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Strategies for Leveraging ICT to Build Meaningful Learning in Pancasila Education Pancasila at MTsN Makassar

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Abstract. The urgency of this research arises from the need to strengthen meaningful Pancasila Education learning in madrasahs amid rapid digital transformation, particularly in integrating Information and Communication Technology (ICT) into pedagogical practices, assessment, and student character development. This study aims to analyze ICT utilization strategies in teaching, assessment implementation, and the development of meaningful learning in Pancasila Education at State Islamic Junior High Schools (MTsN) in Makassar. This research employed a descriptive qualitative approach. Data were collected through classroom observations, in-depth interviews, and documentation of lesson plans, teaching modules, digital media, and assessment instruments. The data were analyzed inductively through data reduction, data presentation, and conclusion drawing or verification. The findings show that Pancasila Education teachers have utilized ICT in both teaching and assessment processes. Eight ICT-based learning strategies were identified, namely blended learning using LMS, digital literacy, inquiry learning, collaborative learning, project-based learning, differentiated learning, problem-based learning, and discovery learning. The implementation of assessment covers diagnostic, formative, summative, and attitude assessment, supported by digital platforms such as Google Forms, Quizizz, LMS, CBT, WhatsApp, and digital portfolios. ICT utilization also supports meaningful learning by connecting cognitive, affective, and psychomotor aspects with students' real-life experiences. This study concludes that ICT becomes pedagogically meaningful when it is integrated with instructional design, digital assessment, and contextual learning activities. The novelty of this research lies in its integrated analysis of ICT-based teaching strategies, digital assessment, and meaningful learning in Pancasila Education within the madrasah context. This research contributes to the development of digital pedagogy and provides practical insights for strengthening Pancasila Education learning in Islamic junior high schools.

Keywords: *Information and Communication Technology; Pancasila Education; Digital Assessment; Meaningful Learning; Madrasah Digital Learning.*

INTRODUCTION

Education is a strategic process for developing students' intellectual, moral, social, and participatory capacities so that they can perform their roles as responsible citizens. In the context of a digital society, education is no longer limited to the transmission of knowledge but also serves to cultivate critical thinking, media ethics, digital literacy, and civic awareness. This transformation has significant implications for citizenship education because students are increasingly exposed to social, political, and cultural information through digital platforms. Therefore, learning needs to be designed not only to transfer civic knowledge but also to enable students to interpret values, evaluate information critically, and participate responsibly in democratic life.

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In Indonesia, Pancasila Education occupies a strategic position in shaping citizens who are characterized by morality, democracy, and social responsibility. Through Pancasila Education, students are guided to internalize the values of divinity, humanity, unity, democracy, and social justice in their personal, social, national, and state lives. Susanto (2021) emphasizes that citizenship education functions as a medium for internalizing Pancasila values and forming citizens who are able to practice these values in social life. In line with this view, the development of digital citizenship has become increasingly important because civic education in the digital era must prepare students to understand rights, obligations, ethics, and participation in both physical and virtual public spaces (Candra et al., 2021; Sidharta et al., 2022; Musa & Wulan, 2024).

Despite the strategic role of Pancasila Education, its implementation still faces challenges in creating learning that is contextual, participatory, and meaningful for students. Pancasila Education is often perceived as abstract and normative when it is delivered through conventional teaching practices that emphasize memorization rather than interpretation, reflection, and value internalization. This condition becomes more complex in the digital era, in which students require learning experiences that are relevant to their daily interactions with digital media, social issues, and civic realities. Therefore, the main research problem addressed in this study is how Information and Communication Technology (ICT) can be used strategically in teaching, assessment, and learning reflection to build meaningful Pancasila Education learning in madrasahs.

Several general solutions have been proposed to address this problem, particularly through the integration of digital media, technology-enhanced learning, and ICT-based pedagogy. The use of ICT in education has been shown to support learning interaction, student engagement, access to learning resources, and the development of digital competence (Ghavifekr & Rosdy, 2015; Henderson et al., 2017; Schindler et al., 2017). Miftah (2022) argues that the use of ICT in learning must consider students' characteristics so that technology is not merely used for technical purposes but is also aligned with students' needs and learning experiences. This view indicates that ICT integration should be understood as a pedagogical strategy rather than as the simple use of digital devices in the classroom.

More specific solutions have also been offered through ICT-based learning models such as blended learning, digital literacy-based learning, inquiry learning, collaborative learning, project-based learning, problem-based learning, differentiated learning, and discovery learning. These models provide opportunities for students to explore information, analyze social issues, discuss civic problems, and produce digital learning products. Previous studies have shown that technology-based learning can increase student engagement, support contextual learning, and improve the quality of learning experiences (Bond, 2020; Maesharoh et al., 2022; Hasanah, 2024;

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Maulani et al., 2024). In the context of civic education, the use of digital media can help students understand civic concepts, multicultural values, and democratic participation through more concrete and relevant learning experiences (Andriani, 2020; Choi & Park, 2021; Japar et al., 2024).

In madrasah contexts, ICT integration has become part of the broader digital transformation of Islamic educational institutions. Studies on digital madrasahs indicate that digital platforms, learning management systems, and technology-based administration can support educational quality and learning innovation (Santosa & Jazuli, 2022; Mardhiah et al., 2024; Hayani et al., 2024; Juhri et al., 2025). However, ICT integration in madrasahs still faces several challenges, including limited infrastructure, unequal teacher competence, and the need for stronger digital pedagogical skills (Mirfani, 2019; Hayani et al., 2024). Philosophically, ICT utilization in education should remain humanistic and value-oriented so that technology strengthens students' potential, character, and social responsibility rather than reducing learning to technical activities (Anjani et al., 2024).

A review of previous studies shows that research on ICT in education has generally focused on digital learning media, technology-enhanced learning, digital literacy, and institutional readiness for digital transformation. In the field of civic and Pancasila Education, previous studies have examined the role of digital media in strengthening civic understanding and student engagement (Andriani, 2020; Wahyudi & Laturrahkmi, 2022; Salsabila & Salsabila, 2024; Sujoko et al., 2024). Nevertheless, these studies have not comprehensively examined the relationship between ICT-based teaching strategies, digital assessment practices, and the construction of meaningful learning in Pancasila Education, particularly at the State Islamic Junior High School level. This gap indicates the need for research that analyzes ICT integration not only as media use but also as a pedagogical system that connects instruction, assessment, reflection, and students' meaningful understanding of Pancasila values.

This study differs from previous research by integrating three analytical dimensions: ICT-based teaching strategies, ICT-based assessment, and meaningful learning in Pancasila Education within the digital madrasah ecosystem. The novelty of this study lies in its attempt to explain how ICT is pedagogically utilized to connect cognitive, affective, and psychomotor aspects of student learning with civic values and real-life experiences. The scope of this study is limited to the use of ICT in Pancasila Education learning at State Islamic Junior High Schools in Makassar City, with particular attention to teacher strategies, assessment implementation, and the development of meaningful learning. This focus provides an empirical basis for understanding how digital transformation in madrasahs can support value-based citizenship education.

