is essential for instructional time, minimizing disruptions, and ensuring that every student has the opportunity to learn and achieve success(Larson et al., 2021).

Principal Elements of Classroom Rules Management are Establishing and Expectations. Teachers establish rules and behavior for expectations and academic performance that are clear and consistent. These rules should be communicated to students at the start of the academic year and reinforced on a regular basis(Franklin & Harrington, 2019).

Consequence Consistency is essential when applying consequences for misbehavior. Consequences that are just and appropriate help students understand the importance of following rules and promote responsible decisionmaking(Napitupulu et al., 2020).

Developing positive teacher-student relationships increases classroom trust and esteem. If they feel valued and supported by the teacher, students are more likely to respond positively to classroom expectations. Teachers should possess effective conflict resolution skills in order to address student conflicts and promote a peaceful and harmonious learning environmen(Aslan, 2022)t. According to Kaya & Selvitopu (2019) Advantages of effective classroom administration are;

- 1. Improved student engagement and academic achievement
- 2. Decreased disruptive conduct and distractions
- 3. Enhanced instructional time and efficiency
- 4. Improved student engagement and motivation
- 5. Positive student-teacher relationships and a conducive learning environment
- 6. Teachers and students report greater overall satisfaction.

The classroom management is an essential component of effective instruction. A wellmanaged classroom enables teachers to concentrate instruction, foster a positive learning on environment, and promote the academic and socialemotional development of all students. Effective classroom management lays the foundation for successful teaching and learning experiences proactive positive through strategies, reinforcement, teacher-student and strong relationships.

### Assessment and Evaluation

The program covers assessment techniques and strategies for evaluating student progress. Aspiring teachers are taught how to design and administer effective assessments, interpret results, and use data to inform instructional decisions.

Assessment and evaluation are essential components of the educational process that provide valuable information about students' progress, learning outcomes, and the effectiveness of instruction (Nova et al., 2021). Both assessment and evaluation assist educators in making well-informed decisions to enhance teaching and learning. Although the terms are frequently used interchangeably, they serve distinct functions and take different approaches (Wook, 2009).

Assessment is the ongoing process of collecting and analyzing information regarding students' knowledge, skills, and abilities. Its primary objective is to comprehend what and how well students are learning, to identify their strengths and weaknesses, and to inform instructional planning (Eckstein, 2019). Accoding to Hannemann et al.,(2019) Evaluations can take numerous forms, including: Fist Formative, summative, Performance-Based, and Alternative Assessments. Formative assessment is an assessment in the learning process, formative assessments are administered to monitor student progress and provide immediate feedback. They are diagnostic in nature and aid teachers in identifying improvement areas and adjusting instruction. Summative assessments are typically administered at the conclusion of a learning period to evaluate students' overall comprehension and

mastery of the content. These evaluations typically carry greater weight and are used for grading and reporting.

Performance-based assessments evaluate students' abilities to apply their knowledge and skills in authentic situations. These evaluations may consist of projects, presentations, or practical tasks. Standardized tests are used to measure the achievement of students in relation to a predetermined set of criteria. They provide a standardized and objective method for evaluating large student populations. Alternative assessments include non-traditional methods like portfolios, selfevaluations, and peer evaluations. These methods permit students to demonstrate their comprehension in novel ways.

Evaluation is the comprehensive and methodical assessment of educational programs, initiatives, and interventions. Its primary objective is to determine the efficacy, impact, and alignment of these initiatives with educational objectives (Papadakis & Kalogiannakis, 2019). Accoding to Tanwir (2015) Formative and summative evaluation is possible: Formative evaluation is conducted the program's development during and implementation. It evaluates the program's strengths and weaknesses, identifies improvement opportunities, and guides program refinement. After the completion of the program, a summative evaluation is conducted to assess its overall effectiveness and outcomes. It assists in determining whether the program's objectives have been met and whether the program should be continued, modified, or terminated(Tanwir, 2015).

