

Research Article

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Integration of Culturally Responsive Teaching Approach, Local Wisdom, and Gamification in Pancasila Education to Develop Students' Multicultural Competence

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Abstract

Background/purpose. Globalization and the advancement of communication technology have increased diversity and complexity, including in education. Diversity is currently in classrooms. This situation adds a need for multicultural competence.

Materials/methods. This research explains the creation of new products through learning models to develop students' multicultural competencies. This research uses a research and development (R&D) approach based on the development theory of the Dick and Carey model. The learning model is developed for Pancasila subjects by integrating culturally responsive teaching (CRT), local wisdom, and gamification (CERITATALOGAM). Research data collection, model development, model trials, and model testing were carried out in public elementary schools in Bogor, Indonesia. Testing research instruments through tests of validity, reliability, test difficulty, test differences, and validation from model, language, and media experts.

Results. This study finds that the Pancasila learning model for developing students' multicultural competencies based on CRT, integrated with local culture and gamification (CERITATALOGAM), is feasible and in line with the theory of the Dick and Carey learning model. The model of this study is also proven to be effective based on the results of the N-Gain test between the CERITATALOGAM learning model and the Problem-Based Learning (PBL) model. The responses of teachers and students also showed that the CERITATALOGAM model was easy to implement and motivated students more.

Conclusion. The research recommends that teachers pay attention to and enforce Culturally Responsive Teaching (CRT), local wisdom, and gamification in various subjects and grade levels.

1. Introduction

A country with cultural diversity, like Indonesia, is prone to conflicts due to differences in perceptions, ways of thinking, and the language used (Azizah, 2020). Globalization and the advancement of communication technology have increased diversity and complexity, including in education. Diversity is currently in classrooms, both in primary, secondary, and higher education (Choi & Mao, 2021). This situation adds a need for multicultural competence. (Arphattananon, 2018). Multicultural competence refers to attitudes, knowledge, and skills in multiculturalism so that students can adapt to various conditions. (Aga Mohd Jaladin et al., 2020; Chang & Tharenou, 2004). Multicultural competence is formed from the multicultural education process in schools and non-schools (Jayadi et al., 2022; Koh & Harris, 2020). The results of multicultural education have been proven to create harmonious interactions between different (Saihu et al., 2022) so that it can create a conducive plural community environment (Sahibudin et al., 2020).

Forming multicultural competencies and the multicultural education process in the Indonesian context cannot be separated from Pancasila education. Pancasila plays an important role in uniting the lives of plural Indonesian people (D. A. Lubis & Najicha, 2022) and is an integral part of the education system (Fadhilah & Adela, 2020). Pancasila is the foundation of the Indonesian state, containing 5 basic values of the nation's life, namely divinity, humanity, unity, democracy and social justice (Guritno et al., 2023; Karyono, 2023; Ruly & Morganna, 2023). Pancasila contains education on the values and morals of the Indonesian nation (Nurgiansah, 2021), which are taught using various learning models. The model is through storytelling, games, and art activities, among others (Ni'amah, 2024), teaching with a multicultural curriculum (Firdaus et al., 2020), use of context appropriate to the student's circumstances (Sariyatun et al., 2018), use of content that can stimulate students' creative thinking (Tarigan, 2019), comprehensive learning (Kusumawati et al., 2021) and through the Problem-Based Learning model (PBL). These learning efforts aim to make the results of Pancasila education effective (Ahyar et al., 2019), especially in developing multicultural competencies.

The discovery and development of new learning models to develop multicultural competencies is very important and necessary. These concerns and needs are both in education and the aspect of humanity. This learning model in the humanitarian aspect contributes to creating a plural society environment conducive to sustainability, especially in Indonesia. In addition to being important, this research is novel because the development of the Pancasila learning model for developing multicultural competencies based on Culturally Responsive Teaching (CRT) integrated with local wisdom and gamification (CERITATALOGAM) has never been done. Based on these reasons, developing the feasibility of this learning model and the results of testing its effectiveness is important and has novelty.

2. Literature Review

The success of multicultural competency development through Pancasila education determines the existence of the Indonesian nation (Nurwardani, 2016). The young generation of Indonesia can understand and internalize the values that become their national identity through Pancasila (Akhyar & Dewi, 2022). Pancasila contains the value of unity and cooperation (Nurgiansah, 2021), recognizing the diversity of cultures, religions, ethnicities, and races and upholding tolerance between religions and ethnic groups (Yani & Darmayanti, 2020). The implementation of Pancasila education through various ways (Japar, 2024; Japar et al., 2019, 2023), including the Value Education Approach (VEA) such as cooperation, social justice, democracy, and human rights (Setiyono & Natalis, 2023; Sundara & Solehah, 2019; Wulandari et al., 2023), historical and philosophical approach (Agus et al., 2021; Marjuni, 2019; Nurwardani, 2016; Zulfa, 2017), Institutionalization Strengthening Approach (M. R. Lubis, 2023; Nevrita, 2023; Sutrisno et al., 2023), Character Education approach (Lestari & Kurnia, 2022; Nurgiansah, 2022; Susan Fitriyanti, 2017), and student-centered learning approach (Andriawan

et al., 2022; Sundara & Solehah, 2019; Vioreza et al., 2023; Wulandari et al., 2023). Pancasila education aims to form intelligent, competent citizens who love their homeland (Sumardjoko & Musyiam, 2018).

Efforts to improve Pancasila values can be carried out through various learning approaches, including the Culturally Responsive Teaching (CRT) approach. CRT refers to the teacher's teaching behavior that brings students' cultural identities and their life experiences into the classroom (Meléndez-Luces & Couto-Cantero, 2021). CRT emphasizes the importance of acknowledging and understanding students' cultural, linguistic, and experiential backgrounds in the teaching and learning process (Androsov & Zhang, 2023; Gay, 2015; Subasi Singh & Akar, 2021). According to Cheng et al. (2021), CRT can improve the learning outcomes of ethnically diverse students. Indonesia needs CRT implementation (Patras et al., 2024). The use of culture can be done to achieve the goals of the subject matter as well as a preserved and sustainable cultural identity (Rahmawati et al., 2023). The results of the research show that the use of CRT has been proven to be effective in achieving learning goals (Portes et al., 2018), such as improving mathematics learning outcomes (Register et al., 2022), Multicultural Education (Chahar Mahali & Sevigny, 2022), English (Idrus et al., 2023) and science learning outcomes such as chemistry (Rahmawati, Ridwan, Cahyana, et al., 2020; Rahmawati, Ridwan, Faustine, et al., 2020). However, the use of CRT can be carried out optimally if supported by policies, curriculum, school regulations, parents and teaching reforms (Yang et al., 2014).

The CRT approach in learning will be more contextual through the local wisdom of each student. Local wisdom refers to the paradigm and concept of knowledge of a nation (Susanto et al., 2019), a local policy that is used as a cultural identity (Nurasiah et al., 2022) which is built and rooted to normative stability so that each region has a different cultural character (Sujinah et al., 2019). The manifestation of local wisdom includes a system of communal values (Sujinah et al., 2019), local socio-scientific (S. P. W. Lubis et al., 2022), activities or ways of life that are local but have universal value (Hasibuan, 2022), way of life of the local community (Meilana & Aslam, 2022), values upheld by the local community (Santika, 2022), theological, cosmological and sociological perspectives that are alive and embraced by local communities (Rummar, 2022), and as something meaningful to continue in the future (Kholidah et al., 2022). The study results show that local wisdom influences various development sustainability, including multicultural competence. Local wisdom affects the way people improve ecotourism management (Marlina et al., 2022), managing adolescent life (Hanafie Das et al., 2022), disaster mitigation (Priyambodo et al., 2022), Financial Literacy (Priyambodo et al., 2022), Character of students (Kardana et al., 2022), and tolerance in religious life (Pajarianto et al., 2022). One of the local wisdom is the local Sundanese wisdom, which teaches *silih asah* (Teach each other), *silih asih* (loving each other), and *silih asuh* (take care of each other) (Fauzia et al., 2020; Ulum et al., 2022).

The use of local wisdom can be more attractive to students by using gamification according to the context of today's students, who are generally the alpha generation, namely the generation that loves games. Gamification is a learning approach that uses elements in games or video games to motivate and maximize feelings of enjoyment and engagement in a learning process (Oliveira, Hamari, Shi, et al., 2022). Gamification is one of the innovative methods of learning using gamification elements such as levels, points, badges, and leaderboards (Lutfina et al., 2023). Gamification integrated with artificial intelligence (AI) will increase student interest, engagement and mental health (Kamarudin et al., 2022). Gamification in learning has various advantages, including learning is more interesting and successful (Manzano-León et al., 2022), improves students' cooperation and emotional intelligence (Redondo-Rodríguez et al., 2022), current and future learning models (Kaya & Ercag, 2023) (Oliveira, Hamari, Shi, et al., 2022). Gamification models in learning can be used in a variety of subjects (Kamalodeen et al., 2021) and produce meaningful learning (Antonopoulou et al.,

2022). Gamification models include the use of Kahoot (Azmi & Kasduri, 2023), and the use of Wordwall (Ariyanto et al., 2023).

Using CRT, local wisdom and gamification in an integrated manner in learning can ultimately increase students' multicultural competence. Multicultural competence refers to students' multicultural knowledge, attitudes, and skills (Futaqi, 2018) in respecting diversity (Chao et al., 2011). Current and future students need multicultural competencies to be able to adapt and collaborate sustainably (Astashova et al., 2019). In the context of teachers, multicultural competence is reflected in the teacher's ability to master the field they are taught, be aware of and recognize the culture he or she has, be able to influence different thinking patterns, and be able to adjust approaches and intervention techniques that are in line with the student's conditions (Rifani et al., 2022). An effective multicultural education process can equip its graduates with multicultural competencies in the form of awareness, knowledge, and holistic skills in appreciating personal art and other cultures (Astashova et al., 2019). To cultivate multicultural competence, a systematic and planned process is needed, but it is not enough (Dameron et al., 2020). Multicultural competence is needed by various professions, such as doctors, counselors, and educators. Multicultural competence will prevent them from engaging in unethical behavior (Moleiro et al., 2013; Subarimani et al., 2020).