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The primary objective of this study is to analyze the utilization of Information and Communication Technology in Pancasila Education learning at State Islamic Junior High Schools in Makassar City. Specifically, this study seeks to answer the following research questions: (1) What ICT utilization strategies are implemented by Pancasila Education teachers in the learning process? (2) How is ICT used in the implementation of learning assessment? and (3) How does ICT utilization support the development of meaningful Pancasila Education learning? The findings of this study are expected to provide theoretical contributions to the development of digital pedagogy in citizenship education and practical contributions for teachers, madrasahs, and policymakers in strengthening meaningful, contextual, and value-based learning in the digital era.

LITERATUR REVIEW

Pancasila Education and Civic Character Formation

Pancasila Education is an essential component of citizenship education in Indonesia because it functions as a medium for developing civic knowledge, civic disposition, and civic responsibility. In the Indonesian educational context, Pancasila Education is not merely concerned with the transmission of normative knowledge about state ideology, but also with the internalization of values that guide students' attitudes and behavior in social, national, and state life. Susanto (2021) emphasizes that citizenship education serves as a strategic means of internalizing Pancasila values so that students are able to practice the principles of divinity, humanity, unity, democracy, and social justice in everyday life. Similarly, Winarno (2013) explains that citizenship education should be designed through appropriate content, learning strategies, and assessment so that it contributes to the formation of democratic and responsible citizens.

In the digital era, the orientation of Pancasila Education has expanded from conventional civic knowledge to digital citizenship competence. Students are required not only to understand civic values but also to apply them in digital spaces characterized by openness, speed of information, and diverse social interactions. Candra et al. (2021) argue that digital citizenship infrastructure is important for strengthening national identity in Indonesia, while Sidharta et al. (2022) highlight that digital literacy and civic education are closely related in preparing students to participate responsibly in digital society. This indicates that Pancasila Education must be adaptive to technological development by integrating digital literacy, ethical awareness, and civic participation into the learning process.

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ICT Integration in Learning

Information and Communication Technology (ICT) has transformed learning practices by expanding access to information, supporting interaction, and facilitating student-centered learning. ICT allows teachers to present materials through multimedia formats, provide contextual learning resources, and create more flexible learning environments. Ghavifekr and Rosdy (2015) state that ICT integration can improve teaching and learning effectiveness when it is supported by appropriate pedagogical design. Similarly, Hew and Cheung (2014) emphasize that the use of ICT in education is closely related to how teachers and students utilize technology to support interaction, communication, and knowledge construction.

The use of ICT in learning should not be limited to technical functions. Miftah (2022) argues that ICT-based learning media must consider learners' characteristics, needs, and learning experiences so that technology contributes to effective and meaningful learning. This view is consistent with Kirkwood and Price (2014), who argue that technology-enhanced learning should be evaluated based on how technology improves the quality of learning rather than merely on the presence of digital tools. Therefore, ICT integration requires pedagogical awareness, instructional planning, and reflective implementation so that digital media can support learning objectives.

Previous studies have also shown that digital media can increase student engagement and learning participation. Schindler et al. (2017) found that computer-based technology can support student engagement when it is used to encourage interaction and active learning. Bond (2020) also shows that technology-supported learning can facilitate engagement when it provides opportunities for students to participate actively in the learning process. In this regard, ICT can support Pancasila Education by helping students access social issues, analyze civic problems, and relate Pancasila values to real-life situations.

Digital Pedagogy and ICT-Based Learning Strategies

Digital pedagogy emphasizes the use of technology as part of instructional design rather than as a supplementary tool. In this perspective, technology is used to construct learning experiences that are interactive, collaborative, contextual, and student-centered. Brooks and Brooks (1993) explain that constructivist learning requires students to actively build knowledge through interaction with their environment. ICT can support this process by providing digital learning resources, interactive media, and collaborative platforms that enable students to explore information and construct meaning independently.

Several ICT-based learning strategies are relevant to Pancasila Education, including blended learning, digital literacy-based learning, inquiry learning, collaborative learning, project-based learning, problem-based learning, differentiated learning, and discovery learning. Trianto

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(2010) explains that innovative learning models are needed to create progressive and meaningful learning experiences. Project-based and problem-based learning, for example, enable students to investigate real problems, collaborate with peers, and produce learning products that reflect their understanding. Marzano et al. (2001) also emphasize that effective instructional strategies should encourage students to process information actively, connect ideas, and demonstrate understanding through meaningful tasks.

In the context of Pancasila Education, ICT-based learning strategies can help students understand abstract civic concepts through concrete examples. Digital videos, online news, infographics, e-books, and learning management systems can present social realities that are closely related to Pancasila values. Wahyudi and Laturrahkmi (2022) explain that civic education materials in the digital era need to be analyzed and developed according to students' current social context. Sujoko et al. (2024) also show that instructional communication media can support learning innovation in civic and history education. These studies indicate that ICT-based pedagogy can make civic learning more contextual and relevant.

ICT in Madrasah Digital Transformation

Madrasahs have increasingly become part of educational digital transformation through the use of digital platforms, online administration, ICT-based learning media, and technology-supported assessment. Santosa and Jazuli (2022) explain that digital madrasahs represent the development of Islamic education based on information technology. Mardhiah et al. (2024) also show that digital-based madrasah management contributes to improving educational quality through more effective and adaptive management practices. These findings indicate that digital transformation in madrasahs is not only related to administrative efficiency but also to the development of learning innovation.

However, ICT integration in madrasahs still faces challenges. Hayani et al. (2024) explain that ICT implementation in madrasah learning requires teacher competence, infrastructure readiness, and pedagogical adaptation. Similarly, Mirfani (2019) identifies challenges in implementing ICT in the Indonesian national education system, particularly in relation to infrastructure, teacher readiness, and institutional support. These challenges indicate that digital transformation cannot rely solely on the availability of devices but must also be supported by digital pedagogical competence and sustainable institutional policies.

In the context of Makassar, research by Juhri et al. (2025) indicates that technology-based learning strategies in the digital madrasah program have become an important part of learning innovation. Nevertheless, studies on digital madrasah have generally focused on institutional management, infrastructure, or general learning strategies. Limited attention has been given to

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how ICT is specifically integrated into Pancasila Education to support teaching, assessment, and meaningful learning. This provides a strong basis for examining ICT utilization in Pancasila Education within the madrasah context.

ICT-Based Assessment in Learning

Assessment is an essential component of the learning process because it provides information about students' learning progress, competency achievement, and learning difficulties. In ICT-based learning, assessment can be conducted through digital platforms that allow teachers to collect, process, and provide feedback more efficiently. Digital assessment tools such as Google Forms, Quizizz, learning management systems, computer-based tests, and digital portfolios can support diagnostic, formative, summative, and attitude assessments.

The use of ICT in assessment aligns with the principle that assessment should not only measure learning outcomes but also support learning improvement. Winarno (2013) emphasizes that assessment in citizenship education must be aligned with learning objectives and civic character development. Digital assessment provides opportunities for teachers to monitor students' understanding, provide rapid feedback, and document learning progress. This is consistent with the view that assessment should function as part of the learning process rather than merely as a final evaluation.

Digital assessment is also relevant to Pancasila Education because it can be used to assess cognitive, affective, and psychomotor aspects in an integrated manner. Through online quizzes, digital projects, reflective journals, and e-portfolios, students can demonstrate their understanding of civic concepts, reflect on values, and produce learning outputs related to real-life civic issues. This approach supports authentic assessment because students are assessed not only through written tests but also through performance, reflection, collaboration, and digital products.