Assessment and evaluation are essential components of the educational process. Assessment provides valuable insights into student learning and guides instructional strategies, whereas evaluation evaluates the efficacy of educational programs and informs program-level decisions. Together, they promote continuous improvement and improve the quality of education as a whole.

## **Teaching Practicum**

The teaching practicum is a crucial component of the pre-service education program. During teaching practicums, aspiring teachers are placed in actual classroom settings. Under the guidance of seasoned mentors, they apply their knowledge and skills to actual teaching scenarios.

Accoding to Tican & Deniz (2019), The teaching practicum, also referred to as student teaching or practicum placement, is an essential component of teacher education programs. It provides prospective teachers with hands-on classroom experience under the supervision of an experienced mentor teacher. The teaching practicum is a crucial requirement for becoming a certified and qualified educator, as it enables teacher candidates to apply the knowledge and theories they have acquired in their coursework to actual teaching situations (Angeli, 2005). The duration and structure of a teaching practicum can vary based on the teacher education program and school. Typically, it lasts between a few weeks and an entire academic semester. Throughout this period, teacher candidates gradually assume greater responsibility for lesson planning and delivery (Dalinger et al., 2020).

Teacher candidates are placed in actual classrooms with students at the grade level or in the subject area for which they are preparing to teach. Depending on the program's requirements and the candidate's interests, the placement may be in elementary, middle, or high school (Ariana, 2016). Each teacher candidate is assigned a mentor teacher who serves as a guide, supervisor, and role model for the duration of the practicum. The mentor teacher provides feedback, support, and professional development opportunities (Akayoğlu et al., 2020).

At the beginning of the practicum, teacher candidates primarily observe the mentor teacher's lessons. As they gain confidence and experience, they transition gradually to co-teaching, where they actively assist the mentor teacher in lesson planning and delivery. The teaching practicum provides candidates with the opportunity to practice classroom management strategies and create a positive and well-managed learning environment. Managing student behavior and maintaining a conducive learning environment are essential skills that are acquired during the practicum (Tashtoush et al., 2022).

Advantages of the Teaching Practicum are the teacher candidates gain valuable experience in applying theoretical knowledge to actual classroom The teaching practicum provides settings. candidates with the opportunity to develop and refine their instructional, classroom management, and evaluation skills. Teacher candidates develop professional relationships with experienced educators and potential future colleagues through networking. Practicum experiences increase teacher candidates' self-efficacy and confidence in their ability to teach effectively. Preparing for Licensure: Successfully completing a teaching practicum is frequently a prerequisite for obtaining a teaching license or certification. Teaching practicum is an essential component of teacher education programs that bridges the gap between theory and practice. It provides teacher candidates with practical experience, mentorship, and growth and reflection opportunities as they prepare to become competent and effective teachers in their own classrooms.

## Ethics and Professionalism

The peservice teacher program instills ethical principles and professional standards in future

teachers. They are educated on the responsibilities and ethical dilemmas inherent to the teaching profession. According to Yuliasih et al., (2020)Teacher ethics and professionalism are essential aspects of the teaching profession that guide educators in maintaining high standards of conduct, integrity, and commitment to their roles as learning facilitators. These principles govern interactions between teachers, students, colleagues, and the larger community, thereby ensuring a positive and productive learning environment.

According to (Ene et al., 2021) The essential components of educator ethics and professionalism are Ethical educators treat each and every student with respect, fairness, and dignity. They recognize and value the individuality, cultural background, and unique learning needs of each student, fostering a supportive and inclusive learning environment.

Teachers are required to maintain the privacy and confidentiality of their students and their families. Confidential information should be kept secure and shared only with relevant parties on a need-to-know basis (Tashtoush et al., 2022).