Based on the background and literature review above, developing a Pancasila Education learning model that focuses on improving students' multicultural competencies can be carried out through a culturally responsive teaching (CRT) approach by integrating local wisdom and gamification (CERITATALOGAM). Through CRT, students understand the values of diversity through learning experiences in relevant cultural contexts, such as Sundanese cultural culture in this study. Through local wisdom, students can understand the values of love for the homeland and national identity, traditional games, traditional food, and ancestors' traditions. Gamification as an interactive learning strategy, gamification ages active student engagement, making learning more fun and effective. By integrating these three approaches, Pancasila Education learning becomes a holistic means to develop multicultural competencies.

Paying attention to these rational reasons, the formulation of the problem in this study is: How can a CERITATALOGAM-based Pancasila education learning model that can improve students' multicultural competence be developed? Based on the formulation of the problem, this study has two objectives, namely: (1) Explain the development process and feasibility of the CERITATALOGAM-Based Pancasila Education Model in improving students' multicultural competence, and (2) Explain the effectiveness of the CERITATALOGAM-Based Pancasila Education Model in improving students' multicultural competence.

3. Methodology

This research aims to produce a new learning model in the subject of Pancasila Education. This study describes the development process and feasibility of the new learning model and testing its effectiveness. The new learning model integrates the Culturally Responsive Teaching (CRT), Local Wisdom, and Gamification (CERITATALOGAM) approach. This research uses a research and development (R&D) approach to produce a learning model (Creswell, 2012). The learning model produced in this study is to develop students' multicultural competencies.

To achieve the above objectives, this study uses the theory of the development of the Dick & Carey learning model (Walter Dick, Lou Carey, 2015). Based on this theory, a learning model can be declared "feasible" and "effective" through 10 activities, namely: (1) identification of learning objectives, (2) analysis of learning and learning devices, (3) identification of student characteristics, (4) formulation of special learning objectives, (5) development of research instruments/learning assessment instruments, (6) development of learning strategies, (7) development of selection of learning materials, (8) design and conduct formative evaluations, (9) revision learning, and (10)

activities to test the effectiveness of learning models or summative evaluation by conducting quasi-experimental between the new model and the Problem based learning (PBL) model.

The research was conducted on 5th-grade students at State Elementary Schools in Bogor City, Indonesia. The selection of schools based on considerations includes cultural diversity (there are seven tribes, namely Sundanese, Betawi, Padang, Batak, Bali, Javanese, and Dayak), the achievement of Pancasila learning outcomes is still lacking (as many as 49.42 percent have not achieved learning completeness), appreciation for diversity is still lacking (as many as 65.25 percent of students still commit acts of intolerance), teachers are still lacking in implementing innovative learning (as many as 59.58 percent of teachers not using differentiated learning) (Hidayat & Patras, 2024).

Testing of Pancasila learning outcome instruments related to multicultural competence is carried out through expert test and validation instruments (Ge et al., 2018; Md Ghazali, 2016). The test instrument comprises multiple choice (PG), fills, descriptions, and essays. Expert validation includes Language experts, media experts, contents, and model experts . Based on the trial results in modules 1, 2, 3, and 4, all questions met the criteria of validity, reliability, test difficulty, and test differences. In addition to the test results, the assessment instrument for developing this learning model product has been declared feasible and ready for further testing by experts.

Formative model testing is carried out through three stages: One-to-One, small group, and field test (Aust et al., 2024; Söderström, 2023). Information from the One-to-One stage is used to improve learning designs, gamification features, and Student Worksheets (LKPD). Information from the Small Group stage is used to assess the success of CRT, local wisdom, and gamification in increasing student learning motivation. Information from the Field Test stage is used to measure the achievement of learning outcomes, the influence of local wisdom in understanding Pancasila, and the acceptance of students and teachers to the overall learning model.

Testing the effectiveness of the new learning model was carried out through N-Gain results from the differences in learning outcomes of Modules 1, 2, 3, and 4 between those using the CERITALOGAM model and PBL (Problem-Based Learning) (Benly et al., 2020; Dalila et al., 2022). The model's effectiveness was tested in 4 experimental and 4 control classes. In addition to looking at N-Gain, testing the model's effectiveness was also carried out through the results of teacher and student responses. A total of 8 teachers and 120 students were respondents to assess the effectiveness of learning models. The following is the flow of the research used.

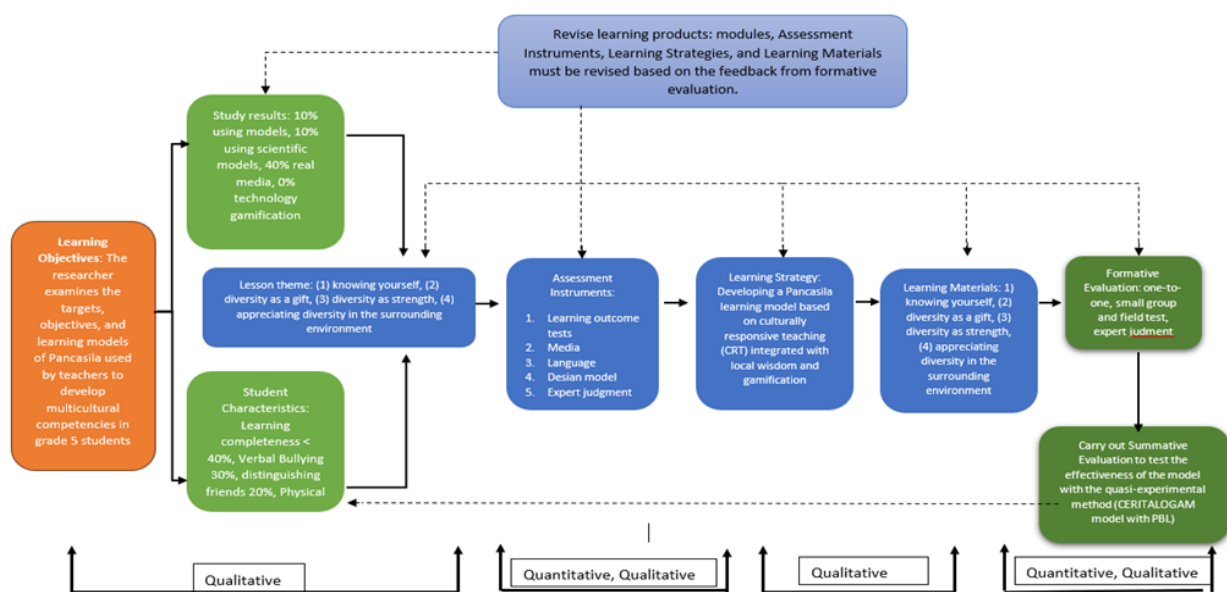


Figure 1. Flow chart of CERITALOGAM research

4. Results

4.1. Model Development and Feasibility

First, in the learning objectives of Pancasila education, it is found that educational learning outcomes (CP) require "simplification of goals" so that teachers can more easily implement learning objectives. After setting the learning objectives, then select the dimensions of the CP. In this study, the selected dimension is "Bhineka Tunggal Ika". The concept of Bhineka Tunggal Ika refers to "different but still one", this is also the slogan of the Indonesian state to unite a nation of various ethnicities, religions and languages (Baihaki, 2017; Riyanto et al., 2022). Next is to design a Pancasila learning model based on Culturally Responsive Teaching (CRT) integrated with local wisdom and gamification (CERITATALOGAM) to develop students' multicultural competencies. Based on the dimensions of Bhineka Tunggal Ika, 4 themes are then taken as follows: (1) knowing oneself, (2) diversity as a gift, (3) diversity as a strength, (4) appreciating diversity in the surrounding environment. The teacher's ability to express learning objectives and theme-taking is highly recommended (Kulhmann Lüdeke & Sánchez Zúñiga, 2017; Nurmadiyah et al., 2022).

Second, in the process of preparing and developing products or learning models. This study found that school learning tools, such as curriculum, teaching modules (RPP), learning models, Pancasila learning materials, and Student Worksheets (LKPD), are diverse. Even though it follows the national curriculum (Independent Curriculum), its implementation has not been optimal. Related to the CRT approach, local wisdom, and gamification use in Pancasila learning is still underdeveloped, even almost unused. Based on these findings, to make Pancasila Education education more interesting and useful, this study uses the Culturally Responsive Teaching (CRT) approach, local wisdom, and gamification in an integrated manner. The ability of teachers to evaluate, find, plan, arrange, and implement learning with new learning tools, such as CERITATALOGAM in this study is very important (Konstantinov et al., 2018; Maulida et al., 2024). The ability of teachers to concoct various learning models is highly demanded to be able to create new learning models that are more relevant (Parra González et al., 2019; Wen, 2023)

Third, findings on student characteristics. This study found that the characteristics of students at SDN Layungsari 02 and SDN Empang 01, Bogor City, West Java, Indonesia, are diverse, and each student is unique academically, socially, emotionally, physically, and creatively. In general, student characteristics are influenced by the conditions of parents' education level, economic level, and socio-cultural environment. The education level of the students' parents is mostly graduates of elementary and junior high schools, their jobs are laborers with irregular incomes. Based on the diversity and uniqueness of the students, this study chooses a learning model that is able to motivate students in the form of local wisdom and gamification.

Fourth, related to the specific goal of developing a CERITATALOGAM-based Pancasila Education learning model, this study determines that the unique goal is to develop students' multicultural competencies. Several methods are used to obtain these specific goals, including literature studies, to understand the context of the specific goals and their elements. In principle, multicultural competence is a recognition and appreciation of the various cultural backgrounds of students, as well as a commitment to providing fair access to education for all (Dameron et al., 2020; Houser et al., 2012). The development of multicultural competencies can be integrated with stories, histories, and examples from different cultures, the use of technology, and various learning methods that reflect the diversity of students (Dameron et al., 2020; Ishmuradova & Ishmuradova, 2019). In its implementation, the development of multicultural competencies involves the implementation of teaching strategies and practices that support cultural diversity (Karadağ et al., 2021; Lyu, 2024). Among the challenges faced are that teachers need to overcome stereotypes, prejudices, and discrimination to create an inclusive learning environment that respects differences (Connerley &

Pedersen, 2014; Finck et al., 2021). In terms of elements, the formulation of this goal needs to pay attention to specific objectives, including their importance, role, implementation, and challenges. Based on the exposure to the formulation of the specific goal, the development of a learning model product such as CERITATALOGAM is significant for teachers to understand the context and elements of the selected particular goal of defense correctly (Aguilar & Cháves, 2022; van Zundert et al., 2012).