Meaningful Learning in Pancasila Education

Meaningful learning occurs when new knowledge is connected to students' prior knowledge, experiences, and cognitive structures. Ausubel (2012) explains that learning becomes meaningful when students are able to relate new information to concepts that already exist in their cognitive structure. In Pancasila Education, this means that students should not merely memorize values but must be able to connect Pancasila concepts with their personal experiences, school life, social interaction, and digital citizenship practices.

Piaget (2000) views learning as a process of knowledge construction through interaction between individuals and their environment. This constructivist perspective is relevant to ICT-based Pancasila Education because digital media allows students to explore information, observe social phenomena, discuss civic issues, and construct understanding through active participation.

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Komalasari (2017) also emphasizes that contextual learning helps students connect academic concepts with real-life situations. Therefore, ICT can support meaningful learning when it presents authentic contexts and encourages students to interpret civic values based on their lived experiences.

Meaningful Pancasila Education requires the integration of cognitive, affective, and psychomotor domains. Students need to understand civic concepts, internalize civic values, and demonstrate responsible behavior. ICT can facilitate this integration by providing contextual videos, digital discussions, project-based assignments, reflective journals, and collaborative learning activities. In this way, ICT becomes a bridge between abstract civic concepts and students' real-world experiences. This is consistent with the idea that digital technology should support humanistic learning and character formation rather than merely technical skill development (Anjani et al., 2024).

Research Gap

The literature indicates that ICT has been widely studied in relation to learning media, digital literacy, student engagement, technology-enhanced learning, and madrasah digital transformation. Previous studies have also emphasized the importance of digital citizenship, civic education, and the role of technology in improving the quality of learning. However, most studies remain fragmented. Some focus on ICT as learning media, others examine digital madrasah management, while several studies discuss civic education in the digital era. Few studies have comprehensively examined the relationship between ICT-based teaching strategies, ICT-based assessment, and meaningful learning in Pancasila Education, particularly at the State Islamic Junior High School level.

Therefore, this study addresses this gap by analyzing ICT utilization as an integrated pedagogical strategy in Pancasila Education. The study does not treat ICT merely as a digital tool but as part of a broader learning system that includes instructional planning, learning implementation, assessment, reflection, and the construction of meaningful learning. This focus provides a more comprehensive perspective on how digital transformation in madrasahs can support the internalization of Pancasila values and the development of students as responsible citizens in the digital era.

RESEARCH METHODS

Research Type and Approach

This study employed a descriptive qualitative research design to analyze the utilization of Information and Communication Technology (ICT) in Pancasila Education learning at State Islamic Junior High Schools (MTsN) in Makassar City. A qualitative approach was selected

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because the study sought to understand learning practices, teacher strategies, assessment implementation, and the construction of meaningful learning in their natural educational context. In line with Sugiyono (2008), qualitative research is appropriate for examining social phenomena by emphasizing meaning, process, interpretation, and contextual understanding. Therefore, this approach enabled the researcher to explore not only the forms of ICT use but also how teachers, students, and madrasah stakeholders interpreted and implemented ICT in the Pancasila Education learning process.

The descriptive orientation of this study was used to provide a systematic and comprehensive explanation of ICT-based pedagogical practices in madrasahs. The research focused on three main aspects: ICT utilization strategies in the learning process, ICT use in learning assessment, and ICT integration in building meaningful Pancasila Education learning. This approach allowed the researcher to describe empirical realities in the classroom while also interpreting the relationship between digital media, teacher pedagogy, assessment practices, and students' learning experiences.

Research Subjects

The research subjects were selected purposively because the study required informants who had direct experience and knowledge related to ICT use in Pancasila Education learning. The informants consisted of Pancasila Education teachers, students, madrasah leaders, and ICT managers or operators at State Islamic Junior High Schools in Makassar City. The selection of informants was based on their involvement in the learning process, their experience in using or managing ICT, and their understanding of digital learning practices in the madrasah environment.

Pancasila Education teachers were selected because they were the main actors in planning, implementing, assessing, and reflecting on ICT-based learning. Students were involved because they experienced the learning process directly and could provide information about engagement, understanding, participation, and the meaningfulness of learning. Madrasah leaders and ICT managers were included to provide institutional perspectives regarding digital infrastructure, learning platforms, policy support, and technical assistance. This purposive selection was intended to ensure that the data obtained were relevant to the research focus and reflected the actual conditions of ICT utilization in the madrasah context.

Research Implementation Procedures

The research was conducted at State Islamic Junior High Schools in Makassar City over a three-month period. The implementation procedure consisted of three main stages: preparation, field data collection, and data analysis and reporting. The preparation stage began with preliminary observation to obtain an initial understanding of ICT use in Pancasila Education

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learning. This stage also included determining the research focus, preparing research instruments, identifying informants, and obtaining research permission from the relevant institutions.

The field data collection stage was conducted through classroom observations, in-depth interviews, questionnaires as supporting data, and documentation studies. Observations were carried out during Pancasila Education learning activities to examine the use of ICT media, learning strategies, classroom interaction, student engagement, and ICT-based assessment practices. Interviews were conducted with teachers, students, madrasah leaders, and ICT managers to obtain deeper information about their experiences, perceptions, and challenges in using ICT. Documentation studies were conducted by reviewing lesson plans, teaching modules, learning media, assessment instruments, digital assessment results, and madrasah digital platforms.

The final stage involved organizing, reducing, coding, categorizing, and interpreting the collected data. The data were analyzed to identify patterns of ICT utilization in teaching, assessment, and meaningful learning. The findings were then presented thematically according to the research objectives, followed by interpretation and discussion based on relevant theories and previous studies.

Materials and Instruments

The main instruments used in this study were observation sheets, interview guidelines, questionnaires, and documentation checklists. The observation sheets were designed to record classroom learning activities, forms of ICT use, teacher strategies, student participation, and assessment practices. The interview guidelines were used to explore informants' experiences, perceptions, challenges, and reflections regarding ICT integration in Pancasila Education learning.

Questionnaires were used as supporting data to obtain a descriptive overview of ICT utilization, particularly regarding the frequency, forms, and perceived benefits of digital media in learning. However, the questionnaires were not intended for statistical generalization because the study was qualitative in nature. Documentation checklists were used to examine lesson plans, teaching modules, digital learning materials, online assignments, assessment instruments, and student learning products.

The instrument indicators were developed based on the research focus, namely ICT-based learning strategies, ICT-based assessment, and meaningful learning. Before being used in the field, the instruments were reviewed to ensure their relevance to the research objectives. This process was intended to strengthen the accuracy and appropriateness of the instruments in collecting data related to ICT utilization in Pancasila Education learning.

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Data Collection

Data were collected through in-depth interviews, classroom observations, questionnaires, and documentation studies. Semi-structured interviews were conducted with Pancasila Education teachers, students, madrasah leaders, and ICT managers. Each interview lasted approximately 30–60 minutes and was conducted using an interview guide to ensure that the discussion remained aligned with the research focus while still allowing informants to provide open and detailed responses.

Classroom observations were conducted during Pancasila Education learning activities to examine how teachers utilized ICT in planning, implementing, assessing, and reflecting on learning. The observations focused on the use of digital media such as PowerPoint presentations, learning videos, YouTube, WhatsApp, e-books, Learning Management Systems, Google Forms, Quizizz, and other digital platforms. The observations also examined student activities, including discussion, collaboration, information searching, digital project development, and participation in ICT-based assessment.

