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The integration of indigenous knowledge in the social studies classroom to promote intercultural competence

Kirana Prama Dewi * ^{1a}, Probosiwi ^{2b}, Isna Rahmawati ^{3c}

^{1,2} Elementary Teacher Education Universitas Ahmad Dahlan, Yogyakarta 55162, Indonesia

³Elementary Teacher Education Universitas Widya Dharma, Jawa Tengah 57438, Indonesia

^a kirana.dewi@pgsd.uad.ac.id; ^b probosiwi@pgsd.uad.ac.id; ^c isna_klaten@yahoo.com

*Corresponding author

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Abstract: Indonesia is a heterogeneous population that speaks various languages and has a wide range of cultural, racial, religious, traditions, and indigenous knowledge. In our multicultural and globalized society, intercultural competence is becoming more critical. This study aimed to discover how to integrate indigenous knowledge into the social studies classroom to promote intercultural competence. The method used was descriptive qualitative analysis. The subjects of this study were students in two classes and a lecturer. Data collection techniques used were interviews, observation, and a reflective journal. This research used data triangulation techniques to check the data validity. The result showed 1) integrating indigenous knowledge in the social studies classrooms through eight steps: collection and identifying, analyzing, implementing, evaluating students, reflecting the cultural value, evaluating the lesson process, expanding, and sharing, and 2) The intercultural competence students were also identified in the significant increase on four dimensions: knowledge, attitude, skills, and behavior. Ultimately, this study will concurrently and ongoingly preserve indigenous knowledge and favorable connections with indigenous groups. The model's use in schools, its efficacy, and its effects on teachers, students, and the indigenous community can all be explored further in this study.

Keywords: Indigenous Knowledge; Intercultural Competence; Social Studies

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Introduction

Indonesia's heterogeneous population speaks various languages and has a wide range of cultural, racial, religious, traditions, and indigenous knowledge. So that policymakers do not err and threaten the country's sustainability in the future, indigenous knowledge is required to make appropriate, effective policies in response to the development of local wisdom. Culture is one of the proud assets of the Indonesian state. Indonesian culture spreads from Sabang to Merauke, causing most citizens to have difficulty understanding or even recognizing the diversity of indigenous Indonesian cultures. This understanding of the cultural diversity of Indonesia has resulted in a decrease in the interest of citizens in activities to preserve Indonesian culture (Mulyani & Julianto, 2018).

Indonesia has more than a thousand different cultures. The national anthem of Indonesia, "Bhinneka Tunggal Ika," declares that diversity is a component of the country's identity (Unity in Diversity). People in Indonesia are from various cultural backgrounds and live in multiple

communities. Multicultural education was suggested as a global commitment by UNESCO in October 1994. Educational institutions are encouraged by a multicultural education system to meet the requirements, demands, and aspirations of students from varied backgrounds (Aslan, 2019; Banks, 2020; Jayadi et al., 2022; Sleeter, 2018). Cultural diversity is crucial for the Indonesian people to create a flourishing nation.

On the other hand, these benefits are susceptible to disputes that might cause a country to fall apart. Diversity and differences should not be used as an excuse for people and groups to despise one another but as a springboard for mutual understanding and respect. Individual and group differences, such as those related to gender and citizenship status, are prevalent and should not be used as an excuse for hatred or mutual destruction (Nugraha et al., 2020). Instead, the existing disparities should be embraced as a way to keep in touch and get to know one another. It is possible to achieve national unity and integrity notwithstanding differences. Bringing people together does not require eradicating existing divisions because that would be impossible and against the laws of nature.

In Indonesia, which has multicultural societies, multicultural education can go beyond traditional knowledge. Teaching multicultural education in multicultural societies by enabling indigenous knowledge and outlining Indonesia's indigenous knowledge and how it might support multicultural education in social studies classrooms. A value to supporting multicultural education can be found in indigenous knowledge of societies (Arofah, 2018).

Contextual variables influence the learning environment in the classroom. In order to help learners understand the social studies topics covered in encyclopedias based on indigenous knowledge, curriculum knowledge should value and include the preliminary information that students bring from home. Doing this, hopes to improve learners' access to knowledge while making curriculum topics more relevant to their everyday lives. Students' information from home may consist of experiential knowledge expressed in particular practices. However, since these practices are unique to particular communities, they can be called indigenous knowledge practices (IKPs).