Fifth, related to the development of assessment instruments. This study ensures that the learning outcome instruments created can accurately and fairly measure the achievement of students' multicultural competencies and provide constructive feedback for further improvement. In this study, the learning outcomes of Pancasila related to multicultural competence consist of test instruments (Dwi Kristanto et al., 2020; Meier, 2020) and experts validation (Buitrago et al., 2023; Ismail & Asbah, 2021; Rohmadheny & Laila, 2020). The test instrument consists of multiple choice (PG), fills, descriptions, and essays. Expert validation includes Language experts, media experts, and model experts. The learning outcomes of Pancasila include students' awareness, knowledge and multicultural skills (Maisyaroh et al., 2023; Oktaviani et al., 2024). Based on the results of the test in modules 1, 2, 3 and 4, all question items met the criteria of validity, reliability, test difficulty, and the difference of each test item. In addition to the test results, the assessment instrument for the development of this learning model product has been declared feasible and ready for further testing. Material experts validated that the learning materials were in accordance with the goal of developing students' multicultural competencies. The validation of the model experts stated that the improvements made will help the CERITATALOGAM model be clearer, easier to understand, and relevant to the learning needs of students and teachers. Media experts stated that the integration of gamification with local wisdom can be visually interesting and student interaction with learning. The validation of the language expert noted the need to improve the Indonesian and Sundanese used in the module. Expert validation of an assessment instrument for the development of learning models is very important (Ismail & Asbah, 2021).

Sixth, related to the development of learning strategies. The development of Pancasila education learning strategies is carried out by identifying learning needs relevant to the local context. Based on interviews with teachers and students, there is a consensus that the culturally responsive teaching (CRT) learning approach can be integrated with local wisdom and gamification (CERITATALOGAM). These findings are in line with other studies (Koswara et al., 2024). The purpose of the model is to improve students' multicultural competence. The determination of learning strategies with CERITATALOGAM is based on the fact that this CRT and gamification-based learning strategy is effective in creating learning that is more inclusive and relevant to the local context despite challenges in terms of time and resource limitations. The selection of learning strategies is a crucial ability that teachers must master, especially in the development of new learning models (Aliyu et al., 2023; Schlusche et al., 2023).

Seventh, related to the development of the selection of learning materials. This research has met the seven characteristics of the learning model (Nor et al., 2022; Schlusche et al., 2023), namely: (1) the understanding that the Pancasila learning model is based on CERITATALOGAM is an innovation of a learning model developed to develop students' multicultural competencies, (2) the goal that all student behavior can be observed, measured in special behaviors that are the learning objectives, namely the development of multicultural competencies, (3) syntax, that this model syntax includes interaction of cultural involvement, self-understanding, cultural technology, collaboration, reflection and evaluation, (4) social systems, that there is interaction between teachers and students, the existence of cultural involvement, self-understanding, technology, collaboration, reflection and evaluation, (5) reactions, that teachers respond and reward what has been given by students, (6) a support system that the implementation of this model involves collaboration between schools, local communities, and experts in culture to ensure that the content taught is appropriate to the local

context and the needs of students, and (7) the instructive and accompanying impact that this learning model is expected to provide a significant instructional impact by enhancing students' multicultural competencies. In developing a learning model, the seven characteristics of the model are very important (Aliyu et al., 2023; Koswara et al., 2024).

4.2. Preparation and development of evaluation models

Eighth, related to formative evaluation, this study conducts formative assessments with three stages: One-to-One, Small Group, and Field Test (Lu et al., 2022; Siing et al., 2023). Each stage has different assessment objectives. The One-to-One stage is an initial test on three students to identify the initial design problems of the model and test student understanding and engagement (Mateos-Moreno & Erlanson, 2024; Steliou & Jakubowski, 2024). Data from this stage is used to improve learning design, gamification features, and Student Worksheets (LKPD). The Small Group stage involves 6 students who are formed into 3 groups based on student learning styles. Assessment at this stage is to assess the success of CRT and gamification elements in increasing student learning motivation in the context of group work (He et al., 2024; Yuniarti et al., 2023). The Field Test stage was carried out in a class with 28 students. This stage is used to measure the achievement of learning outcomes, the influence of local wisdom in the understanding of Pancasila, and the acceptance of students and teachers to the overall learning model (Farley et al., 2015). The result of the formative assessment is improving the Pancasila learning model through CERITATALOGAM to develop students' multicultural competence. Pre- and post-tests were carried out in two public elementary schools to strengthen the feasibility of the model. Based on the pre- and post-tests, it was found that the Pancasila learning model based on CERITATALOGAM was more effective in increasing student involvement and relevance and further fostering multicultural competence.

Ninth, related to expert validation. In this study, expert validation is integral to the formative stage (Tempelaar et al., 2024; Wafubwa & Csíkos, 2022). This research involved two modeling experts and material experts, two cultural and language experts, and two media experts. The input of the model and material experts includes improving sentences that are adjusted to the age of the students, use of English in each syntax translated into Indonesian, adding time to preliminary activities, and improving evaluations. One of the material experts stated the following:

“The subject matter is good; it has led to Self Understanding, Differentiative, Cultural Technology Engagement, Social Engagement, Collaborative.” (VMA, 03).

Cultural and linguistic experts improved the Sundanese language, which used to be a simpler language and suitable for the age of the students. Input from media experts is that the gamification must be backed up with a video to anticipate if the internet network is unstable so that gamification can still be implemented without an internet network. Expert validation in the model feasibility process is essential as models become more feasible for use in learning (Aliyu et al., 2023; Shida et al., 2023).

4.3. Testing the effectiveness of the learning model

Tenth, the effectiveness of the learning model must be tested. The Pancasila learning model based on Culturally Responsive Teaching (CRT) integrated with local wisdom and gamification (CERITATALOGAM) has proven very effective. Evidence through N-Gain of the difference in learning outcomes of Modules 1, 2, 3, and 4 between those using the CERITATALOGAM model and PBL (Problem-Based Learning) model shows that the learning outcomes for multicultural competence are higher than those of the PBL model. Testing the effectiveness of this model is part of the summative assessment or the 10th stage of the development of the Dick and Carey learning model (Walter Dick, Lou Carey, 2015). The effectiveness of the learning model results from the research results because of the teacher's ability to understand students' unique and varied talents, interests, and learning

styles (de Jong et al., 2019; Hidayat & Patras, 2024; Indrawatiningsih et al., 2024). In addition, teachers can bring students to the factual context that exists in society, such as language, food, culture, and traditional games (Patras et al., 2023; Reddy & van Dam, 2020; Sjafirah et al., 2024). In addition, the teacher's ability to present gamification in learning can motivate and attract students' interest in learning (Lampropoulos & Kinshuk, 2024; Novo et al., 2024; Oliveira, Hamari, Shi, et al., 2022).

The results of the responses of teachers and students also show the effectiveness of the model in the research model. Teachers who participated in the study stated that the CERITATALOGAM model is exciting and easy to implement. One of the teachers stated regarding the effectiveness of the learning model as follows:

“The CERITATALOGAM model in Pancasila learning is very effective because it is easy to understand, the local context is relevant, entertaining and interactive, can increase learning motivation and develop students' character and critical thinking skills.” (NR, Teacher, 2024)

Most students also mentioned that the CERITATALOGAM model is new and fun. Novelty in the form of integration of local wisdom and gamification has proven to be able to motivate students (Cheng et al., 2021; Dahalan et al., 2023; Konstantinov et al., 2018; Patras et al., 2023).

5. Discussion

Essential findings worth discussing from the research include the fact that the learning curriculum in schools may be very complicated and not easy to implement. Teachers developing a new learning model must have the courage to simplify learning objectives. The teacher's ability to express learning objectives and theme-taking is highly recommended (Kulhmann Lüdeke & Sánchez Zúñiga, 2017; Nurmadiyah et al., 2022) so that teachers are more independent when choosing a new learning model. The ability of teachers to formulate teaching objectives and materials is vital. This requires teachers to be more professional in teaching (Cai Zhaohui, 2014; Nor et al., 2022).

Along with the ability to articulate learning objectives, teachers face challenges from an ever-changing environment. In such conditions, teachers must remain enthusiastic to find and solve problems. To overcome the problem of multicultural competence of students, for example, teachers need to think about new ways that have not been done much, for example, in the context of this research, teachers are trying to implement the CERITATALOGAM model to increase multicultural competence into a new solution for Pancasila learning. This is in line with the spirit of the 21st century where teachers need to look for more innovative and technology-based learning theories (ICF Consulting Services Ltd, 2015; Taimalu & Luik, 2019). Innovative technology-based learning theory is the basis for the development of learning strategy models in the digital era (Kummanee et al., 2020; Lewin et al., 2018; Yakovleva, 2022). Teachers' ability to evaluate, discover, plan, organize, and implement new learning is very important (Konstantinov et al., 2018; Maulida et al., 2024). To make learning more relevant for 21st-century students (Parra González et al., 2019; Wen, 2023).

Teachers' understanding of students with diverse academic, social-emotional, and economic backgrounds is indispensable. Teachers' ability to create interesting learning models, such as gamification and local wisdom, can increase students' learning motivation with diverse backgrounds. Teachers must be able to understand that motivation that arises from outside the student through gamification (Konstantinov et al., 2018; Wen, 2023). Students' internal motivation arises from the development of learning that is by the student's talents, interests, and learning style (Álava et al., 2021; Maulida et al., 2024). The ability of teachers to determine learning models from diverse student characters such as CERITATALOGAM is important to achieve the specific learning goals set (Fadlun, 2019; Star et al., 2015).

In developing learning models, teachers' ability to find the main goals in teaching is very important. In the context of research on developing the CERITALOGAM model, the researcher sets the main goal of learning to improve students' multicultural competence. The correct formulation of specific goals allows teachers to succeed in their efforts to improve their ability to develop new learning models (Galadima et al., 2019; Ramli et al., 2022), such as developing a CERITAMETAL-based Pancasila Education model to improve students' multicultural competencies.