Ethical educators exhibit sincerity and integrity in every aspect of their professional practice. They uphold academic and assessment integrity and avoid plagiarizing or engaging in unethical conduct. Teachers maintain appropriate professional boundaries with their students, avoiding any behavior that could be construed as inappropriate or harmful. While maintaining a professional distance, develop positive relationships. Ethical they educators are committed to lifelong learning and career advancement (Solís-Espallargas et al., 2019). Ethical educators ensure that their instructional practices are devoid of bias or discrimination based on race, gender, religion, ethnicity, or any other factor. They create a learning environment that is safe and welcoming for all students (Shidiq & Yamtinah, 2019).

The preservice teachers must advocate for the needs and welfare of their students, but they must also maintain objectivity and fairness when making educational decisions(Halamish, 2018). Teachers with high ethical standards collaborate with colleagues, administrators, and parents to foster a supportive learning community and improve student outcomes. They have to handle conflicts and disagreements with professionalism and respect, seeking constructive solutions that prioritize the best interests of the students (Kopnina, 2020). Teachers present themselves in a professional manner, adhering to dress codes and exhibiting appropriate behavior both inside and outside of the classroom. Ethical educators avoid dual relationships that could compromise their professional judgment or generate conflicts of interest(McGarr & McDonagh, 2021a).

Adhering to high ethical standards and exhibiting professionalism not only upholds the integrity of the teaching profession, but also inspires students, parents, and society to have faith and confidence in teachers. Teachers with high ethical standards serve as role models for their students, inspiring them to become principled and responsible individuals. As professionals, teachers play a crucial role in shaping the future of society, and their dedication to ethics and professionalism is essential to fostering a positive and nurturing learning environment. As technology continues to play an important role in education, aspiring teachers are introduced to effective methods for integrating technology into their teaching to enhance student learning.

## Digital Literacy and Educational Technology

As technology plays an essential role in Society 5.0, pre-service teachers must be proficient in the use of digital tools and educational technology. The curriculum should include courses on digital literacy, teaching with technology, and the use of emerging technologies like artificial intelligence, virtual reality, and augmented reality to facilitate innovative and interactive learning experiences.

According to Akayoğlu et al. (2020) Educational technology and digital literacy are closely related concepts that play a significant role in contemporary education. They include the knowledge, skills, and attitudes required to effectively navigate, comprehend, and utilize digital learning and communication tools and resources.(McGarr & McDonagh, 2021b).

Digital Literacy is the ability to locate, evaluate, create, and communicate information using digital technologies. It requires both technical and critical thinking skills such as evaluating the credibility of online sources and comprehending privacy and security issues. Digital literacy enables individuals to be active and responsible digital citizens who can use technology effectively and ethically in a variety of contexts(Reisoğlu & Çebi, 2020).

According to Demirkan (2019) The digital literacy which the teacher must have information literacy, media literacy, digital communication, cybersecurity, and ethical literacy. Information Literacy is the ability to search for, access, evaluate, and critically apply information from diverse digital sources. Media Literacy is the ability to interpret and evaluate media messages, including those encountered in digital formats such as videos, social media, and online news. Digital Communicationis proficient use of digital communication tools, email, messaging including apps, video conferencing, and social media. Cybersecurity is the awareness of online safety practices and measures to protect personal data and information from cyber threats. Understanding the ethical and responsible use of technology, including respectful online behavior and awareness of digital rights and responsibilities, is the definition of digital citizenship.

EdTech refers to the integration of digital tools and resources into the teaching and learning process in order to enhance educational experiences. It includes a vast array of technological tools, applications, and software designed specifically for educational purposes. Various instructional models, including traditional classrooms, blended learning environments, and fully online courses, can utilize educational technology (Reisoğlu & Çebi, 2020).