According to UNESCO (UNESCO, 2016), indigenous knowledge includes information and customs that are distinctive to a community, culture, or society. These knowledge systems also involve values, beliefs, worldviews, and practices. These kinds of knowledge, which manifest at the crossroads of human life, are frequently used by communities to address their concerns about environmental sustainability and have been practiced for many generations (Mandikonza, 2019). According to Mandikonza (Mandikonza, 2019), users' knowledge might be either explicit or implicit. Although indigenous knowledge is largely distinct to particular communities, some elements are shared by various communities.

According to Sadler's argument (Sadler, 2011), social context should play a significant part in all aspects of teaching and learning. Students might look for connections between social sciences topics and indigenous knowledge in the classroom. According to Retnowati, Anantasari, Marfai, and Dittmann (Retnowati et al., 2014), pupils must learn about, notice, retain, and develop social, moral, and emotional responsibility for their surroundings. Through contextual knowledge based on the knowledge of the local culture, students must develop cultural values. In other words, students can maintain their cultural effectiveness, realize their social identities, and potentially change their attitude toward social science (Bronen et al., 2020; Crerar & Mullins, 2019). Indigenous knowledge can be used to assist students in conceptualizing their experiences, intercultural competence, and growing and strengthening their sense of self (Gómez-Zermeño, 2018; Shizha, 2014; Vilbar et al., 2021).

Earlier, numerous studies on Indigenous Knowledge (IK) and Adult Education practice were carried out in education. For instance, numerous scholars have explored indigenous educational systems and approaches in studies on IK (Assefa, 2021; Iliemenam, 2018; Manyau et al., 2018; Mawere, 2019). However, additional investigations (Bronen et al., 2020; H O Kaya, 2013; Hassan O Kaya & Seleti, 2013; Overmars, 2020; Seehawer, 2018) looked into the role that policy, staff, learners, governments, community, and other stakeholders played in the current Adult Education, and literacy practice had higher mean achievement scores. Regarding the inclusion of IK into Adult Education offerings, particularly the integration of learning materials, local-culture-based learning approach, and facilitation tactics across learners' contexts in social studies classrooms to promote intercultural competence, none of the studies described above addressed this topic to the researcher's knowledge. The researcher thinks that IK and its integration are not given enough attention.

The students of elementary teacher education UAD come from various regions of Indonesia. Each student brings indigenous knowledge and has their methods, structures, paradigms, culture, and analysis to interpret and understand multiple symbolic meanings. Metaphysics and linguistic symbolism abound in indigenous knowledge. They use symbols to communicate messages that have been used from prehistoric times and possess a body of information that forms the foundation of thought, the history of epistemology, and culture. This study describes the feasibility of integrating indigenous knowledge in social studies classrooms through a local culture-based learning approach and an encyclopedia of the country's cultural diversity during primary teacher education to promote intercultural competence. Students' intercultural competence in this study is measured in four dimensions: knowledge, attitude, skills, and behavior.

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Methods

The study used a qualitative descriptive methodology with multiple data collection methods consisting of a reflective journal, interviews, and observation. The qualitative descriptive method aims to describe, and summarize various conditions, situations, or social reality phenomena. The qualitative descriptive also exists in the research object community. It attempts to draw that reality to the surface as a feature, character, trait, model, sign, or description of certain conditions, situations, or phenomena. Descriptive qualitative research describes a phenomenon and its characteristics (Creswell & Creswell, 2018; Weyant, 2022).

Indonesia is a multicultural country made up of several ethnic and cultural groupings. In Indonesia, these tribes can be found in numerous provinces and islands, including the Special Region of Yogyakarta. This study, conducted in a university setting in Indonesia, may offer new insight into how participants in elementary teacher education and faculty of teacher training and education imagined themselves to be interculturally competent graduates, particularly in developing nations. This research conducted from July – Oktober 2022 in elementary teacher education, Universitas Ahmad Dahlan. The selection of research subjects was based on a purposive sampling technique. Purposive sampling is a careful selection based on specific objectives and considerations of the researcher following the specified sample requirements. Some criteria in determining the population and sample are 1) Elementary teacher education UAD students in semester 1; 2) 10 students representing Class E for elementary social studies learning classroom; and 3) 10 students representing class F for elementary social studies learning classroom. Data analysis in this study used model data analysis interactive. The analysis consists of three activities that coincide: data reduction, data presentation, and conclusion

drawing/verification. Data or documents obtained in qualitative research need to be checked for validity. According to (Lexy J. Moleong, 2019), there are four kinds of standards or criteria for the validity of qualitative data, namely: (1) credibility, (2) transferability, (3) dependability, and (4) confirmability.