Another thing that teachers need to pay attention to in model development is the ability to make test instruments used in research. Test questions can consist of multiple choice, description, and essay. Don't forget that expert validation is also needed to determine that the instrument is feasible to measure what we are measuring. Expert validation in the development of learning models is very important (Ismail & Asbah, 2021).

The main advantage of the CERITALOGAM model is its cultural relevance which makes learning more suitable for students' daily lives (Ali et al., 2024; Stephens et al., 2019). By integrating local wisdom, such as folklore and local traditions, students feel more connected to the subject matter and can improve their understanding of Pancasila values (Haka et al., 2024; Widana et al., 2023; Wulandari et al., 2023). In addition, the use of gamification in learning increases student motivation and engagement (Ruiz et al., 2024; Sotos-Martínez et al., 2023; Zhang & Crawford, 2024). Gamification elements, such as educational games and reward systems, make the learning process more interactive and fun, so that students are more interested and active in learning activities (Ccoa et al., 2023; Oliveira, Hamari, Joaquim, et al., 2022).

The results of this study are in line with other research that improving multicultural competence is not only with the CERITALOGAM model, but can also be done with other multicultural education models, including the learning model through educational comics (Anggito & Sartono, 2022), Multicultural Community (Ali et al., 2024), Habituation education (Akbarwati et al., 2024), problem-based learning (Qondias et al., 2022), Multicultural Environment and Collaboration (Antón-Solanas et al., 2020).

6. Conclusion

The Pancasila education learning model based on Culturally Responsive Teaching (CRT) integrated with local wisdom and gamification (CERITALOGAM) has proven to be feasible and effective in developing students' multicultural competencies. The model development process is in line with the ten steps of model development theory from Dick and Carey. The ten steps are divided into three activities on an ongoing basis, namely: (1) Model development and feasibility, (2) Preparation and development of evaluation models, and (3) Summative testing or model effectiveness testing. The feasibility of the model is proven in steps 1-9, and the effectiveness is demonstrated in Step 10. The N-Gain results in Step 10 show that the learning outcomes of Modules 1, 2, 3, and 4 using the CERITALOGAM model are higher than those of the Problem-Based Learning (PBL) model. The effectiveness of the CERITALOGAM model is supported by the teacher's ability to understand students' unique and varied talents, interests, and learning styles. It is also supported by the teacher's ability to bring students to the local cultural wisdom of the Sundanese people, West Java, Indonesia, such as values of life, language, food, ancestor tradition, and traditional games. In addition, it is supported by the teacher's ability to make gamification to motivate and attract students' interest in learning. The responses of teachers and students also showed that the Pancasila Education model through CERITALOGAM was fascinating and easy to implement in learning.

7. Suggestion

Based on the results of the research that has been carried out, the recommendations of this study are as follows: Teachers in elementary schools should pay special attention to implementing

Culturally Responsive Teaching (CRT), local wisdom, and gamification (CERITALOGAM) in various subjects, grade levels by adjusting the content of the lessons. Strong support from schools for using the CERITALOGAM model can be part of learning innovation. In-depth studies are still needed to strengthen and follow up on achievements and findings related to the CERITALOGAM model. In addition, further research is still needed to innovate and increase teachers' creativity in developing multicultural competencies.

Declarations

Author Contributions. All authors have read and approved the publication of the article's final version.

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References

- Aga Mohd Jaladin, R., Amit, N., Anuar, A. A., Fernandez, J. A., Salleh, S., Rais, H., & Lim, H. S. (2020). Development of a continuous professional development training module based on multicultural counselling competency for professional counsellors in Malaysia. *Journal of Adult and Continuing Education*, 26(2), 242–261. <https://doi.org/10.1177/1477971419896375>
- Aguilar, J., & Cháves, M. (2022). A Review of a Teaching–Learning Strategy Change to Strengthen Geomatic Concepts and Tools in the Biosystems Engineering Academic Studies at the Universidad de Costa Rica †. *Engineering Proceedings*, 9(1). <https://doi.org/10.3390/engproc2021009044>
- Agus, I. P., Giri, A., Ardini, N. L., Kertiani, N. W., Agama, K., & Tabanan, K. (2021). Pancasila Sebagai Landasan Filosofis Pendidikan Nasional. *Sanjiwani Jurnal Filsafat*, 12(1), 113–123.
- Ahyar, Sihkabuden, & Soepriyanto, Y. (2019). IMPLEMENTASI MODEL PEMBELAJARAN PROBLEM BASED LEARNING (PBL) PADA MATA PELAJARAN PENDIDIKAN PANCASILA DAN KEWARGANEGARAAN (PPKN). *JINOTEP (Jurnal Inovasi Teknologi Pembelajaran)*, 5(2), 74–80.
- Akbarwati, P., Supriyanto, T., & Trimurtini, T. (2024). Implementation of multicultural education values in the learning process in grade V elementary school. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 10(3), 386. <https://doi.org/10.29210/020244180>
- Akhyar, S. M., & Dewi, D. A. (2022). Pengajaran Pendidikan Pancasila Di Sekolah Dasar Guna Mempertahankan Ideologi Pancasila Di Era Globalisasi. *Jurnal Kewarganegaraan*, 6(1), 1541–1546. <http://journal.upy.ac.id/index.php/pkn/article/view/2772%0Ahttps://journal.upy.ac.id/index.php/pkn/article/view/2772/pdf>
- Álava, J. B. C., Vera, L. E. A., Tipán, V. F., & Pinargote, G. V. L. (2021). Teaching-learning methods and their influence on the development of multiple intelligences of initial education. *International Research Journal of Management, IT and Social Sciences*, 8(6), 701–711. <https://doi.org/10.21744/irjmis.v8n6.1970>
- Ali, A., Bektiarso, S., Walukow, A. F., & Narulita, E. (2024). Building Inclusive Learning Communities in Multicultural Classrooms: The Role of the CTL Model in Learning Interpersonal Skills. *Tafkir:*

Interdisciplinary Journal of Islamic Education, 5(4), 568–583.
<https://doi.org/10.31538/tijie.v5i4.1172>

- Aliyu, J., Osman, S., Kumar, J. A., & Jamil, M. R. M. (2023). the Design and Development of a Learning Strategy To Enhance Students' Engagement in Simultaneous Equations: an Evaluation Viewpoint. *Journal of Technology and Science Education*, 13(1), 36–52.
<https://doi.org/10.3926/jotse.1691>
- Andriawan, W., Islam, U., Mataram, N., & Andriawan, W. (2022). Pancasila Perspective on the Development of Legal Philosophy : Relation of Justice and Progressive Law. *Volksgeist*, V(1), 1–11. <https://doi.org/10.24090/VOLKSGEIST.V5I1.6361>
- Androsof, A., & Zhang, B. H. (2023). Students as Co-Creators: Bringing Culturally Responsive Teaching into a Doctoral Course for International Students in China. *SAGE Open*, 13(1), 1–16.
<https://doi.org/10.1177/21582440221145914>
- Anggito, A., & Sartono, E. K. E. (2022). The development of multicultural education comics to embed tolerance character for 4th grade of elementary school. *Jurnal Prima Edukasia*, 10(1), 66–81.
<https://doi.org/10.21831/jpe.v10i1.40504>
- Antón-Solanas, I., Coelho, M., Huércanos-Esparza, I., Vanceulebroeck, V., Kalkan, I., Cordeiro, R., Kömürkü, N., Soares-Coelho, T., Hamam-Alcober, N., Dehaes, S., Casa-Nova, A., & Sagarra-Romero, L. (2020). The teaching and learning cultural competence in a multicultural environment (Ccmn) model. *Nursing Reports*, 10(2), 154–163.
<https://doi.org/10.3390/NURSREP10020019>
- Antonopoulou, H., Halkiopoulou, C., Gkintoni, E., & Katsimpelis, A. (2022). Application of Gamification Tools for Identification of Neurocognitive and Social Function in Distance Learning Education. *International Journal of Learning, Teaching and Educational Research*, 21(5), 367–400. <https://doi.org/10.26803/ijlter.21.5.19>
- Ariyanto, M. P., Nurcahyandi, Z. R., Diva, S. A., & Kudus, U. M. (2023). Penggunaan Gamifikasi Wordwall untuk Meningkatkan Hasil Belajar Matematika Siswa. *Mathema: Jurnal Pendidikan Matematika*, 5(1), 1–10.
<https://ejurnal.teknokrat.ac.id/index.php/jurnalmathema/article/view/2080/1089>
- Arphattananon, T. (2018). Multicultural education in Thailand. *Intercultural Education*, 29(2), 149–162. <https://doi.org/10.1080/14675986.2018.1430020>
- Astashova, N. A., Bondyрева, S. K., & Zhuk, O. L. (2019). Preparation of future teachers for the implementation of the ideas of multicultural education in the interactive educational space. *Obrazovanie i Nauka*, 21(2), 27–50. <https://doi.org/10.17853/1994-5639-2019-2-27-50>
- Aust, L., Schütze, B., Hochweber, J., & Souvignier, E. (2024). Effects of formative assessment on intrinsic motivation in primary school mathematics instruction. *European Journal of Psychology of Education*, 39(3), 2177–2200. <https://doi.org/10.1007/s10212-023-00768-4>
- Azizah, N. (2020). Urgensi Kompetensi Multikultural Dari Konselor Sebagai Sarana Membangun Integritas Bangsa. *Counsnesia Indonesian Journal Of Guidance and Counseling*, 1(01), 12–19.
<https://doi.org/10.36728/cijgc.v1i01.1170>
- Azmia, I., & Kasduri, M. (2023). Pengaruh Menggunakan Media Pembelajaran Pada Aplikasi Game Kahoot Terhadap Evaluasi Pembelajaran PAI di SMP Swasta An-Nizam Medan. *Jurnal Penelitian Ilmu Pendidikan Indonesia*, 2(4), 451–456.
<https://jpion.org/index.php/jpi451> Situswebjurnal: <https://jpion.org/index.php/jpi>
- Baihaki, E. S. (2017). Strengthening Bhinneka Tunggal Ika As an Identity and Unifier of the Nation:

- Realizing a Peaceful Islam and Statehood Harmonization. *Addin*, 11(1), 55. <https://doi.org/10.21043/addin.v11i1.1965>
- Benly, M., Kartowagiran, B., Sukariasih, L., & Fayanto, S. (2020). Application of cooperative learning type group investigation to improve physics learning outcomes in vocational schools. *Universal Journal of Educational Research*, 8(10), 4618–4627. <https://doi.org/10.13189/ujer.2020.081030>
- Buitrago, R., Salinas, J., & Boude, O. (2023). Validation of a Model for the Formalization of Personal Learning Pathways Through Expert Judgment. *Journal of Higher Education Theory and Practice*, 23(12), 224–241. <https://doi.org/10.33423/jhetp.v23i12.6283>
- Cai Zhaohui, A. S. A. (2014). Impact of Teachers' Professional Development on Students' Performance. *Journal of Industrial Distribution & Business*, 5(3), 15–24. <https://doi.org/10.13106/jidb.2014.vol5.no3.15>
- Ccoa, N. M. Q., Choquehuanca, M. E. F., & Paucar, F. H. R. (2023). An Application of the Quizizz Gamification Tool to Improve Motivation in the Evaluation of Elementary School Students. *International Journal of Information and Education Technology*, 13(3), 544–550. <https://doi.org/10.18178/ijiet.2023.13.3.1837>
- Chahar Mahali, S., & Sevigny, P. R. (2022). Multicultural Classrooms: Culturally Responsive Teaching Self-Efficacy among A Sample of Canadian Preservice Teachers. *Education and Urban Society*, 54(8), 946–968. <https://doi.org/10.1177/00131245211062526>
- Chang, S., & Tharenou, P. (2004). Competencies Needed for Managing a Multicultural Workgroup. *Asia Pacific Journal of Human Resources*, 42(1), 57–74. <https://doi.org/10.1177/1038411104041534>
- Chao, M. M., Okazaki, S., & Hong, Y. yi. (2011). The quest for multicultural competence: Challenges and lessons learned from clinical and organizational research. *Social and Personality Psychology Compass*, 5(5), 263–274. <https://doi.org/10.1111/j.1751-9004.2011.00350.x>
- Cheng, M. M., Lacaste, A. V., Saranza, C., & Chuang, H. H. (2021). Culturally responsive teaching in technology-supported learning environments in marine education for sustainable development. *Sustainability (Switzerland)*, 13(24). <https://doi.org/10.3390/su132413922>
- Choi, S., & Mao, X. (2021). Teacher autonomy for improving teacher self-efficacy in multicultural classrooms : A cross-national study of professional development in multicultural education. *International Journal of Educational Research*, 105(November 2020), 101711. <https://doi.org/10.1016/j.ijer.2020.101711>
- Connerley, M., & Pedersen, P. (2014). The Development of Multicultural Competencies. *Leadership in a Diverse and Multicultural Environment: Developing Awareness, Knowledge, and Skills*, 69–88. <https://doi.org/10.4135/9781483328966.n5>
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Pearson.
- Dahalan, F., Alias, N., & Shaharom, M. S. N. (2023). Gamification and Game Based Learning for Vocational Education and Training: A Systematic Literature Review. In *Education and Information Technologies* (Vol. 29, Issue 2). Springer US. <https://doi.org/10.1007/s10639-022-11548-w>
- Dalila, A. A., Rahmah, S., Liliawati, W., & Kaniawati, I. (2022). Effect of Differentiated Learning in Problem Based Learning on Cognitive Learning Outcomes of High School Students. *Jurnal Penelitian Pendidikan IPA*, 8(4), 2116–2122. <https://doi.org/10.29303/jppipa.v8i4.1839>

- Dameron, M. L., Camp, A., Friedmann, B., & Parikh-Fox, S. (2020). Multicultural Education and Perceived Multicultural Competency of School Counselors. *Journal of Multicultural Counseling and Development, 48*(3), 176–190. <https://doi.org/10.1002/jmcd.12176>
- de Jong, L., Meirink, J., & Admiraal, W. (2019). School-based teacher collaboration: Different learning opportunities across various contexts. *Teaching and Teacher Education, 86*, 102925. <https://doi.org/10.1016/j.tate.2019.102925>
- Dwi Kristanto, Y., Hariwangsa Panuluh, A., & Dian Atmajati, E. (2020). Development and validation of a test instrument to measure pre-service mathematics teachers' content knowledge and pedagogical content knowledge. *Journal of Physics: Conference Series, 1470*(1). <https://doi.org/10.1088/1742-6596/1470/1/012008>
- Fadhilah, N., & Adela, D. (2020). Penguatan Nilai-Nilai Pancasila di Sekolah Dasar. *Jurnal BELAINDIKA (Pembelajaran Dan Inovasi Pendidikan), 2*(3), 7–16. <https://doi.org/10.52005/belaindika.v2i3.44>
- Fadlun. (2019). The Effect Of Teacher Performance On Academic Achievement Of Elementary School. *Jurnal Manajemen Pendidikan Dan Studi Islam, 27*(2), 58–66.
- Farley, D., Zheng, H., Rousi, E., & Leotsakos, A. (2015). Field test of the world health organization multi-professional patient safety curriculum guide. *PLoS ONE, 10*(9), 1–16. <https://doi.org/10.1371/journal.pone.0138510>
- Fauzia, N., Maslihah, S., & Wyandini, D. Z. (2020). Trisilas Local Wisdom Scale , Silih Asih, Silih Asah, Silih Asuh. *Jurnal Psikologi TALENTA, 5*(2), 121. <https://doi.org/10.26858/talenta.v5i2.12757>
- Finck, C., Gómez, Y., Castro, J. N., Mogollón, E. Y., Marcelo, N., & Hinz, A. (2021). Adaptation and validation of a Spanish instrument for assessing multicultural competencies and empathy. *International Journal of Intercultural Relations, 83*(June), 163–176. <https://doi.org/10.1016/j.ijintrel.2021.06.007>
- Firdaus, F., Anggreta, D. K., & Yasin, F. (2020). Internalizing Multiculturalism Values Through Education: Anticipatory Strategies for Multicultural Problems and Intolerance in Indonesia. *Jurnal Antropologi: Isu-Isu Sosial Budaya, 22*(1), 131. <https://doi.org/10.25077/jantro.v22.n1.p131-141.2020>
- Futaqi, S. (2018). Kompetensi Multikultural Lembaga Pendidikan Islam. *TA'LIM: Jurnal Studi Pendidikan Islam, 1*(1), 1–18. <https://doi.org/10.52166/talim.v1i1.621>
- Galadima, U., Ismail, Z., & Ismail, N. (2019). A new pedagogy for training the pre-service mathematics teachers readiness in teaching integrated STEM education. *International Journal of Engineering and Advanced Technology, 8*(5), 1272–1281. <https://doi.org/10.35940/ijeat.E1181.0585C19>
- Gay, G. (2015). The what, why, and how of culturally responsive teaching: International mandates, challenges, and opportunities. *Multicultural Education Review, 7*(3), 123–139. <https://doi.org/10.1080/2005615X.2015.1072079>
- Ge, W., Han, X., & Shen, X. (2018). Developing a validated instrument to measure teachers' ICT competencies for university teaching in a digital age. *Proceedings - 2018 7th International Conference of Educational Innovation through Technology, EITT 2018, 2012*, 101–105. <https://doi.org/10.1109/EITT.2018.00028>
- Guritno, B., Dewi, R. S., Arianti, F., Utama, S., Norvadewi, N., & Anggara, O. (2023). Culture of Islamic Economic Principles and Democracy and Welfare Based on Pancasila Ideology. *Journal of Intercultural Communication, 23*(1), 55–65.

- Haka, N. B., Pamungkas, M. F., Masya, H., Rakhmawati, I., & Hidayah, N. (2024). Design, Development, and Evaluation of Biology E-Modules Website Based on Local Wisdom of the Baduy Tribe: Strengthening Pancasila Student Profiles on Ecosystem Material. *E3S Web of Conferences*, 482. <https://doi.org/10.1051/e3sconf/202448205005>
- Hanafie Das, S. W., Halik, A., Ahdar, & Iman, B. (2022). Prenatal Education Process Based on Local Wisdom in Indonesia. *Education Research International*, 2022. <https://doi.org/10.1155/2022/6500362>
- Hasibuan, H. A. (2022). Peran Modul Berbasis Kearifan Lokal Untuk Mendukung Pendidikan Merdeka Belajar. *Prosiding Pendidikan Dasar*, 1(1), 292–301. <https://doi.org/10.34007/ppd.v1i1.201>
- He, J., Wu, B., Zhong, H., Zhan, J., Zhu, L., Zhang, J., Zeng, Y., & Li, Z. (2024). Implementing mind mapping in small-group learning to promote student engagement in the medical diagnostic curriculum: a pilot study. *BMC Medical Education*, 24(1), 1–10. <https://doi.org/10.1186/s12909-024-05318-0>
- Hidayat, R., & Patras, Y. E. (2024). Education transformation in Indonesia requires the implementation of differentiated learning. *International Journal of Evaluation and Research in Education*, 13(3), 1526–1536. <https://doi.org/10.11591/ijere.v13i3.27658>
- Houser, R., Wilczenski, F., & Ham, M. (2012). Carol: Multicultural Competence. *Culturally Relevant Ethical Decision-Making in Counseling*, 153–160. <https://doi.org/10.4135/9781452225838.n20>
- ICF Consulting Services Ltd. (2015). Literature Review on the Impact of Digital Technology on Learning and Teaching. *Social Research Series*, 61. <http://www.gov.scot/Resource/0048/00489224.pdf>
- Idrus, F., Ramli, L. N., & Habib, N. J. (2023). Exploring Preservice Teachers' Experiences of Implementing Culturally Responsive Teaching in the ESL Classrooms. *Theory and Practice in Language Studies*, 13(3), 766–776. <https://doi.org/10.17507/tpls.1303.26>
- Indrawatiningsih, N., Qomariyah, S., Nubita, A. R., & Muarofah, L. (2024). Effectiveness of Differentiated Learning in Improving Literacy and Numeracy of Primary School Students. *Asian Journal of Education and Social Studies*, 50(5), 8–17. <https://doi.org/10.9734/ajess/2024/v50i51337>
- Ishmuradova, I. I., & Ishmuradova, A. M. (2019). Multicultural education of students as an important part of education. *International Journal of Higher Education*, 8(7), 111–115. <https://doi.org/10.5430/ijhe.v8n7p111>
- Ismail, H., & Asbah. (2021). Linguistics and English language teaching journal expert judgment regarding ICT in efl reading comprehension material. *Linguistics and English Language Teaching Journal*, 10(2), 22–26.
- Japar, M. (2024). Educational Administration : Theory and Practice Analysis of Character Character in Indonesia Education Values : *Educational Administration: Theory and Practice*, 30(1), 334–347.
- Japar, M., Fadhillah, D. N., Kardiman, Y., & Kenedi, A. K. (2023). Teaching Civic Skills through Multicultural Education in Indonesia. *Proceedings of the 6th International Conference on Learning Innovation and Quality Education (ICLIQE 2022), Advances in Social Science, Education and Humanities Research 767, Icliqe*, 1033–1045. https://doi.org/10.2991/978-2-38476-114-2_95
- Japar, M., Fadhillah, D. N., & Syarif, S. (2019). *Civic Education through E-Learning in Higher Education*. 335(ICESHum), 505–511. <https://doi.org/10.2991/iceshum-19.2019.81>