The following are examples of educational technology: Learning Management Systems (LMS) online platforms that facilitate course are management, content distribution, and student evaluation(Akayoglu et al., 2020). Whiteboards and projectors that allow instructors to display and interact with digital content during lessons. Videos, animations, simulations, and digital textbooks that enhance learning experiences are Multimedia Resources(Tashtoush et al., 2022). Online Collaboration Tool is platforms that enable realtime collaboration between students and teachers on projects and assignments. Adaptive Learning Software is the programs that modify the content and level of difficulty based on the learning pace and needs of each student(Akayoglu et al., 2020). Virtual and Augmented Reality is technologies that immerse students in virtual environments in order to improve comprehension and engagement (Calderón et al., 2021).

Menurut Akayoglu et al.(2020) Digital literacy and educational technology offer these advantages such as Digital literacy and educational technology provide diverse and interactive learning experiences that are tailored to the individual learning styles and preferences of students. Global Connectivityi the technology enables students and teachers to connect with people and resources from around the globe, thereby fostering cross-cultural understanding and collaboration (O. Demirkan, 2019). Personalized Educational technology Learning enables personalized learning pathways, customizing content and instruction to meet the needs and interests of each student. Enhanced Student Engagement Interactive and multimedia resources capture and maintain students' interest throughout the learning process. Technology streamlines the assessment process, enabling faster and more detailed feedback on student performance.

Professional Development Digital literacy and educational technology also provide educators with access to professional development opportunities, online courses, and collaborative platforms, which is beneficial for their professional development. Digital literacy and educational technology are indispensable elements of contemporary education. Developing digital literacy skills enables students to thrive in a world dominated by technology, whereas integrating educational technology improves teaching and learning experiences, resulting in more engaging and effective educational outcomes. Adopting digital literacy and educational technology provides students and teachers with the tools they need to succeed in the digital landscape of the twenty-first century.

# CONCLUSION

### Conclusion

The Teachers' Pre-Service Program at faculties of education prepares aspiring teachers to become professional teachers by combining theoretical knowledge with practical experiences. The curriculum balances theory and practice, focusing on pedagogy and instructional strategies, subject matter expertise, child development, educational psychology, educational interventions. and Pedagogy is the science and art of teaching, while instructional strategies are techniques used to deliver content and engage students. Educational psychology is the application of psychological principles and scientific research to the field of education, focusing on learning theories, motivation, assessment methods, teacher-student relationships, and interventions. Inclusive education promotes equal opportunities and access to education for all students, regardless of their abilities, backgrounds, or learning styles.

Key principles of inclusive education include recognizing and respecting each individual, promoting equitable access, fostering collaboration between teachers, parents, and support staff, and employing differentiated instruction. The program also emphasizes effective classroom management, assessment techniques, evaluation, and digital literacy and educational technology.

# **DAFTAR PUSTAKA**

- Ahmed Abdulwahed Ismail, S., & Mohamed Jarrah Asst, A. (2019). Exploring Pre-Service Teachers' Perceptions of Their Pedagogical Preferences, Teaching Competence and Motivation. *International Journal of Instruction*, 12(1), 493–510. www.e-iji.net
- Akayoglu, S., Satar, H. M., Dikilitas, K., Cirit, N. C., & ... (2020). Digital literacy practices of Turkish pre-service EFL teachers. *Australasian Journal of ...*, 5(6), 87–89. https://ajet.org.au/index.php/AJET/article/vie w/4711
- Akayoğlu, S., Satar, H. M., Dikilitaş, K., Cirit, N. C., & Korkmazgil, S. (2020). Digital literacy practices of Turkish pre-service EFL teachers. Australasian Journal of Educational Technology, 36(1), 85–97. https://doi.org/10.14742/ajet.4711
- Alanko, A. (2018). Preparing pre-service teachers for home-school cooperation: Exploring

Finnish teacher education programmes. Journal of Education for Teaching, 44(3), 321–332. https://doi.org/10.1080/02607476.2018.14656