Results and Discussion

The findings obtained based on the triangulation of a reflection journal, observations, and interviews are shown in the following Table 1.

Identifying

The study shows that before conducting learning, the lecturer identified the topics to be explained. The lecturer said, "We identified the topics we are going to the syllabus, teach, and connected topics with indigenous knowledge that endured in the community, such as tribe and cultural diversity in Indonesia" (Interview, June 13, 2022). The example of Dayakness students recognizes the knowledge of the traditional rice cultivation called *Manugal*, as Dayak residents of the Meratus Mountains, South Kalimantan, call for farming on dry land or mountains. *Manugal* can be a style farmer tradition of rice cultivation in Dayak. *Manugal* has the concept of the diversity of social living things. (Interview, July 4, 2022).

This identification was made by considering the ability of students and lecturers, the availability of resources, and mentioning examples of cultural diversity. Furthermore, the lecturer responded, "identification needs to be arranged with the students and colleagues so that the material taught is right on the learning outcomes, more contextual, and explores experience from students" (interview, June 13, 2022). The interviews indicated that lecturer considered their ability when they wanted to teach indigenous knowledge because of students' little understanding. The participants agreed that indigenous knowledge was scientific and vital for the learners, but both oral and unwritten information caused difficulties in identifying indigenous knowledge. Hence, a unique approach and literature, such as an encyclopedia of cultural diversity based on indigenous knowledge and local culture-based learning, was needed.

Table 1. Valid data categories as initial findings

Categories	Activities
(1) Identifying	(a) Identifying social studies topic (b) Considering students' indigenous knowledge (c) Connecting topic with Indigenous knowledge
(2) Analyzing	(a) Planning activities (b) Discussing pedagogic and learning challenges (c) Organizing all information into a lesson plan
(3) Implementing	(a) Implementing the lesson in local culture-based learning (b) Considering students' activities
(4) Evaluating	(a) Discussing students' activities (b) Evaluating the learning process
(5) Revising lesson plan	(a) Evaluating the previous lesson (b) Revising the lesson plan

Analyzing

The lecturer created the lesson plan after a more thorough analysis of the subject. They talked about lesson planning with other lecturers. The lecturers said, "We frequently solicited input from other colleagues while conducting learning analysis and planning. We spoke about encouraging effective learning (Interview, June 15, 2022). They planned and selected the subjects and topics, the learning material, the tasks students would complete during the learning process, any difficulties they might encounter, and the most effective teaching techniques. "Planning activities is vital for me because it helps me manage the classroom," the lecturer said (interview, June 13, 2022). Additionally, the lecturer noted, "We frequently envisioned the students' replies and their activities around the theme of cultural diversity."

Implementing

The study's findings indicate that the lecturer followed the lesson plan as she conducted the class. The lecturers' accessible design placed a focus on the actions of observing, inquiring, looking into, reasoning, and communicating. They focused on the student's capacity for observing cultural diversity in their region, questioning them and participating in discussions about indigenous knowledge, conducting investigations through small-group discussions, analyzing various cultural diversity and indigenous knowledge, and communicating through class discussions. The lecturer led and planned the class while also asking students questions. "Students must be able to build and construct their knowledge through self-experience," the lecturer remarked" (Interview, June 21, 2022).

Evaluating

During the learning process, the lecturer asked students to discuss the subject. At the conclusion, the lecturer inquired about any challenges or stumbling blocks the students had faced with the subjects. According to the lecturer, "I always inquire about the challenges my pupils are facing to determine whether the point is obvious or not" (interview, June 27, 2022). Additionally, the lecturer provided a brief note about the learning diary entries produced by the students. This learning journal included information that may be used for future lecturer evaluations, such as the lecturer's activities during the learning process, student activities, and student engagement. According to the lecturer, every lecturer was requested to create a learning log to assess the learning process (interview, July 11, 2022).