- Jayadi, K., Abduh, A., & Basri, M. (2022). A meta-analysis of multicultural education paradigm in Indonesia. *Heliyon*, 8(1), e08828. <https://doi.org/10.1016/j.heliyon.2022.e08828>
- Kamalodeen, V. J., Ramsawak-Jodha, N., Figaro-Henry, S., Jaggernauth, S. J., & Dedovets, Z. (2021). Designing gamification for geometry in elementary schools: insights from the designers. *Smart Learning Environments*, 8(1). <https://doi.org/10.1186/s40561-021-00181-8>
- Kamarudin, N. A. B., Ikram, R. R. binti R., Azman, F. N. B., Ahmad, S. S. S., & Zainuddin, D. Bin. (2022). A Study of The Effects of Short-Term AI Coding Course with Gamification Elements on Students' Cognitive Mental Health. *TEM Journal*, 11(4), 1854–1862. <https://doi.org/10.18421/TEM114-53>
- Karadağ, Y., Kesten, A., & Özden, D. Ö. (2021). Multicultural competencies of social studies teachers: A qualitative study. *Journal of Social Science Education*, 20(1), 91–117. <https://doi.org/10.4119/jsse-3473>
- Kardana, I. N., Rajistha, I. G. N. A., & Sri Satyawati, M. (2022). Revitalizing Local Wisdom in Balinese Simile: An Effort to Enhance Balinese Youth Character. *Journal of Language Teaching and Research*, 13(1), 138–144. <https://doi.org/10.17507/JLTR.1301.16>
- Karyono, H. (2023). Pancasila Ideology as the Basis for Building the Character of the Younger Generation in Indonesia. *Academic Journal of Interdisciplinary Studies*, 12(3), 319–326.
- Kaya, O. S., & Ercag, E. (2023). The impact of applying challenge - based gamification program on students ' learning outcomes : Academic achievement , motivation and flow. *Education and Information Technologies*, 0123456789. <https://doi.org/10.1007/s10639-023-11585-z>
- Kholidah, L. N., Winaryo, I., & Inriyani, Y. (2022). Evaluasi Program Kegiatan P5 Kearifan Lokal Fase D di Sekolah Menengah Pertama. *Edukatif: Jurnal Ilmu Pendidikan*, 4(6), 7569–7577. <https://doi.org/10.31004/edukatif.v4i6.4177>
- Koh, S. Y., & Harris, A. (2020). Multicultural reflexivity: university students negotiating 'pockets' and 'strings' of multiculturalism in Malaysia. *Children's Geographies*, 18(6), 712–725. <https://doi.org/10.1080/14733285.2020.1713300>
- Konstantinov, O., Kovatcheva, E., & Palikova, N. (2018). Gamification in Cultural and Historical Heritage Education. *INTED2018 Proceedings*, 1(June 2020), 8443–8451. <https://doi.org/10.21125/inted.2018.2043>
- Koswara, D., Hyangsewu, P., Darajat, D., & Alamsyah, Z. (2024). Model of Local Wisdom Education in The Ancient Sundanese Manuscript Sanghyang Siksa Kandang. *International Journal of Language and Culture*, 2(1), 53–65.
- Kulmann Lüdeke, A., & Sánchez Zúñiga, M. C. (2017). Educational Alignment: Learning – Teaching Approaches as Influencing Factors. *Universitas Médica*, 58(1). <https://doi.org/10.11144/javeriana.umed58-1.ealt>
- Kummanee, J., Nilsook, P., & Wannapiroon, P. (2020). Digital learning ecosystem involving steam gamification for a vocational innovator. *International Journal of Information and Education Technology*, 10(7), 533–539. <https://doi.org/10.18178/ijiet.2020.10.7.1420>
- Kusumawati, I., Ari Bowo, A. N., & Wahono, J. (2021). Model Pembelajaran Ppkn Melalui Pendekatan Komprehensif. *Jurnal Pendidikan PKN (Pancasila Dan Kewarganegaraan)*, 2(1), 24. <https://doi.org/10.26418/jppkn.v2i1.43556>
- Lampropoulos, G., & Kinshuk. (2024). Virtual reality and gamification in education: a systematic review. In *Educational Technology Research and Development* (Vol. 72, Issue 3). Springer US.

<https://doi.org/10.1007/s11423-024-10351-3>

- Lestari, S. O., & Kurnia, H. (2022). Peran pendidikan Pancasila dalam pembentukan karakter. *Jurnal Citizenship: Media Publikasi Pendidikan Pancasila Dan Kewarganegaraan*, 5(1), 25–32. <https://doi.org/10.12928/citizenship.v5i2.23179>
- Lewin, C., Cranmer, S., & McNicol, S. (2018). Developing digital pedagogy through learning design: An activity theory perspective. *British Journal of Educational Technology*, 49(6), 1131–1144. <https://doi.org/10.1111/bjet.12705>
- Lu, J., Tuo, P., Feng, R., Stephens, M., Zhang, M., & Shen, Z. (2022). Visualizing Commognitive Responsibility Shift in Collaborative Problem-Solving During Computer-Supported One-to-One Math Tutoring. *Frontiers in Psychology*, 13(April), 1–11. <https://doi.org/10.3389/fpsyg.2022.815625>
- Lubis, D. A., & Najicha, F. U. (2022). Pentingnya Pancasila Menjadi Mata Pelajaran Wajib dalam Kurikulum Pendidikan Nasional Guna Menjaga Keutuhan Bangsa. *De Cive : Jurnal Penelitian Pendidikan Pancasila Dan Kewarganegaraan*, 2(5), 171–175. <https://doi.org/10.56393/decive.v2i5.614>
- Lubis, M. R. (2023). LAW ENFORCEMENT CONCERNING THE CRIME OF MONEY LAUNDERING BASED ON PANCASILA. *Jurnal Hukum*, 38(1), 32–42.
- Lubis, S. P. W., Suryadarma, I. G. P., Paidi, & Yanto, B. E. (2022). The Effectiveness of Problem-based learning with Local Wisdom oriented to Socio-Scientific Issues. *International Journal of Instruction*, 15(2), 455–472. <https://doi.org/10.29333/iji.2022.15225a>
- Lutfina, E., Setiawan, R. O. C., Nugroho, A., & Abdillah, M. Z. (2023). PERANCANGAN APLIKASI PEMBELAJARAN DENGAN KONSEP GAMIFIKASI Systematic Literature Review. *METHOMIKA Jurnal Manajemen Informatika Dan Komputerisasi Akuntansi*, 7(1), 78–87. <https://doi.org/10.46880/jmika.Vol7No1.pp78-87>
- Lyu, J. (2024). Cultivating Cross-Cultural Competence in Students. *SHS Web of Conferences*, 187, 04006. <https://doi.org/10.1051/shsconf/202418704006>
- Maisyaroh, M., Untari, S., Chusniyah, T., Adha, M. A., Prestiadi, D., & Ariyanti, N. S. (2023). Strengthening character education planning based on Pancasila value in the international class program. *International Journal of Evaluation and Research in Education*, 12(1), 149–156. <https://doi.org/10.11591/ijere.v12i1.24161>
- Manzano-León, A., Rodríguez-Ferrer, J. M., Aguilar-Parra, J. M., & Salavera, C. (2022). The Legends of Elendor: Educational Gamification as an Influential Factor in Academic Flow and Academic Performance in Socially Depressed Communities. *Education Sciences*, 13(1), 8. <https://doi.org/10.3390/educsci13010008>
- Marjuni. (2019). FILSAFAT PENDIDIKAN PANCASILA DALAM PERSPEKTIF PENDIDIKAN ISLAM DI INDONESIA. *Jurnal Filsafat Indonesia*, 2(2).
- Marlina, Sumarmi, Astina, I. K., Utomo, D. H., & Kurniawati, E. (2022). Ecotourism Management Based on Local Wisdom for Optimizing the Function of Cave Water Resources As a Prevention of Floods and Droughts in Wakatobi Regency, Indonesia. *Geojournal of Tourism and Geosites*, 44(4), 1222–1232. <https://doi.org/10.30892/gtg.44406-938>
- Mateos-Moreno, D., & Erlanson, E. (2024). Investigating one-to-one instrumental music lessons in relation to a training programme on Paul Harris' simultaneous learning. *International Journal of Music Education*, 42(1), 148–160. <https://doi.org/10.1177/02557614221137844>