44

- Anderson, J. O., Lin, H. S., Treagust, D. F., Ross, S. P., & Yore, L. D. (2007). Using large-scale assessment datasets for research in science and mathematics education: Programme for International Student Assessment (PISA). *International Journal of Science and Mathematics Education*, 5(4), 591–614. https://doi.org/10.1007/s10763-007-9090-y
- Angeli, C. (2005). Transforming a teacher education method course through technology: Effects on preservice teachers' technology competency. *Computers and Education*, *45*(4), 383–398. https://doi.org/10.1016/j.compedu.2004.06.00 2
- Ariana, R. (2016). Penggunaan Aplikasi Merdeka Mengajar dalam Meningkatlan Hasil Belajar Siswa pada sekolah Penggerak. Jurnal Ilmiah Pendidikan Dasar, 07(2), 1–23.
- Aslan, S. (2022). An Analysis of the Primary School Teachers' Classroom Management Styles in Terms of Some Variables. *International Online Journal of Education and Teaching*, 9(2), 955–970. https://eric.ed.gov/?id=EJ1342691
- Awad, N., & Barak, M. (2018). Pre-service science teachers learn a science, technology, engineering and mathematics (STEM)oriented program: The case of sound, waves and communication systems. *Eurasia Journal* of Mathematics, Science and Technology Education, 14(4), 1431–1451. https://doi.org/10.29333/ejmste/83680
- Baxter, P., & Jack, S. (2015). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, *13*(4), 544–559. https://doi.org/10.46743/2160-3715/2008.1573
- Bedir, H. (2019). Pre-service ELT teachers' beliefs and perceptions on 21st century learning and innovation skills (4Cs). *Journal of Language and Linguistic Studies*, *15*(1), 231–246. https://doi.org/10.17263/jlls.547718
- Calderón, A., Scanlon, D., MacPhail, A., & Moody, B. (2021). An integrated blended learning approach for physical education teacher education programmes: teacher educators' and pre-service teachers' experiences. *Physical Education and Sport Pedagogy*, 26(6), 562–577.

https://doi.org/10.1080/17408989.2020.18239 61

- Carter, R., & Nunan, D. (2001). The Cambridge Guide to Teaching English to Speakers of Other Languages. Cambridge University Press. http://www.cambridge.org
- Cucu, C., & Mardiyati, I. (2019). Halaqah Keluarga Di Era Milenial Perspektif Psikologi Dakwah. *Raheema*, 6(2), 227–244. http://jurnaliainpontianak.or.id/index.php/rah eema/article/view/1399
- Dalinger, T., Thomas, K. B., Stansberry, S., & Xiu, Y. (2020). A mixed reality simulation offers strategic practice for pre-service teachers. *Computers and Education*, 144(September 2019), 103696. https://doi.org/10.1016/j.compedu.2019.1036 96
- Dally, K., Dempsey, I., Ralston, M. M., & ... (2019). Current issues and future directions in Australian special and inclusive education. *Australian Journal of Teacher Education*, 44(8), 97–123. https://doi.org/10.3316/informit.73744280783 6706
- Demirkan, O. (2019). Pre-Service Teachers' Views about Digital Teaching Materials. *Educational Policy Analysis and Strategic Research*, 2(2), 21–29. https://eric.ed.gov/?id=EJ1212874
- Demirkan, Ö. (2019). Pre-service Teachers' Views about Digital Teaching Materials. *Educational Policy Analysis and Strategic Research*, 14(1), 40–60. https://doi.org/10.29329/epasr.2019.186.3
- Eckstein, M. A. (2019). A cross-sectional survey evaluating transgender-related care education in United States pharmacy school curricula. *Currents in Pharmacy Teaching and Learning*, *11*(8), 782–792. https://doi.org/10.1016/j.cptl.2019.04.005
- Ene, C. U., Ugwuanyi, C. S., Okeke, C. I. O., Nworgu, B. G., & ... (2021). Factorial Validation of Teachers' Self-Efficacy Scale Using Pre-Service Teachers: Implications for Teacher Education Curriculum. *International Journal of ..., 10*(1), 113–212. https://eric.ed.gov/?id=EJ1286040
- Fackler, S., Sammons, P., & Malmberg, L. E. (2021). A comparative analysis of predictors of teacher self-efficacy in student engagement, instruction and classroom management in Nordic, Anglo-Saxon and East and .... *Review of Education*, 9(1), 203– 239. https://doi.org/10.1002/rev3.3242