Documentation studies were conducted by analyzing learning documents and digital artifacts, including lesson plans, teaching modules, learning media, assessment results, digital worksheets, student projects, and madrasah digital platforms. Field notes were also maintained throughout the data collection process to record important events, contextual information, and researcher reflections. These multiple data collection techniques were used to obtain comprehensive and mutually reinforcing data.

Data Analysis Techniques

The data were analyzed inductively and interactively using the Miles and Huberman model, which consists of data reduction, data display, and conclusion drawing or verification (Miles & Huberman, 1992). Data reduction was conducted by selecting, simplifying, and organizing data obtained from interviews, observations, questionnaires, and documents. At this stage, the researcher coded the data based on recurring meanings, patterns, and themes related to ICT-based learning strategies, digital assessment, student engagement, learning reflection, and meaningful learning.

The coded data were then grouped into thematic categories. These categories included forms of ICT media utilization, ICT-based learning strategies, levels of ICT integration, assessment practices, student participation, and indicators of meaningful learning. The level of ICT utilization was categorized into high, moderate, and low based on the intensity of ICT use, the variety of digital media and platforms used, the integration of ICT into learning and assessment, and its contribution to student interaction and meaningful learning.

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Data display was conducted by presenting the findings in narrative descriptions, tables, and a concept map. This presentation helped clarify the relationship between ICT-based learning strategies, digital assessment practices, and meaningful learning. The final stage was conclusion drawing and verification, in which the researcher interpreted the findings, compared data across sources, and ensured consistency between the empirical data and the research focus. As explained by Helaluddin and Wijaya (2019), qualitative data analysis requires systematic interpretation so that the meaning of social phenomena can be understood contextually and comprehensively.

Data Validity

Data validity was ensured through triangulation, member checking, and increased research diligence. Source triangulation was conducted by comparing information obtained from teachers, students, madrasah leaders, and ICT managers. Technique triangulation was carried out by comparing interview data, classroom observations, questionnaires, and documentation. This strategy was used to ensure that the findings were not based on a single source or method but were supported by different forms of evidence.

Member checking was conducted by reconfirming interview summaries and preliminary interpretations with informants. This process allowed informants to clarify, correct, or add information to ensure that the data accurately represented their experiences and perspectives. In addition, the researcher strengthened data credibility through repeated observations, systematic field notes, and careful examination of learning documents and digital assessment records.

The validity process was also supported by continuous comparison of data across categories and research objectives. This procedure helped ensure that the conclusions were grounded in empirical evidence and reflected the actual practice of ICT utilization in Pancasila Education learning. Through these validity strategies, the study sought to produce credible, consistent, and contextually meaningful findings regarding ICT-based pedagogy, digital assessment, and meaningful learning in the madrasah environment.

RESULT

Overview of Findings

The findings indicate that Information and Communication Technology (ICT) has been utilized in Pancasila Education learning at State Islamic Junior High Schools (MTsN) in Makassar City through various digital media, platforms, and pedagogical strategies. ICT was used not only to support material delivery but also to facilitate student interaction, digital assignments, classroom discussions, assessment implementation, and learning reflection. The findings are organized based on the three research objectives: ICT utilization strategies in the learning process, ICT use in learning assessment, and ICT use in building meaningful Pancasila Education learning.

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The analysis further shows that the level of ICT utilization among teachers varied. Some teachers demonstrated a high level of ICT integration by using multiple digital media and connecting them with active learning models, while others used ICT more partially, mainly for presenting materials or supporting classroom communication. Nevertheless, no teacher was categorized as having a low level of ICT utilization in the main learning process. This indicates that ICT has become part of Pancasila Education learning practices in MTsN Makassar City, although the depth of pedagogical integration still differs among teachers.

ICT Utilization Strategies in the Pancasila Education Learning Process

The first research objective was to identify the strategies used by Pancasila Education teachers in integrating ICT into the learning process. Based on lesson plan analysis, teaching module review, classroom observation, and interviews, the learning process was generally conducted through three stages: planning, implementation, and reflection. In the planning stage, teachers had included various forms of digital media in lesson plans and teaching modules, such as presentation slides, videos, YouTube, WhatsApp, e-books, Learning Management Systems (LMS), smart TVs, and LCD projectors.

The document analysis showed that teachers designed ICT-based learning activities to support students' understanding of conceptual materials and to connect classroom learning with real-life situations. The use of videos, images, online articles, and digital platforms helped teachers present social and civic phenomena more concretely. The strategies identified in the learning planning documents are presented in Table 1.

Table 1. Teacher Strategy Design for ICT Utilization in Pancasila Education Learning at MTsN Makassar City

No.	Teacher Strategy	Form of ICT Utilization	Student Activities
1	Blended learning using LMS	Delivering materials and assignments through platforms accessible during and outside classroom hours	Observing and listening
2	Digital literacy	Presenting texts from digital books and internet sources	Reading, writing, and communicating
3	ICT-based inquiry learning	Displaying videos, images, articles, and online reading materials	Observing, listening, analyzing, discovering, associating, and communicating
4	ICT-based collaborative learning	Facilitating group discussions and presentations using ICT	Forming groups, discussing, and presenting group work
5	ICT-based Project-Based Learning	Creating digital products such as infographics, posters, presentation slides, videos, animations, educational content, and vlogs	Creating learning projects

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6	ICT-based differentiated learning	Using YouTube, digital articles, infographics, LMS, educational games, interactive quizzes, AI platforms, WhatsApp, videos, slides, and vlogs	Learning according to students' abilities and needs
7	ICT-based Problem-Based Learning	Using LMS and WhatsApp to share teaching materials, assignments, quizzes, and discussion materials	Searching for information, data, and articles independently through internet search engines
8	ICT-based discovery learning	Presenting cases through slides, videos, or online news	Exploring, investigating, and discovering concepts independently through problem-solving

Source: Processed observation and documentation data.

Table 1 shows that ICT was designed not merely as a supporting tool but as part of the pedagogical strategy used in various learning models. ICT enabled teachers to strengthen blended learning, inquiry, collaboration, project-based learning, problem-based learning, differentiated learning, and discovery learning. Classroom observations involving eight Pancasila Education teachers showed that ICT utilization was implemented with different levels of integration. The results are presented in Table 2.

Table 2. Summary of Observation Results on ICT Utilization by Pancasila Education Teachers at MTsN Makassar City

No.	Teacher Code	ICT Media	ICT-Based Learning Strategy	Learning Model	Level of ICT Utilization	Evidence Threshold
1	Teacher A	PPT, e-book, video, internet search, LMS	Blended learning and online assignments	Collaborative learning	High	ICT was used consistently through various media and platforms to support active and sustainable learning
2	Teacher B	PPT, WhatsApp, video, internet search, e-book	Digital literacy	Collaborative learning	High	ICT supported student activities, communication, and access to digital learning resources
3	Teacher C	E-book, internet search, printed articles	ICT-based inquiry learning	Inquiry learning	Moderate	ICT was used, but integration with active learning strategies was not yet optimal
4	Teacher D	PPT, WhatsApp, internet search	ICT-based collaborative learning	Problem-Based Learning	Moderate	ICT use was limited to material delivery and classroom communication
5	Teacher E	PPT, digital books, internet search,	ICT-based Project-Based Learning	Project-Based Learning	High	ICT supported project development,

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		YouTube videos, applications				student collaboration, and digital product creation
6	Teacher F	PPT, video, internet search, platform, e-book	ICT-based differentiated learning	Project-Based Learning	High	ICT supported differentiated content, process, and product-based learning
7	Teacher G	YouTube, infographics, e-books, internet search, PPT	ICT-based Problem-Based Learning	Problem-Based Learning	High	ICT supported problem investigation, discussion, and case-based learning
8	Teacher H	PPT, internet search, WhatsApp	ICT-based discovery learning	Discovery learning	Moderate	ICT was used partially and had not been fully integrated into student-centered activities

Source: Processed observation data.