Revising lesson plan

The study's findings showed that the lecturer corrected students' work by adding adjustments to their learning journals or notes. These notes were a resource for developing extra study strategies or refreshing knowledge in subsequent classes covering the same material. In an interview on July 21, 2022, the lecturer claimed, "I make modifications directly, revising the lesson plan that I have produced by looking at the learning diaries." This result supported the lecturer's ongoing efforts to enhance and modify the learning processes.

Proposed model for integrating indigenous knowledge in social studies classrooms

The first five discoveries can be the foundation for a new model for integrating indigenous knowledge based on the explanation. The researcher supported a cycle with eight recurrent, repeatable steps in this study. Figure 1 depicts integrating indigenous knowledge in social

studies Classrooms using an encyclopedia for material learning and local culture-based learning.



Figure 1. Outline of integrating Indigenous knowledge in the Social studies Classrooms

Collecting and identifying Indigenous knowledge

The study's self-identification phase involves identifying the students' backgrounds and indigenous knowledge. The lecturer then hands out a questionnaire about the students' characteristics, learning methods, cultural backgrounds, and intercultural competency. Student 8 described their hometown as a means of self-identification. This student sets themselves apart from other regions by identifying as a citizen of Bima. Based on the results of interviews (June 22, 2022) with student 8, data was obtained that described their hometown as a means of self-identification. This student sets themselves apart from other regions by identifying as a citizen of Bima and explaining traditional food and drink, indigenous knowledge, and local languages and culture. The local languages include Salama Loko, Peta Kapanca, and Compo Sampari. Bima has much local knowledge that used to be a guide for living together. Not a few writings in Bima containing invitations that become the philosophy of life are installed in almost every road section, for example, "katuda pu rawi ma tadi, katedi pu rawi ma tada." The phrase means showing hard work and not taking people's rights. Student 3 named their traits and highlighted how they behaved well in class as active knowledge builders (Interviews data, June 22, 2022)—examples of how student involvement may be raised to help students develop lifetime learning abilities (Gilbert, 2014). The gathered information was then studied and analyzed among students through some factors, such as the trustworthiness of knowledge, cultural values, indigenous knowledge, and possibilities for integration into learning materials and social studies classroom.

Selecting the Indigenous Knowledge Topics

Following identification, the lecturer and students settled on a subject they would probably discuss. Traditional homes, clothing, rites, meals, weaponry, and folk music are some indigenous knowledge topics that can be incorporated into cultural diversity material and social studies classes. Choosing particular topics or ideas was to be more in-depth and focused. The selection of 7 themes was based on several factors, including relevancy, benefits, and drawbacks of indigenous knowledge, societal influence, the cultural significance of the

knowledge, student abilities, available resources, scheduling, and compliance with social studies curricula. An ideal research lesson would focus on immediate academic and non-academic learning objectives to foster intelligence, good mental habits, constructive behaviors, personal and social attitudes, and character traits. The chosen topics should not oppose indigenous groups' cultural values, ethics, customs, or beliefs. During this step's conversation, respect for one another was encouraged. The first phases in the study were self-identification and an understanding of cultures in the context of content integration. The student groups talked about the diverse customs followed by Indonesia's five distinct regions. Students from various origins were mixed to form the student groups, simulating a professional environment where team members must respect cultural diversity (Abdullah & Saifi, 2016; Liu et al., 2020). Students are now reading and discussing articles from the Encyclopedia of Cultural Diversity and those that incorporate indigenous knowledge and culture that they encounter in their everyday lives.

Analyzing and connecting the topic of interest of indigenous knowledge in social classrooms

This step involved brainstorming ideas for the selected area of interest by determining whether they fit the social studies curriculum. What essential skills, for instance, does the issue include? What is the intended learning outcome? How does it connect to indigenous knowledge and the diversity of cultures? What benefits and drawbacks of merging indigenous knowledge and cultural diversity perspectives? How are the pupils responding to the learning process?

Additionally, by examining the parallels and discrepancies between the two points of view, the team investigated the crucial correlation between indigenous knowledge and social studies materials. The analysis's findings were arranged to serve as the foundation for creating a lesson plan. Essential competencies, learning objectives, achievements, teaching methods, learning obstacles, assessment, student character, media, teaching material, and cultural diversity in the classrooms were all considered when creating lesson plans. Additionally, the lecturer predicted how the class would react to the material. The lecturer envisioned what it would be like to experience the class and its associated activities from the pupils' perspective. Briefly, the lecturer adjusted a pre-existing class and made an effort to get students to consider a more meaningful educational experience based on local culture (Hikmawati et al., 2021; Suardana et al., 2018). The entries from the students' reflective journals show how they gained intercultural competency while learning. The study's findings demonstrate that using indigenous knowledge in social studies lessons can improve students' cultural identity and comprehension while advancing their knowledge of the subject matter (Suardana et al., 2018).