- Franklin, H., & Harrington, I. (2019). A review into effective classroom management and strategies for student engagement: Teacher and student roles in today's classrooms. *Journal of Education and Training Studies*, 7(12), 1–12. https://rune.une.edu.au/web/handle/1959.11/2 7556
- Halamish, V. (2018). Pre-service and in-service teachers' metacognitive knowledge of learning strategies. *Frontiers in Psychology*, 9(2), 2152–2152. https://doi.org/10.3389/fpsyg.2018.02152
- Hannemann, L., Uhde, G., & Thies, B. (2019). Evaluation of a classroom management training for future teachers. *Zeitschrift Für Bildungsforschung*. https://doi.org/10.1007/s35834-019-00255-1
- He, Q., von Davier, M., Greiff, S., Steinhauer, E. W., & Borysewicz, P. B. (2017). Collaborative Problem Solving Measures in the Programme for International Student Assessment (PISA). *Methodology of Educational Measurement and Assessment*, *April*, 95–111. https://doi.org/10.1007/978-3-319-33261-1\_7
- Kamaruddin, I., Uran, S. I. G., Kurniawan, A., Ningsih, W., Fathurrohmah, T., Amir, A., & Febrianti, A. N. (2022). *Manajemen Pendidikan*. Get Press.
- Karakolidis, A., Pitsia, V., & Emvalotis, A. (2016). Examining students' achievement in mathematics: A multilevel analysis of the Programme for International Student Assessment (PISA) 2012 data for Greece. International Journal of Educational Research, 79, 106–115. https://doi.org/10.1016/j.ijer.2016.05.013
- Karami, M., Karami, Z., & Attaran, M. (2013). Integrating problem-based learning with ICT for developing trainee teachers' content knowledge and teaching skill. *International Journal of Education and Development Using Information and Communication Technology* (*IJEDICT*), 9(3), 36–49.
- Kaya, M., & Selvitopu, A. (2019). A Meta-Analysis of the Effects of Some Factors on Teachers' Classroom Management Skills. *International Journal of Advanced Science and Technology*, 29(7), 3263–3271. https://dergipark.org.tr/en/download/articlefile/879985
- KEMENDIKBUD. (2019). Hasil PISA Indonesia 2018: Akses Makin Meluas, Saatnya Tingkatkan Kualitas. Kemdikbud.Go.Id. https://www.kemdikbud.go.id/main/blog/201