The data in Table 2 indicate that five teachers were categorized as having a high level of ICT utilization, while three teachers were categorized as moderate. Teachers in the high category used ICT consistently and interactively to support collaborative learning, project-based learning, problem-based learning, and differentiated learning. They used ICT not only for delivering materials but also for facilitating discussion, collaboration, digital assignments, information searching, and learning assessment.

Interview findings support the observation results. One teacher stated that students became more active when learning involved videos, online information searches, and digital project assignments because they could directly find examples and discuss them in groups. Observations also showed that students used digital media to search for information, discuss social issues, and present assignments through presentation applications and learning videos. In one observed class, students worked collaboratively using search engines and YouTube videos to complete case studies in problem-based learning.

Teachers in the moderate category had used ICT in the learning process, but the integration was still partial. ICT was mainly used for PowerPoint presentations, WhatsApp communication, or simple information searching. In these classes, ICT had not been fully integrated into collaborative tasks, digital projects, or reflective learning activities. Nevertheless, the absence of teachers in the low category indicates that all observed teachers had begun to use ICT in Pancasila Education learning.

Learning reflection also showed different levels of ICT integration. Some teachers used digital documentation, digital worksheets, online assessment results, and student digital products

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as sources of reflection, while others still relied on oral reflection or manual notes. The findings are presented in Table 3.

Table 3. Summary of ICT Utilization in the Learning Reflection Stage

No.	Teacher Code	Form of ICT Utilization in Reflection	Visible Teacher Reflection	ICT-Based Reflection Category
1	Teacher A	Learning documentation videos and mind-mapping project results	Identifying strengths and weaknesses of project-based learning	High
2	Teacher B	Simple Google Forms to reflect student understanding	Evaluating objective achievement and student participation	Moderate
3	Teacher C	PPT slides and photos of student work	Reflecting on media effectiveness and learning strategies	Moderate
4	Teacher D	YouTube learning videos as comparison between plans and practice	Identifying the suitability between planning and implementation	High
5	Teacher E	Short video as a reflection trigger	Assessing students' general responses and enthusiasm	Low
6	Teacher F	Digital assessment results and digital worksheets	Analyzing learning difficulties and remedial needs	High
7	Teacher G	WhatsApp class group to collect written reflections	Evaluating student responses and learning meaningfulness	Moderate
8	Teacher H	Manual reflection based on teacher notes	Reflecting on general impressions of learning	Low

Source: Processed observation data.

Table 3 shows that ICT utilization in learning reflection varied across teachers. Teachers in the high category used ICT as a source of reflective data, such as learning videos, digital project results, online assessment data, and digital worksheets. These data helped teachers identify learning strengths, weaknesses, student difficulties, and follow-up actions. Teachers in the moderate category used ICT for collecting simple responses, communication, or documentation, while teachers in the low category conducted reflection mainly through conventional methods.

ICT Utilization in Pancasila Education Learning Assessment

The second research objective was to examine how ICT was used in learning assessment. The findings show that ICT was used in diagnostic, formative, summative, and attitude assessment. The analysis was conducted through document review, interviews, and classroom observations. At the assessment planning stage, teachers had begun to include ICT in several assessment components. However, the degree of planning varied across assessment types. The findings are presented in Table 4.

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Table 4. Review of Learning Planning Documents Related to ICT Utilization in Assessment

No.	Assessment Planning Aspect	Facts Found in Documents	Form of ICT Utilization	Analysis of ICT Utilization	Planned ICT Utilization Strategy
1	Diagnostic assessment	Teachers planned initial questions and discussions to map students' prior knowledge	Not yet explicitly designed as ICT-based	ICT had not been systematically used as an initial assessment tool	No specific plan for digital questionnaires, Google Forms, or online quizzes was consistently found
2	Formative assessment	Observation, group discussion, reflection, and assignments during learning	Videos, digital teaching materials, and product-based activities	ICT was used implicitly to support process assessment	Digital media and project activities were included, but LMS-based assessment mechanisms were not fully described
3	Summative assessment	Written tests and projects such as mind mapping and presentations	Digital learning products	ICT functioned as a product assessment medium	Student presentations and digital products were planned, but online submission and digital scoring were not systematically described
4	Attitude assessment	Self-reflection and citizenship attitude assessment	Potential use of digital formats	ICT use had not been systematically formulated	No specific plan for digital reflection journals or attitude e-portfolios was consistently found

Source: Processed documentation data.

The document review indicates that ICT-based assessment planning had been initiated but was not yet fully systematic. Diagnostic assessment was still largely conventional, although some teachers had used Google Forms or online quizzes. Formative and summative assessments showed stronger ICT use, especially through digital assignments, videos, LMS, and project-based products. Attitude assessment still required further development because digital instruments for monitoring student attitudes had not been consistently designed. The implementation of ICT-based assessment in the classroom showed stronger integration than the planning documents. The findings are presented in Table 5.

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Table 5. ICT Utilization Strategies in Learning Assessment Implementation

Assessment Aspect	ICT-Based Assessment Strategy	Form of ICT Utilization	Implementation in the Field	Assessment Objective	Level of ICT Utilization
Diagnostic	Initial mapping of students' learning readiness and prior knowledge	Paper-based questionnaires, WhatsApp, PPT, online initial quizzes	Google Form pre-tests, interest surveys, and initial understanding checks through WhatsApp	Identifying students' prior knowledge, readiness, and learning needs	Moderate
Formative	Continuous monitoring of the learning process	Online quizzes, digital analysis tasks, quick feedback	Quizizz, Google Forms, digital questions in LMS	Providing feedback and supporting learning improvement	High
Summative	Evaluation of final learning achievement	Computer-Based Test, digital final assignments	Madrasah CBT, e-learning, and digital final projects	Determining students' final competency achievement	High
Attitude	Assessment of citizenship values, norms, and behavior	Digital attitude questionnaires, reflection journals, attitude recapitulation	Google Forms, digital journals, Excel, and RDM	Assessing affective and character domains systematically	Moderate

Source: Processed interview and observation data.

Table 5 shows that formative and summative assessments had a high level of ICT utilization. Teachers used Quizizz, Google Forms, LMS, madrasah CBT, e-learning, and digital projects to monitor student progress and evaluate learning outcomes. These platforms enabled teachers to obtain student responses more quickly, provide immediate feedback, and document assessment results more efficiently.