Implementing the lesson based on appropriate strategies and judgment

The fifth stage of learning design was implemented in the social studies classroom. Introduction, cultural exploration, task-relevant discussion, interaction with the learning material and journal article, and consolidation are the stages of local culture-based learning. The model lecturer's mission was to carry out the lesson plan in the classroom, and the other lecturers' was to observe and document student learning activities using evaluation criteria and technical field notes. For example, how did the students act in class? What are the pupils' reactions to the information on cultural diversity, including indigenous knowledge? Members

of this group were supposed to concentrate on student interaction, activities, and behaviors during periodic organized observations. During this stage, observers received crucial information about the lesson's learning objectives. All actions were documented for later reference and served as the primary source of information for reflection at the following stage. The student groups discussed their articles outlining the traditions after completing the worksheet. Each group had a separate topic to discuss, and after summarizing their thoughts, they explained to the class what they had learned about the subject. The entries from the students' reflective journals show how they gained cultural awareness while learning. According to research, what students interpret from their cultural beliefs influences how they explain indigenous knowledge (Neeganagwedgin, 2020; Williams, 2018).

Reflecting on the indigenous knowledge perspective and considering their intercultural competence

The lecturer debriefed shortly after the course to consider the experience of observing the lesson. In this phase, the design and organization of the created lesson were the focus. The lecturer considered incorporating indigenous knowledge into social studies classrooms and determined the effects of the two opposing viewpoints. The lecturer evaluated the learning impact in terms of its history and ensured that the integration was acceptable before considering the applicability of values, ethics, and wisdom contained in the information and reflecting on the vision. As a result, the lecturer made the reflection at this point. At this point, the lecturer considered the overall goal and rehearsed long-term support objectives.

Students create a project based on the indigenous knowledge concept of cultural diversity after expressing their understanding of the subjects covered in the discussion. The activities at the collaboration stage allow participants to collaborate on challenging challenges in order to improve their problem-solving abilities. Collaborative learning can encourage sociocultural interactions among students. It should be integrated into the social studies curriculum to enhance student communication, interpersonal skills, and intercultural competence, as proved by the interview (June 22, 2022). Based on the results of these interviews, data was obtained that meaningful assignment and student interviews show how this project helped students improve their abilities to collaborate, assess their ideas, keep track of their progress, and handle failure while trying to solve a problem. Students also knew how to develop collaborative abilities and their group placement. Even though they are from different cultures, the students understood their roles and could complete the project by working together and speaking clearly (Carreño Bolivar, 2018; Kaihlanen et al., 2019; Perry & Southwell, 2011). Furthermore, the project facilitated deep learning; once the concept is understood, students can apply the theories and principles to the project and engage meaningfully in the task.

Evaluating the lesson process and students' intercultural competence

In the next stage of the study, assessment, and reflection, the lecturer is a facilitator and asks the students to assess what they have already learned. Students complete a worksheet and an intercultural competency reflection that inquires about how they have changed due to their learning. The following interview demonstrates how students can represent the integration and relationship between the concept of cultural diversity and their indigenous knowledge through the creation of meaningful projects. Through interviews (June 22, 2022), the study found that students who participated in the local culture-based learning activities successfully improved

their ability to recall and retain information about cultural diversity concepts and the related indigenous knowledge aspects.

At this point, the evaluation includes a strong emphasis on and attention to student learning activities. The lecturer reflected on the lesson's observations, evaluations, and field notes to make several claims about student learning. Including the degree to which students understood indigenous knowledge, whether students could connect indigenous knowledge and cultural diversity material, areas for improvement during the learning process, and the student's experiences during the learning process. The lecturer then gave students a chance for structured, individual reflection on what they had seen, including the effects of including indigenous knowledge in social studies classrooms. The lecturer also looked for trends to provide information about how students learn.