9/12/hasil-pisa-indonesia-2018-akses-makinmeluas-saatnya-tingkatkan-kualitas

- Kopnina, H. (2020). Education for the future? Critical evaluation of education for sustainable development goals. *Journal of Environmental Education*, 51(4), 280–291. https://doi.org/10.1080/00958964.2019.17104 44
- Koşar, G. (2021). Distance teaching practicum: Its impact on pre-service EFL teachers' preparedness for teaching. *IAFOR Journal of Education*, 9(2), 111–126. https://doi.org/10.22492/ije.9.2.07
- Larson, K. E., Pas, E. T., Bottiani, J. H., & ... (2021). A multidimensional and multilevel examination of student engagement and secondary school teachers' use of classroom management practices. *Journal of Positive ...*, *23*(3), 149–162. https://doi.org/10.1177/1098300720929352
- Magnússon, G., Göransson, K., & ... (2019). Contextualizing inclusive education in educational policy: the case of Sweden. *Nurdic Journal of Studies in Educational Policy*, 5(2), 67–77. https://doi.org/10.1080/20020317.2019.15865 12
- Mamadjanovna, K. M., Salaxiddinovna, M. G., & ... (2022). Current Problems of Training Pedagogical Staff for the Implementation of Inclusive Education. Australian Journal of Teacher Education, 44(8), 57–73. https://geniusjournals.org/index.php/erb/articl e/view/2539
- McGarr, O., & McDonagh, A. (2021a). Exploring the digital competence of pre-service teachers on entry onto an initial teacher education programme in Ireland. *Irish Educational Studies*, 40(1), 115–128. https://doi.org/10.1080/03323315.2020.18005 01
- McGarr, O., & McDonagh, A. (2021b). Exploring the digital competence of pre-service teachers on entry onto an initial teacher education programme in Ireland. *Irish Educational Studies*, 7(10), 129–131. https://doi.org/10.1080/03323315.2020.18005 01
- Mieghem, A. Van, Verschueren, K., Petry, K., & ... (2020). An analysis of research on inclusive education: a systematic search and meta review. *International Jornal of Inclusive Education*, 56(7), 187–195. https://doi.org/10.1080/13603116.2018.14820 12
- Mozahem, N. A., Boulad, F. M., & Ghanem, C. M.

(2021). Secondary school students and selfefficacy in mathematics: Gender and age differences. *International Journal of School and Educational Psychology*, 9(1), 142-S152. https://doi.org/10.1080/21683603.2020.17638 77

- Napitupulu, M., Walanda, D., Poba, D., & Pulukadang, S. (2020). Ace chemistry classroom management with LMS schoology. *The Learning and Technology Library*, *14*(12), 179–185. https://www.learntechlib.org/p/217768/
- Nilai Hasil UKG dan PPG Se Indonesia. (2028). Media GTK. http://ap2sg.sertifikasiguru.id/pub/index.php? pg=pretes
- Nousheen, A., Zai, S. A. Y., Waseem, M., & Khan, S. A. (2020). Education for sustainable development (ESD): Effects of sustainability education on pre-service teachers' attitude towards sustainable development (SD). *Journal of Cleaner ..., 37*(5), 32–46. https://www.sciencedirect.com/science/article /pii/S0959652619344075
- Nova, A., Arifin, Z., Jamaluddin, G. M., Faridah, E. S., & ... (2021). Evaluasi Dan Pengembangan Kurikulum Pendidikan Agama Islam. books.google.com. https://books.google.com/books?hl=en%5C& lr=%5C&id=FZ9BEAAAQBAJ%5C&oi=fnd %5C&pg=PA1%5C&dq=strategi+pengemba ngan+kurikulum+pendidikan+islam%5C&ots =iFiCZZHcXa%5C&sig=KH2wi-pkbhsyilIVANCXvJ7vKQ
- Papadakis, S., & Kalogiannakis, M. (2019). Evaluating a course for teaching introductory programming with Scratch to pre-service kindergarten teachers. *International Journal* of Technology Enhanced Learning, 11(3), 231–246.

https://doi.org/10.1504/IJTEL.2019.100478

- Rahmadi, I. F., Hayati, E., & Nursyifa, A. (2020a). Comparing pre-service civic education teachers' TPACK confidence across course modes. *Research in Social Sciences and Technology*, 5(2), 113–133. https://www.ressat.org/index.php/ressat/articl e/view/444
- Rahmadi, I. F., Hayati, E., & Nursyifa, A. (2020b). Comparing Pre-service Civic Education Teachers' TPACK Confidence Across Course Modes. *Research in Social Sciences and Technology*, 5(2), 113–133. https://doi.org/10.46303/ressat.05.02.7
- Reisoğlu, İ., & Çebi, A. (2020). How can the digital competences of pre-service teachers be

developed? Examining a case study through the lens of DigComp and DigCompEdu. *Computers and Education*, 156(103), 1–16. https://doi.org/10.1016/j.compedu.2020.1039 40