Diagnostic assessment was categorized as moderate because ICT use was still situational. Some teachers used Google Forms, online quizzes, and WhatsApp surveys to identify students' prior knowledge and readiness, while others continued to use direct classroom questioning. Attitude assessment was also categorized as moderate because teachers still combined manual notes with digital tools such as Google Forms, Excel, and digital journals. The management of assessment results also showed varied levels of ICT utilization. The findings are presented in Table 6.

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Table 6. ICT Utilization in Managing Learning Assessment Results

Assessment Aspect	ICT Utilization Pattern	Level of Utilization
Diagnostic	Teachers used Google Forms, online quizzes, and WhatsApp to map students' initial abilities, but implementation was not yet consistent across teachers	Moderate
Formative	ICT was used through Quizizz, Google Forms, LMS, and digital assignments to monitor learning progress and provide rapid feedback	High
Summative	Teachers used madrasah CBT, digital projects, presentations, and e-learning to measure students' competency achievement	High
Attitude	ICT was used through digital journals, Google Forms, and simple documentation, but not yet systematically by all teachers	Moderate

Source: Processed interview and observation data.

Table 6 confirms that ICT was most strongly integrated into formative and summative assessment. In formative assessment, digital platforms helped teachers monitor students' understanding and provide feedback during the learning process. In summative assessment, ICT supported computer-based testing, digital projects, multimedia presentations, and e-learning-based evaluation. However, diagnostic and attitude assessments still need improvement in terms of consistency, instrument design, and systematic implementation.

ICT Utilization in Building Meaningful Pancasila Education Learning

The third research objective was to analyze how ICT utilization supported meaningful learning in Pancasila Education. The findings show that ICT contributed to meaningful learning by helping students connect Pancasila Education concepts with their prior knowledge, personal experiences, school life, and social realities. The analysis was based on five operational indicators: the relationship between prior knowledge and meaning construction, conceptual understanding, active thinking and discussion, relevance and benefits, and student engagement and enthusiasm.

Table 7. Operational Indicators of Meaningful Pancasila Education Learning through ICT Utilization

No.	Main Aspect	Operational Indicators	Data Source
1	Relationship between prior knowledge and meaning construction	Students relate materials to personal or school experiences and provide relevant real-life examples	Observation and interview
2	Conceptual understanding	Students explain materials in their own words and do not merely repeat ICT media content	Observation and interview

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3	Active thinking and discussion	Students ask questions, express arguments, and participate in oral or digital discussions	Observation and interview
4	Relevance and benefits	Students relate materials to everyday life and recognize the benefits of learning in real situations	Observation and interview
5	Engagement and enthusiasm	Students show focus, enthusiasm, interest, and curiosity when learning involves ICT	Observation and interview

Source: Processed observation and interview data.

The findings indicate that instructional videos, interactive slides, digital images, and online materials helped students connect Pancasila Education concepts with real-life experiences. In Grade VII, students were able to relate the topic of norms to concrete situations in the school environment. When the teacher showed a video about norm violations, students connected the material with their experience of seeing classmates arrive late and receive warnings. Students were also able to explain the concept of norms in simple language, indicating that they did not merely memorize the content but constructed meaning from their experiences.

In Grade VIII, the concept of democracy was connected to students' experiences in electing class leaders and student council members. After watching a video about elections, students related democratic principles to classroom leadership elections. This showed that ICT helped students understand abstract civic concepts through familiar and concrete examples. In Grade IX, the topic of rights and obligations was connected to students' experiences during online learning. Students associated the right to education with the obligation to follow school rules, showing that ICT-based learning encouraged them to integrate civic concepts with personal learning experiences.

The use of ICT also strengthened students' conceptual understanding. Students stated that materials on democracy, rights, obligations, and norms became easier to understand when teachers used actual case videos, visual simulations, and interactive quizzes. ICT helped transform abstract Pancasila Education concepts into contextual learning experiences. Students were not only exposed to definitions but also to examples, situations, and cases that reflected civic values in everyday life.

ICT also encouraged active thinking and discussion. Classroom observations showed that students became more active after learning activities involved videos, online quizzes, digital materials, and group discussions. Students asked questions, responded to peers' opinions, and gave arguments based on the digital materials presented by the teacher. In some classes, students who were less active in oral discussion showed greater confidence in expressing opinions through WhatsApp groups. This indicates that ICT provided alternative spaces for student participation.

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The relevance and benefits of Pancasila Education learning were also strengthened through ICT. Students were able to relate learning materials to daily experiences, such as obeying school rules, respecting differences, participating in class leader elections, and understanding rights and obligations as students. Videos of actual cases and visual representations of social situations helped students recognize that Pancasila Education was not merely theoretical but directly connected to their lives.

Student engagement and enthusiasm were also evident during ICT-based learning. Observations showed that students were more focused and interested when teachers used videos, images, digital quizzes, and online learning resources. Students perceived ICT-based learning as more engaging and less monotonous than conventional learning. This emotional engagement is important because the internalization of Pancasila values requires not only cognitive understanding but also affective involvement.

Overall, the findings show that ICT utilization contributed to meaningful Pancasila Education learning by integrating digital infrastructure, ICT-based learning strategies, ICT-based assessment, and student-centered learning experiences. The relationship among these findings is summarized in the conceptual framework presented in Figure 1.

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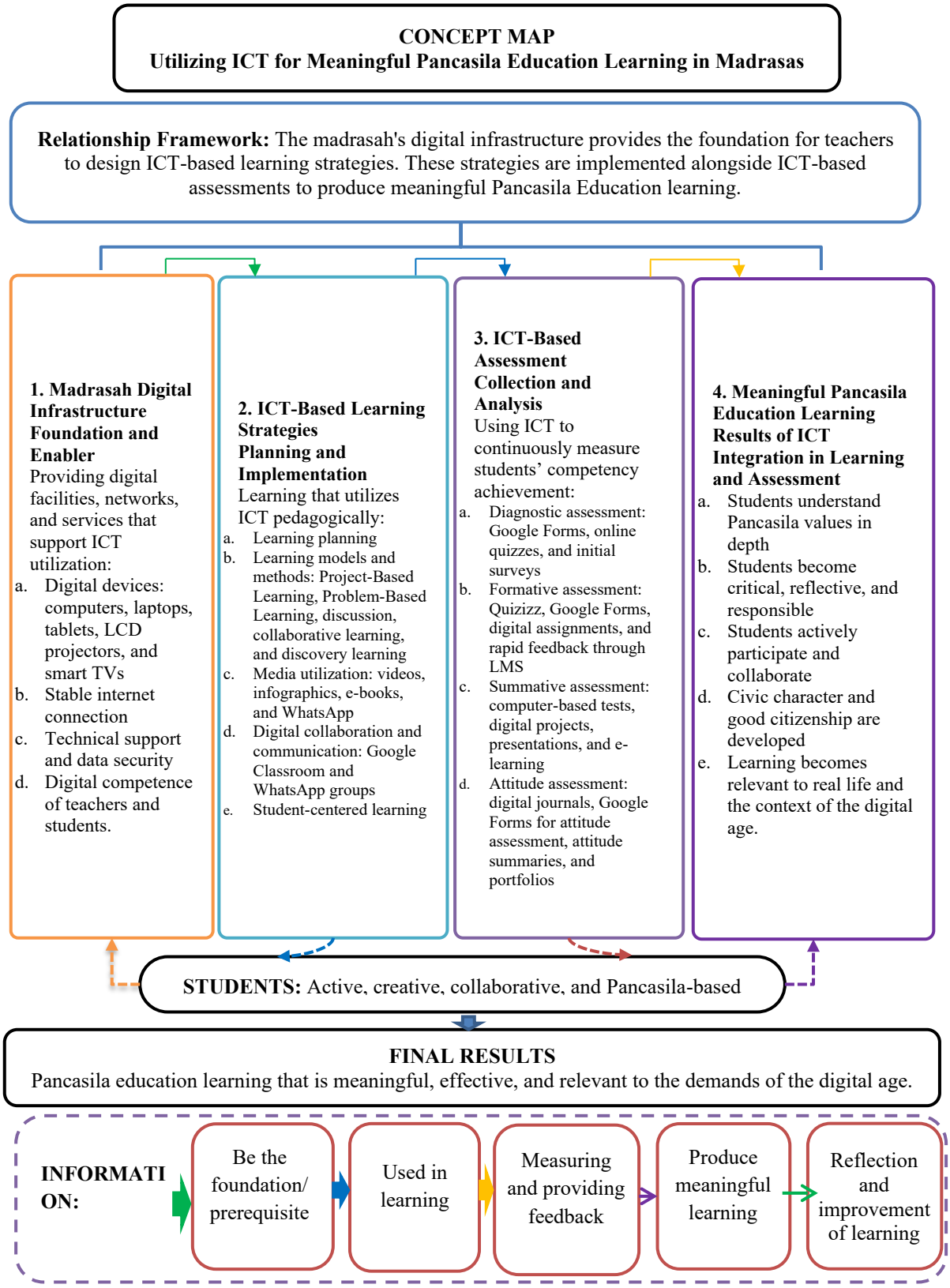