In this stage, the study shows that students' intercultural competence variously equated with understanding, relationship development, satisfaction, effectiveness, appropriateness, and adaptation to different cultures. The students confirm the urgent need for intercultural competence in today's world because it can help students process cultural differences and irregularities, intergroup postures, and stressful experiences. The four dimensions (Deardorff, 2006), knowledge, attitude, skills, and behaviors, can be seen in this study. The four dimensions, knowledge, attitude, skills, and behaviors, can be seen in this study. First, the knowledge dimension items included: "Approaching a different culture, I can ...", self-aware and understanding the rules, norms, and expectations associated with the culture of the people with whom [they] are interacting. Two kinds of knowledge are needed to be fully competent – content knowledge and procedural knowledge. Students completed six items on the knowledge dimensions scale. The results of this study show that knowledge dimensions increase significantly before and after the lesson.

Second, the attitude dimension item includes the sum and total of a person's choice and how students act out those choices when interacting with someone from another culture, show a preference for cultural integration, and have more excellent social contact with culturally different others. Students rated their agreement on a strongly disagree until strongly agree with items such as: "I respect the values of people from different cultures," "I enjoy interacting with people from different cultures," and "I respect the ways people from different cultures behave." Students completed five items on the attitude dimension Scale. The results of this study show that attitude dimensions increase significantly before and after the lesson.

Third, this research found that integrating indigenous knowledge in social studies classrooms through local culture-based learning significantly increased students' perceived skills dimensions. Students frequently reported that the course broadened their perspectives, as indicated by anonymous narrative comments on the course evaluations, e.g., "The class has inspired me," "I hope to travel and learn more soon," "Very eye-opening to other perspectives of other cultures," "... I learned so much about myself and other people in this class," "It helped me understand the different cultures of everyone in each region."

This research found that integrating indigenous knowledge in social studies classrooms through local culture-based learning significantly increased students' perceived behavior dimensions. Students reported that the course broadened their behavior, e.g., "The situation of living region, the ability to work in culturally diverse groups toward a common goal, The ability to provide multicultural leadership, and The ability to understand another person's culture by listening to and understanding their perspective (Quintriqueo & Arias-Ortega, 2019; Wei et al., 2021).

Expanding the possibilities for the resolution of the research lesson and future discovery

The fifth and sixth stages of reflection and evaluation are carried over into this stage. The outcomes of the preceding steps served as the foundation for figuring out how to better things going forward and how to apply and incorporate indigenous knowledge into social studies curricula. Each participant outlined their plans for more study, changed the lesson plan, and reconfigured the integration of the two knowledge domains. As a result of the findings, the lecturer modified the approach, learning method, and evaluation of each step to extend the new research lesson.

Sharing outcomes and discoveries

The indigenous community should be informed of the outcomes of the earlier phases. This phase was finished as a show of respect for indigenous knowledge. The lecturer had a moral obligation to present the conclusion as a sign of respect for one another. A crucial component of keeping up the partnership with the native population was letting them see the final draft of the work. This phase's main goal was to protect the continuity of indigenous knowledge and respect for one another. In this context, showing respect meant more than just saying "thank you" or "please." It also meant paying close attention to the locals' opinions and knowledge. In other words, there must be reciprocity between the indigenous population and the researchers.

Conclusion

Cultural variety and social studies provide a framework for understanding social realities. It is inextricably linked to people's past, present, and worldview. This study identified three critical justifications for incorporating indigenous knowledge into social studies curricula. First, a system like this reflects the cultural values and wisdom that local people have accumulated over millennia. Second, a great deal of crucial indigenous information has been disregarded. Third, lectures should cover more advanced material. The fusion of two seemingly opposing worldviews is necessary for integrating indigenous knowledge with social studies curricula.

According to this study, eight steps can be taken to preserve indigenous knowledge. The eight steps involve: collecting and identifying indigenous science, selecting the topic of interest, analyzing and connecting the topic to school science, implementing the lesson, reflecting the consequences of each knowledge perspective, evaluating the lesson process, expanding the possibilities for further research, and sharing outcomes. These processes work together to form a cycle that repeats itself. The mindset of students can be influenced by lectures to care about their environment and culture. Understanding education as a mutually beneficial, dynamic, and symbiotic learning process is more manageable. That is a process where people acquire information and the significance of their ancestors' culture that is passed down from parent to child and involves experiences created or produced, embraced, and modified to fit the historical setting. Students' intercultural competence was also identified in the significant increase in four dimensions: knowledge, attitude, skills, and behavior.