- Saloviita, T. (2020). Attitudes of teachers towards inclusive education in Finland. *Scandinavian Journal of Educational Research*, *34*(5), 123– 134. https://doi.org/10.1080/00313831.2018.15418 19
- Sasmita, R., & Wantini, W. (2023). Sekolah Ramah Anak Dalam Teori Belajar Humanistik Perspektif Psikologi Pendidikan Islam. *FOUNDASIA*. https://journal.uny.ac.id/index.php/foundasia/ article/view/57680
- Schina, D., & Valls-Bautista, C. (2021). An associational study: Preschool teachers' acceptance and self-efficacy towards Educational Robotics in a pre-service teacher training program. *International ..., 18*(28), 1– 20. https://doi.org/10.1186/s41239-021-00264-z
- Sharma, U., Armstrong, A. C., Merumeru, L., & ... (2020). Addressing barriers to implementing inclusive education in the Pacific. *International Jornal of Inclusive Education*, 24(6), 675–689. https://doi.org/10.1080/13603116.2018.15147 51
- Shidiq, A. S., & Yamtinah, S. (2019). Pre-service chemistry teachers' attitudes and attributes toward the twenty-first century skills. *Journal* of Physics: Conference Series, 1157(4), 1–8. https://doi.org/10.1088/1742-6596/1157/4/042014
- Singal, N. (2019). Challenges and opportunities in efforts towards inclusive education: Reflections from India. *International Journal* of Inclusive Education, 43(1), 156–163. https://doi.org/10.1080/13603116.2019.16248 45
- Solís-Espallargas, C., Ruiz-Morales, J., Limón-Domínguez, D., & Valderrama-Hernández, R. (2019). Sustainability in the university: A study of its presence in curricula, teachers and students of education. *Sustainability (Switzerland)*, *11*(23), 1–14. https://doi.org/10.3390/su11236620
- Sulistyawati, K. T., & Kuswandono, P. (2022). Students' Self-regulation in English Reading Comprehension during Online Class in Yogyakarta Private Senior High School. JET (Journal of English Teaching), 8(2), 209– 223. https://doi.org/10.33541/JET.V8I2.3493

- Tanwir. (2015). Dasar-Dasar dan Ruang Lingkup Evaluasi Pendidikan. *Jurnal Pendidikan Islam*, *13*(1), 56–57. https://ejurnal.iainpare.ac.id/index.php/alislah /article/view/490
- Tashtoush, M. A., Wardat, Y., Aloufi, F., & ... (2022). ... effect of a training program based on TIMSS to developing the levels of habits of mind and mathematical reasoning skills among pre-service mathematics teachers. *EURASIA Journal of ..., 18*(11), 1–12. https://www.ejmste.com/article/the-effect-ofa-training-program-based-on-timss-todeveloping-the-levels-of-habits-of-mind-and-12557
- Tican, C., & Deniz, S. (2019). Pre-service teachers' opinions about the use of 21st century learner and 21st century teacher skills. *European Journal of Educational Research*, 8(1), 181–197. https://doi.org/10.12973/eu-jer.8.1.181
- Turdimurodov, D. (2021). Preschool period: pedagogical aspect of education of will in a child. *Current Research Journal of Pedagogics*, 2(09), 47–51. https://www.masterjournals.com/index.php/cr jp/article/view/317
- Wook, T. S. M. T. (2009). Usability evaluation of graphic design for ilmu's interface. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 56(10), 514-519. https://doi.org/10.1007/978-3-642-02574-7 58
- Yuliasih, M., Suharyat, Y., & Najmulmunir, N. (2020). National Character Education Model based on Islamic Values. N Proceedings Of the 1st International Conference on Recent Innovations, 1(72), 2057–2066. https://doi.org/10.5220/0009939220572066