Figure 1. Concept Map of Research Findings

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ICT Utilization for Meaningful Pancasila Education Learning in Madrasahs

The findings indicate that meaningful Pancasila Education learning is constructed through four interconnected components. First, madrasah digital infrastructure provides the foundation for ICT utilization, including digital devices, internet access, smart TVs, LCD projectors, learning platforms, and technical support. Second, teachers develop ICT-based learning strategies through planning, implementation, digital media use, collaborative learning, project-based learning, problem-based learning, and student-centered activities. Third, ICT-based assessment is used to measure and support student competency through diagnostic, formative, summative, and attitude assessments. Fourth, the integration of ICT in learning and assessment produces meaningful learning by helping students understand Pancasila values, think critically and reflectively, participate actively, collaborate with peers, and relate learning to real-life civic contexts.

The final outcome of this process is Pancasila Education learning that is more meaningful, effective, contextual, and relevant to the demands of the digital era. ICT supports students in becoming active, creative, collaborative, responsible, and Pancasila-oriented learners.

DISCUSSION

The findings of this study indicate that the utilization of Information and Communication Technology (ICT) in Pancasila Education at MTsN Makassar City is not merely technical, but pedagogical. ICT was used in lesson planning, learning implementation, assessment, and reflection to support students' understanding of civic concepts and their internalization of Pancasila values. This finding confirms that technology becomes meaningful in education when it is integrated into instructional design, learning interaction, assessment practices, and contextual learning experiences. Therefore, ICT in Pancasila Education should not be understood only as a medium for delivering information, but as a pedagogical strategy for constructing knowledge, strengthening civic attitudes, and connecting learning materials with students' everyday realities.

The systematic integration of ICT in lesson planning reflects the importance of instructional design in determining the effectiveness of learning. Sanjaya (2011) explains that lesson planning is a rational process that involves determining learning objectives, strategies, methods, media, and evaluation. In this study, the inclusion of digital media such as presentation slides, videos, YouTube, WhatsApp, e-books, smart TVs, and Learning Management Systems shows that teachers attempted to design learning experiences that were more interactive, contextual, and aligned with students' digital characteristics. This finding indicates that ICT-based planning provides a foundation for teachers to organize learning activities that support student participation and conceptual understanding.

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The findings also support Ausubel's theory of meaningful learning. Ausubel (2012) argues that learning becomes meaningful when new information is connected to students' existing cognitive structures. In this study, videos, online news, digital images, and interactive materials helped students relate Pancasila Education concepts, such as norms, democracy, rights, obligations, tolerance, and social justice, to real-life experiences in school and society. Students were able to explain concepts in their own words and connect them with concrete situations, indicating that ICT helped transform abstract civic concepts into meaningful learning experiences.

From the perspective of constructivist theory, the findings are consistent with Piaget's view that knowledge is constructed through active interaction between learners and their environment (Piaget, 2000). ICT-based activities, such as online information searching, group discussion, digital project creation, and problem-solving, positioned students as active learners rather than passive recipients of information. This is also in line with Brooks and Brooks (1993), who emphasize that constructivist classrooms should provide opportunities for learners to explore, question, interpret, and construct understanding through meaningful experiences. In this study, ICT expanded students' learning environment by enabling them to observe social phenomena, access civic issues, and build understanding through digital resources.

The findings further demonstrate the relevance of contextual learning. Komalasari (2017) explains that contextual learning helps students connect academic concepts with real-life situations. In Pancasila Education, this connection is essential because civic values must be understood not only as theoretical knowledge but also as principles that guide behavior in daily life. The use of actual case videos, online news, digital discussions, and project-based assignments enabled students to understand the relevance of Pancasila values in school, community, and digital life. Thus, ICT strengthened the contextual dimension of Pancasila Education by bridging classroom learning and civic realities.

In terms of assessment, the findings show that ICT supported diagnostic, formative, summative, and attitude assessment. Digital platforms such as Google Forms, Quizizz, LMS, CBT, digital journals, and e-portfolios allowed teachers to collect learning data, provide feedback, and document student progress more efficiently. This finding is consistent with Winarno (2013), who emphasizes that assessment in citizenship education must be aligned with learning objectives and character development. ICT-based assessment in this study not only measured learning outcomes but also supported assessment for learning through rapid feedback, learning reflection, and continuous monitoring of student progress.

The findings of this study are consistent with previous research showing that ICT can improve learning quality, student engagement, and classroom interaction. Ghavifekr and Rosdy (2015) found that ICT integration can increase the effectiveness of teaching and learning when it

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is supported by appropriate pedagogical use. Similarly, Schindler et al. (2017) reported that computer-based technology can enhance student engagement when it facilitates active participation and interaction. The present study supports these findings by showing that students became more active in discussions, information searching, project completion, and digital assessment when ICT was integrated into Pancasila Education learning.

The results also align with Bond (2020), who emphasizes that technology-supported learning can facilitate student engagement when students are given opportunities to participate actively in learning activities. In this study, ICT encouraged students to engage cognitively, socially, and emotionally. Students were more focused during video-based learning, more confident in digital discussions, and more active in collaborative assignments. These findings confirm that ICT can strengthen student engagement when it is integrated with active learning models such as Project-Based Learning, Problem-Based Learning, collaborative learning, differentiated learning, inquiry learning, and discovery learning.