- Maulida, F., Fitriani, A. D., & Darmayanti, M. (2024). Development of Teaching Materials Based on Differentiated Learning to Improve Critical Thinking Dimensions of The Pancasila Learner Profile. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 10(1), 125. <https://doi.org/10.33394/jk.v10i1.10420>
- Md Ghazali, N. H. (2016). A Reliability and Validity of an Instrument to Evaluate the School-Based Assessment System: A Pilot Study. *International Journal of Evaluation and Research in Education (IJERE)*, 5(2), 148. <https://doi.org/10.11591/ijere.v5i2.4533>
- Meier, S. (2020). Development and validation of a testing instrument to assess pedagogical content knowledge of German preservice physical education teachers. *Journal of Physical Education and Sport*, 20(5), 3010–3016. <https://doi.org/10.7752/jpes.2020.s5409>
- Meilana, S. F., & Aslam, A. (2022). Pengembangan Bahan Ajar Tematik Berbasis Kearifan Lokal di Sekolah Dasar. *Jurnal Basicedu*, 6(4), 5605–5613. <https://doi.org/10.31004/basicedu.v6i4.2815>
- Meléndez-Luces, J., & Couto-Cantero, P. (2021). Engaging ethnic-diverse students: A research based on culturally responsive teaching for roma-gypsy students. *Education Sciences*, 11(11). <https://doi.org/10.3390/educsci11110739>
- Moleiro, C., Freire, J., & Tomsic, M. (2013). Immigrant perspectives on multicultural competencies of clinicians: A qualitative study with immigrants in Portugal. *International Journal of Migration, Health and Social Care*, 9(2), 84–95. <https://doi.org/10.1108/IJMHS-05-2013-0003>
- Nevrita, N. (2023). Analysis of Maritime Content in the Project for Strengthening the Profile of Pancasila Students (P-5) as an Educational Media in Getting to Know the Culture of Coastal Communities at SMP Negeri 19 Bintan (Activist School Batch 2). *BIO Web of Conferences*, 05003.
- Ni'amah, M. (2024). Menumbuhkan Tunas Kreativitas: Strategi Pembelajaran Pendidikan Pancasila yang Efektif untuk Kelas 1 SD/MI. *Jurnal Yudistira: Publikasi Riset Ilmu Pendidikan Dan Bahasa*, 2(3), 191–202.
- Nor, H., Hizriani, N., & Kadariyah, N. L. (2022). Teachers' Materials Development, Lesson Planning, and Teaching Skills Readiness in Teaching English. *PANYONARA: Journal of English Education*, 4(1), 32–64. <https://doi.org/10.19105/panyonara.v4i1.5909>
- Novo, C., Zanchetta, C., Goldmann, E., & de Carvalho, C. V. (2024). The Use of Gamification and Web-Based Apps for Sustainability Education. *Sustainability (Switzerland)*, 16(8). <https://doi.org/10.3390/su16083197>
- Nurasiah, I., Marini, A., Nafiah, M., & Rachmawati, N. (2022). Nilai Kearifan Lokal: Proyek Paradigma Baru Program Sekolah Penggerak untuk Mewujudkan Profil Pelajar Pancasila. *Jurnal Basicedu*, 6(3), 3639–3648. <https://doi.org/10.31004/basicedu.v6i3.2727>
- Nurgiansah, T. H. (2021). Pendidikan Pancasila Sebagai Upaya Membentuk Karakter Jujur. *Jurnal Pendidikan Kewarganegaraan*, 9(1), 33–41.
- Nurgiansah, T. H. (2022). Pendidikan Pancasila sebagai Upaya Membentuk Karakter Religius. *Jurnal Basicedu*, 6(4), 7310–7316. <https://doi.org/10.31004/basicedu.v6i4.3481>
- Nurmadiyah, Tolla, I., & Jabu, B. (2022). Design of Contextual Teaching and Learning (CTL) Model to Improve Student's Life Skills: The Development Phase in Research and Development. *Asian Journal of Applied Sciences*, 10(1), 16–24. <https://doi.org/10.24203/ajas.v10i1.6848>
- Nurwardani, P. (2016). *Pendidikan Pancasila*. Direktorat Jenderal Pembelajaran dan

Kemahasiswaan Kementerian Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia.

- Oktaviani, L., Aulia, U. Y., Murdiono, M., & Suharno, S. (2024). Strengthening the critical thinking skill through the six-hat thinking model in pancasila education. *Journal of Education and Learning*, 18(4), 1272–1278. <https://doi.org/10.11591/edulearn.v18i4.21202>
- Oliveira, W., Hamari, J., Joaquim, S., Toda, A. M., Palomino, P. T., Vassileva, J., & Isotani, S. (2022). The effects of personalized gamification on students' flow experience, motivation, and enjoyment. *Smart Learning Environments*, 9(1). <https://doi.org/10.1186/s40561-022-00194-x>
- Oliveira, W., Hamari, J., Shi, L., Toda, A. M., Rodrigues, L., Palomino, P. T., & Isotani, S. (2022). Tailored gamification in education: A literature review and future agenda. In *Education and Information Technologies*. Springer US. <https://doi.org/10.1007/s10639-022-11122-4>
- Pajarianto, H., Pribadi, I., & Sari, P. (2022). Tolerance between religions through the role of local wisdom and religious moderation. *HTS Teologiese Studies / Theological Studies*, 78(4), 1–8. <https://doi.org/10.4102/hts.v78i4.7043>
- Parra González, M. E., López Belmonte, J., Fuentes-Cabrera, A., & Segura Robles, A. (2019). Gamification in Primary Education Grade. A Project of Gamification in Tutorial Action Subject to Increase Motivation and Satisfaction of the Students. *Trends and Good Practices in Research and Teaching. A Spanish-English Collaboration, December*. <https://doi.org/10.36006/16184-13>
- Patras, Y. E., Hidayat, R., & Mulyawati, Y. (2023). A Need Analysis for The Development of Multicultural Learning Model Based on Local Wisdom Integrated Gamification : Public Schools and Female Teachers Need More. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 9(4), 1071. <https://doi.org/10.33394/jk.v9i4.8974>
- Patras, Y. E., Rahmawati, Y., Japar, M., & Hidayat, R. (2024). Today and Future of Culturally Responsive Teaching (CRT) : Indonesia Needs It. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 10(4), 1652. <https://doi.org/10.33394/jk.v10i4.12985>
- Portes, P. R., González Canché, M., Boada, D., & Whatley, M. E. (2018). Early Evaluation Findings From the Instructional Conversation Study: Culturally Responsive Teaching Outcomes for Diverse Learners in Elementary School. *American Educational Research Journal*, 55(3), 488–531. <https://doi.org/10.3102/0002831217741089>
- Priyambodo, Buditiawan, K., Irawan, A. B., Setyawan, D., Rinawati, H. S., Afriyanni, Momon, Yolarita, E., Khasanah Masbiran, V. U., & Dananjaya, I. (2022). Mitigation of Social Impacts of Alternative Road Development Plans Based on Local Wisdom in West Sumatra, Indonesia. *Scientific World Journal*, 2022. <https://doi.org/10.1155/2022/6895084>
- Qondias, D., Lasmawan, W., Dantes, N., & Arnyana, I. B. P. (2022). Effectiveness of Multicultural Problem-Based Learning Models in Improving Social Attitudes and Critical Thinking Skills of Elementary School Students in Thematic Instruction. *Journal of Education and E-Learning Research*, 9(2), 62–70. <https://doi.org/10.20448/JEELR.V9I2.3812>
- Rahmawati, Y., Mardiah, A., Taylor, E., Taylor, P. C., & Ridwan, A. (2023). Chemistry Learning through Culturally Responsive Transformative Teaching (CRTT): Educating Indonesian High School Students for Cultural Sustainability. *Sustainability (Switzerland)*, 15(8). <https://doi.org/10.3390/su15086925>
- Rahmawati, Y., Ridwan, A., Cahyana, U., & Febriana, D. (2020). The integration of culturally responsive transformative teaching to enhance student cultural identity in the chemistry

- classroom. *Universal Journal of Educational Research*, 8(2), 468–476. <https://doi.org/10.13189/ujer.2020.080218>
- Rahmawati, Y., Ridwan, A., Faustine, S., Syarah, S., Ibrahim, & Mawarni, P. C. (2020). Science Literacy and Student Cultural Identity Development Through Ethno-Pedagogy Approach in Science Learning. *Edusains*, 12(1), 54–63.
- Ramli, S., Rasul, M. S., Mohd Affandi, H., Abd Rauf, R. A., & Pranita, D. (2022). Analysing Teaching Strategy, Reflection and Networking Indicators Towards Learning for Sustainable Development (LSD) of Green Skills. *Journal of Technical Education and Training*, 14(1), 63–74. <https://doi.org/10.30880/jtet.2022.14.01.006>
- Reddy, G., & van Dam, R. M. (2020). Food, culture, and identity in multicultural societies: Insights from Singapore. *Appetite*, 149(February), 104633. <https://doi.org/10.1016/j.appet.2020.104633>
- Redondo-Rodríguez, C., Becerra-Mejías, J. A., Gil-Fernández, G., & Rodríguez-Velasco, F. J. (2022). Influence of Gamification and Cooperative Work in Peer, Mixed and Interdisciplinary Teams on Emotional Intelligence, Learning Strategies and Life Goals That Motivate University Students to Study. *International Journal of Environmental Research and Public Health*, 20(1), 547. <https://doi.org/10.3390/ijerph20010547>
- Register, J., Fernandes, A., & Pugalee, D. (2022). Supporting Preservice Mathematics Teachers' Culturally Responsive Teaching: A Focus on Teaching for Social Justice. *Mathematics*, 10(6). <https://doi.org/10.3390/math10060896>
- Rifani, E., Maulina, N., & Ummah, F. S. (2022). Studi Literatur : kompetensi multikultural guru BK dalam mendukung keberhasilan layanan konseling multikultural. *Indonesian Journal Of Guidance and Counseling: Theory and Application*, 11(2), 196–204.
- Riyanto, S., Febrian, F., & Zanibar, Z. (2022). Bhinneka Tunggal Ika: Its Norming and Actualization in Democracy in Indonesia. *Sasi*, 28(4), 567. <https://doi.org/10.47268/sasi.v28i4.1058>
- Rohmadheny, P. S., & Laila, Y. (2020). Expert Judgment of Learning Achievements Evaluation Instrument for Children Age 4-5 Years Old. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(1), 168. <https://doi.org/10.31004/obsesi.v5i1.524>
- Ruiz, J. J. R., Sanchez, A. D. V., & Figueredo, O. R. B. (2024). Impact of gamification on school engagement: a systematic review. *Frontiers in Education*, 9(December). <https://doi.org/10.3389/educ.2024.1466926>
- Ruly, B. W. I. M., & Morganna. (2023). PANCASILA , ISLAM , AND HARMONISING SOCIO-CULTURAL CONFLICT IN INDONESIA. *Al-Jāmi'ah: Journal of Islamic Studies*, 61(1), 137–156. <https://doi.org/10.14421/ajis.2023.611.137-156>
- Rummar, M. (2022). KEARIFAN LOKAL DAN PENERAPANNYA DI SEKOLAH. *Syntax Transformation*, 3(12).
- Sahibudin, S., Supandi, S., Mujiburrohman, M., Rijal, S., & Atnawi, A. (2020). Multicultural Education as a Supported for the Formation on Environment of Islamic Communities in Pamekasan Regency. *IOP Conference Series: Earth and Environmental Science*, 469(1). <https://doi.org/10.1088/1755-1315/469/1/012100>
- Saihu, M., Umar, N., Raya, A. T., & Shunhaji, A. (2022). Multicultural Education Based on Religiosity to Enhance Social Harmonization within Students: A Study in Public Senior High School. *Pegem Egitim ve Ogretim Dergisi*, 12(3), 265–274. <https://doi.org/10.47750/pegegog.12.03.28>