In the context of madrasah digital transformation, the findings support the studies of Santosa and Jazuli (2022), Mardhiah et al. (2024), Hayani et al. (2024), and Juhri et al. (2025). These studies indicate that digital madrasahs require institutional support, digital infrastructure, teacher competence, and appropriate learning strategies. The present study reinforces this view by showing that ICT utilization in Pancasila Education was supported by digital facilities such as smart TVs, internet access, LMS, WhatsApp, and digital assessment platforms. However, this study also found that the availability of infrastructure alone was insufficient. Teachers' digital pedagogical competence determined whether ICT was used merely for presentation or integrated into meaningful learning activities.

This study also complements previous research on ICT in civic and Pancasila Education. Andriani (2020) shows that integrated ICT-based media can support civic education, while Choi and Park (2021) emphasize the importance of civic education in digital environments. Salsabila and Salsabila (2024) found that digital media innovation in Pancasila Education can increase student engagement and contextual learning. The present study extends these findings by showing that ICT contributes not only to media innovation but also to the integration of teaching strategies, digital assessment, learning reflection, and meaningful learning in the madrasah context.

Furthermore, the findings are consistent with studies on digital citizenship and civic learning in the digital era. Candra et al. (2021) emphasize the importance of digital citizenship infrastructure in strengthening national identity, while Sidharta et al. (2022) argue that digital literacy and civic education are closely related in preparing responsible citizens. In this study, ICT-based Pancasila Education helped students understand civic values in relation to real-life and

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digital contexts. Therefore, ICT utilization contributed to the development of students' civic awareness, digital responsibility, and reflective understanding of Pancasila values.

Based on the findings, this study argues that ICT does not automatically produce meaningful learning. ICT becomes pedagogically meaningful only when its use is connected to instructional planning, active learning strategies, authentic assessment, reflection, and the contextualization of civic values. In other words, the effectiveness of ICT in Pancasila Education depends not only on the availability of digital devices but also on the pedagogical competence of teachers in designing, implementing, and evaluating learning.

The findings show that teachers with a high level of ICT utilization were able to integrate digital media with active learning models. These teachers used videos, online sources, LMS, digital projects, interactive quizzes, and digital discussions to encourage students to explore civic issues and relate them to Pancasila values. In contrast, teachers in the moderate category tended to use ICT mainly for PowerPoint presentations, simple communication, or limited information searching. This difference confirms that the meaningfulness of ICT use is determined by the depth of pedagogical integration rather than the number of digital tools used.

This study also argues that ICT-based assessment plays a crucial role in strengthening meaningful learning. Formative and summative assessments showed a high level of ICT utilization because teachers used Quizizz, Google Forms, LMS, CBT, e-learning, and digital projects to monitor learning progress and measure competency achievement. These platforms enabled teachers to provide rapid feedback and helped students reflect on their understanding. However, diagnostic and attitude assessments were still moderate because digital instruments were not yet used consistently and systematically. This indicates that digital assessment needs to be developed not only for cognitive evaluation but also for mapping student readiness and monitoring character development.

Conceptually, this study positions ICT integration in Pancasila Education as part of value-based digital pedagogy. Technology is not the final goal of learning but a means to strengthen the internalization of Pancasila values through contextual, participatory, reflective, and student-centered learning experiences. This position is in line with Anjani et al. (2024), who emphasize that technology in education should be humanistic and directed toward the development of human potential. Therefore, ICT in Pancasila Education should strengthen students' civic knowledge, ethical awareness, social responsibility, and digital citizenship.

The findings indicate that ICT integration in Pancasila Education requires systematic support from teachers, madrasahs, and educational policymakers. First, teachers need continuous professional development in digital pedagogy. Training should not only focus on the technical use of applications but also on how to integrate digital media with Project-Based Learning,

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Problem-Based Learning, collaborative learning, inquiry learning, differentiated learning, and discovery learning. Such training is necessary to help teachers design contextual and reflective learning activities that support the internalization of Pancasila values.

Second, digital assessment needs to be strengthened, particularly in diagnostic and attitude assessment. Teachers should be supported in developing digital pre-tests, online learning readiness surveys, reflective journals, attitude e-portfolios, digital rubrics, and online feedback systems. These instruments can help teachers identify students' prior knowledge, monitor affective development, and provide more comprehensive information about student learning. Digital assessment should be designed not only to measure final outcomes but also to support learning improvement and character formation.

Third, madrasah infrastructure must be improved to ensure consistent ICT integration. Stable internet access, adequate digital devices, smart TVs, LCD projectors, LMS access, and technical support are necessary to support ICT-based teaching, assessment, and reflection. However, infrastructure development should be accompanied by institutional policies that regulate the pedagogical use of digital platforms, encourage teacher collaboration, and ensure that technology is used ethically and effectively.

Fourth, Pancasila Education learning needs to integrate digital ethics more explicitly. Since students interact with information and social issues through digital platforms, teachers need to guide them in filtering information, respecting differences of opinion, communicating responsibly, and applying Pancasila values in digital spaces. This recommendation is important because digital literacy without ethical awareness may not contribute to responsible citizenship.

Finally, future studies are recommended to examine ICT integration in Pancasila Education across different educational levels, regions, and institutional contexts. Comparative studies between madrasahs and public schools may provide broader insights into the relationship between digital infrastructure, teacher competence, assessment practices, and meaningful civic learning. Further research may also focus on the development of digital attitude assessment models and value-based digital learning frameworks for Pancasila Education.

Overall, this study confirms that ICT integration in Pancasila Education at MTsN Makassar City has contributed to more contextual, interactive, reflective, and meaningful learning. However, the success of ICT utilization depends on the interconnection between teacher competence, instructional design, digital assessment, learning reflection, infrastructure readiness, and the ability to present civic values in ways that are relevant to students' lives. Thus, ICT should be positioned as a pedagogical instrument for strengthening meaningful Pancasila Education rather than merely as a technical tool for digital learning.

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CONCLUSION

This study examined the utilization of Information and Communication Technology (ICT) in Pancasila Education learning at State Islamic Junior High Schools (MTsN) in Makassar City, focusing on ICT-based teaching strategies, assessment implementation, and the development of meaningful learning. The findings show that Pancasila Education teachers have integrated ICT into learning through various strategies, including blended learning, digital literacy, inquiry learning, collaborative learning, project-based learning, differentiated learning, problem-based learning, and discovery learning. These strategies indicate that ICT is not merely used as a medium for delivering materials but also as a pedagogical tool to support interaction, collaboration, reflection, and contextual understanding.

The study also found that ICT has been utilized in diagnostic, formative, summative, and attitude assessments, although the level of implementation varies. Formative and summative assessments show stronger ICT integration through the use of Quizizz, Google Forms, LMS, CBT, e-learning, and digital projects, while diagnostic and attitude assessments still require more systematic development. Furthermore, ICT supports meaningful Pancasila Education learning by helping students connect civic concepts with prior knowledge, school experiences, social realities, and digital life. This finding implies that ICT can strengthen students' cognitive understanding, affective engagement, and civic responsibility when it is integrated with appropriate instructional design and assessment practices.

This study contributes to the existing body of knowledge by offering an integrated perspective on ICT-based teaching, digital assessment, and meaningful learning in Pancasila Education within the madrasah context. Unlike previous studies that mainly focused on digital media use or madrasah digitalization in general, this research demonstrates how ICT can function as part of value-based digital pedagogy. Future research is recommended to examine ICT integration in Pancasila Education across broader educational contexts, develop digital models for attitude assessment, and evaluate the long-term impact of ICT-based meaningful learning on students' civic character and digital citizenship.

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