- Santika, I. W. E. (2022). Penguatan Nilai-Nilai Kearifan Lokal Bali dalam Membentuk Profil Pelajar Pancasila. *Jurnal Pendidikan Dan Konseling*, 4(4), 1349–1358. <https://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/6472/4851>
- Sariyatun, Joebagio, H., & Sumardjoko, B. (2018). Proliferation of Democratic Education in Indonesia: The Influence Measurement of Tolerance, Multiculturalism, and Historical Awareness on the Democratic Attitude. *The New Educational Review*, 52(2), 112–123. <https://doi.org/10.15804/tner.2018.52.2.09>
- Schlusche, C., Schnaubert, L., & Bodemer, D. (2023). Competence in (meta-)cognitive learning strategies during help-seeking to overcome knowledge-related difficulties. *Active Learning in Higher Education*. <https://doi.org/10.1177/14697874231168343>
- Setiyono, J., & Natalis, A. (2023). Universal Values of Pancasila in Managing the Crime of Terrorism. *Cosmopolitan Civil Societies: An Interdisciplinary Journal*, 15(2), 48–63.
- Shida, N., Abdullah, A. H., Osman, S., & Ismail, N. (2023). Design and development of critical thinking learning strategy in integral calculus. *International Journal of Evaluation and Research in Education*, 12(1), 284–291. <https://doi.org/10.11591/ijere.v12i1.23779>
- Siing, W. Y., Ta, W. I., & Hashim, M. N. (2023). Examining Scaffolding Process in One-to-One Piano Lessons for Young Beginners: An Observational Analysis. *Malaysian Journal of Music*, 12(1), 66–79. <https://doi.org/10.37134//MJM.VOL12.1.5.2023>
- Sjafirah, N. A., Indriani, S. S., Yanto, A., Sjachro, D. W., & Viannisa, N. (2024). Indonesian Sundanese Local Wisdom As an Ethical Reference in Digital Media. *Revista de Gestao Social e Ambiental*, 18(7), 1–11. <https://doi.org/10.24857/rgsa.v18n7-056>
- Söderström, S. (2023). Computer-based formative assessment for problem solving. *International Journal of Mathematical Education in Science and Technology*. <https://doi.org/10.1080/0020739X.2023.2178982>
- Sotos-Martínez, V. J., Tortosa-Martínez, J., Baena-Morales, S., & Ferriz-Valero, A. (2023). Boosting Student's Motivation through Gamification in Physical Education. *Behavioral Sciences*, 13(2). <https://doi.org/10.3390/bs13020165>
- Star, J. R., Newton, K., Pollack, C., Kokka, K., Rittle-Johnson, B., & Durkin, K. (2015). Student, teacher, and instructional characteristics related to students' gains in flexibility. *Contemporary Educational Psychology*, 41(March), 198–208. <https://doi.org/10.1016/j.cedpsych.2015.03.001>
- Steliou, C., & Jakubowski, K. (2024). A Survey into Piano Teachers' Perceptions of Music Memorization in One-to-one Piano Lessons: A Preliminary Study. *Music and Science*, 7. <https://doi.org/10.1177/20592043231225733>
- Stephens, N. M., Hamedani, M. Y. G., & Townsend, S. S. M. (2019). Difference Matters: Teaching Students a Contextual Theory of Difference Can Help Them Succeed. *Perspectives on Psychological Science*, 14(2), 156–174. <https://doi.org/10.1177/1745691618797957>
- Subarimaniam, N., Zakaria, N. S., & Jaafar, W. M. W. (2020). Multicultural Competency, Spirituality and Self-Efficacy in Dealing with Legal and Ethical Issues. *Pertanika Journal of Social Sciences and Humanities*, 28(2), 1371–1386.
- Subasi Singh, S., & Akar, H. (2021). Culturally responsive teaching: beliefs of pre-service teachers in the Viennese context. *Intercultural Education*, 32(1), 46–61. <https://doi.org/10.1080/14675986.2020.1844533>
- Sujinah, S., Mu'ammad, M. A., Affandy, A. N., & Supriyanto, E. (2019). The effectiveness of local

- wisdom based on textbook to improve students' writing literacy. *Universal Journal of Educational Research*, 7(12), 2573–2583. <https://doi.org/10.13189/ujer.2019.071204>
- Sumardjoko, B., & Musyiam, M. (2018). Model of civic education learning based on the local wisdom for revitalizing values of Pancasila. *Cakrawala Pendidikan*, 37(2), 201–211.
- Sundara, K., & Solehah, S. (2019). Penanaman Karakter Nilai Pancasila Dalam Mencegah Terjadinya Los Generation di Pondok Pesantren. *CIVICUS : Pendidikan-Penelitian-Pengabdian Pendidikan Pancasila Dan Kewarganegaraan*, 7(2), 84–92.
- Susan Fitriyari, R. Y. (2017). Model Pembelajaran Pendidikan Pancasila dan Kewarganegaraan untuk Menumbuhkan Karakter Peduli Lingkungan Hidup Siswa. *Konferensi Nasional Kewarganegaraan III, November*, 167–175. <https://core.ac.uk/download/pdf/154347506.pdf>
- Susanto, T., Rasni, H., & Susumaningrum, L. A. (2019). Using values of local wisdom for family healthcare of adolescents in the Indonesian context. *Sri Lanka Journal of Child Health*, 48(3), 256–258. <https://doi.org/10.4038/sljch.v48i3.8762>
- Sutrisno, S., Firdaus, L. N., & Putra, Z. H. (2023). Ethnoeconomic Learning Approach to Strengthen the Profile of Pancasila Students in a Globally Diverse Environment. *BIO Web of Conferences*, 06005, 1–5.
- Taimalu, M., & Luik, P. (2019). The impact of beliefs and knowledge on the integration of technology among teacher educators: A path analysis. *Teaching and Teacher Education*, 79, 101–110. <https://doi.org/10.1016/j.tate.2018.12.012>
- Tarigan, R. I. (2019). The Role of Multicultural Education Toward Students' Creative Thinking Skills (Case Study on Kaki Dian Emas Foundation, Indonesia). *Journal of Management Practices, Humanities and Social Sciences*, 3(2), 44–52. <https://doi.org/10.33152/jmphss-3.2.3>
- Ulum, F. F., Caturwati, E., & Herdini, H. (2022). Struktur Tritangtu pada Siger Aksesoris Pengantin Sunda Priangan. *PANTUN: Jurnal Ilmiah Seni Budaya*, 7(2). <https://doi.org/10.26742/pantun.v7i2.2043>
- van Zundert, M. J., Könings, K. D., Sluijsmans, D. M. A., & van Merriënboer, J. J. G. (2012). Teaching domain-specific skills before peer assessment skills is superior to teaching them simultaneously. *Educational Studies*, 38(5), 541–557. <https://doi.org/10.1080/03055698.2012.654920>
- Vioreza, N., Supriatna, N., & Abdul, K. (2023). The effect of utilizing Betawi local food in the implementation of Pancasila student profile strengthening project on increasing ecoliteracy of elementary school students. *Kasetsart*, 44, 1115–1126.
- Walter Dick, Lou Carey, J. O. C. (2015). *The Systematic Design of Instruction*. Pearson.
- Wen, X. (2023). The Effect of Gamification Learning on Primary School Students' Second Language Learning. *Journal of Education, Humanities and Social Sciences*, 22, 492–501. <https://doi.org/10.54097/ehss.v22i.12510>
- Widana, I. W., Sumandya, I. W., & Citrawan, I. W. (2023). The special education teachers' ability to develop an integrated learning evaluation of Pancasila student profiles based on local wisdom for special needs students in Indonesia. *Kasetsart Journal of Social Sciences*, 44, 527–536.
- Wulandari, T., Widiastuti, A., Setiawan, J., & Fadli, M. R. (2023). Development of learning models for inculcating Pancasila values. *International Journal of Evaluation and Research in Education (IJERE)*, 12(3), 1364–1374. <https://doi.org/10.11591/ijere.v12i3.25687>
- Yakovleva, O. (2022). Digital Learning Environment Values of Pre-Service Teachers as a Basis for

Successful Professional Self-Realisation: A Case Study. *Education Sciences*, 12(2).
<https://doi.org/10.3390/educsci12020120>

Yang, S. L., Hsiao, Y. J., & Hsiao, H. C. (2014). Culturally responsive teaching with new Taiwanese children: interviews with class teachers in elementary schools. *Asia Pacific Journal of Education*, 34(3), 288–304. <https://doi.org/10.1080/02188791.2013.853647>

Yani, F., & Darmayanti, E. (2020). Implementasi Nilai-nilai Pancasila Melalui Pendidikan Pancasila sebagai Upaya Membangun Sikap Toleransi pada Mahasiswa di Universitas Potensi Utama. *Jurnal Lex Justitia*, 2(1), 48–58.

Yuniarti, Y., Mujiyanto, J., Rukmini, D., & Fitriati, S. W. (2023). Online Small Groups Talk in English Collaborative Prewriting Phase Viewed from Social Presence Frame. *International Journal of Information and Education Technology*, 13(12), 1939–1949. <https://doi.org/10.18178/ijiet.2023.13.12.2008>

Zhang, Z., & Crawford, J. (2024). EFL learners' motivation in a gamified formative assessment: The case of Quizizz. *Education and Information Technologies*, 29(5), 6217–6239. <https://doi.org/10.1007/s10639-023-12034-7>

Zulfa. (2017). FILSAFAT PANCASILA SEBAGAI LANDASAN BERNEGARA YANG DEMOKRATIS. *Jurnal Bakaba*, 6(2), 30–38.

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