Integrating indigenous knowledge in the classroom is supposed to be accomplished through eight processes and local-culture-based learning. The community can link individuals, groups, and systems ready to collaborate and learn across boundaries. It also gives members more room and structure to organize around a common objective and result. Ultimately, this study will concurrently and ongoingly preserve indigenous knowledge and favorable

connections with indigenous groups. The model's use in schools, its efficacy, and its effects on teachers, students, and the indigenous community can all be explored further in this study. Our thorough investigation of the phenomena and the outcome may provide the community with insightful theoretical and practical knowledge, especially in light of the study's similar situations. Future studies must investigate other contexts and a larger population to expand our findings and support the conclusions of this paper with more comprehensive data.

The main challenge of this research is the constraint on the amount of indigenous knowledge brought by the students. However, students have yet to be able to sort out indigenous knowledge related to learning topics. Thus, integrating indigenous knowledge into social studies can provide students with meaningful learning. Students can develop cultural involvement and awareness because they learn not only concepts but also how social studies concepts are implemented in their local culture. Learning social studies uses a local-culture-based learning approach to form students' intercultural competence. The weaknesses of this study include the limited research literature on integrating indigenous knowledge in social studies classrooms. Indigenous knowledge of Indonesian contains traditional beliefs that are considered unacceptable, unlike science. Indigenous knowledge makes it more challenging to assess the accuracy of indigenous sciences to general knowledge and requires time and commitment to social studies classrooms.

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References

- Abdullah, S., & Saifi, A. (2016). The Impact of Motivation , Trust , and National Cultural Differences on Knowledge Sharing within the Context of Electronic Mail. *International Journal of Social, Educational, Economic, Business and Industrial Engineering*, 10(7).
- Arofah, L. (2018). *Relation Between Multicultural Education, Sociology, and Indigenous Knowledge*. <https://doi.org/10.2991/icsse-17.2018.43>
- Aslan, S. (2019). How is multicultural education perceived in elementary schools in Turkey? A case study. *European Journal of Educational Research*, 8(1), 233–247. <https://doi.org/10.12973/eu-jer.8.1.233>
- Assefa, Y. (2021). Integration of Indigenous Knowledge into Adult Learning Material Development and the Facilitation Methodology. *Education Research International*, 2021. <https://doi.org/10.1155/2021/2231759>
- Banks, J. A. (2020). MULTICULTURAL EDUCATION: Development, dimensions, and challenges. In *Race, Culture, and Education*. <https://doi.org/10.4324/9780203088586-27>
- Bronen, R., Pollock, D., Overbeck, J., Stevens, D. A., Natali, S., & Maio, C. (2020). Usteq: integrating indigenous knowledge and social and physical sciences to coproduce knowledge and support community-based adaptation. *Polar Geography*, 43(2–3), 188–205. <https://doi.org/10.1080/1088937X.2019.1679271>
- Carreño Bolívar, L. L. (2018). Promoting Meaningful Encounters as a Way to Enhance Intercultural Competences. *Colombian Applied Linguistics Journal*, 20(1), 120–135. <https://doi.org/10.14483/22487085.11987>

- Crerar, J., & Mullins, M. (2013). *Humanities and Social Science Education*. 106–115.
- Creswell, W. J., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9).
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3). <https://doi.org/10.1177/1028315306287002>
- Gilbert, J. (2014). Catching the knowledge wave? The knowledge society and the future of education. In *Journal article* (Vol. 2014, Issue 3).
- Gómez-Zermeño, M. G. (2018). Strategies to identify intercultural competences in community instructors. *Journal for Multicultural Education*, 12(4). <https://doi.org/10.1108/JME-12-2016-0062>
- Hikmawati, H., Gunawan, G., Sahidu, H., & Kosim, K. (2021). Effect of Local Culture Based Learning in Science on Critical Thinking and Student Communication Skills. *Journal of Science and Science Education*, 2(1). <https://doi.org/10.29303/jossed.v2i1.713>
- Iliemenam, C. (2018). Integration of Indigenous Knowledge and Practices Into CHEMISTRY TEACHING AND STUDENTS' ACADEMIC ACHIEVEMENT. *International Journal of Academic Research and Reflection*, 4(4), 22–30.
- Jayadi, K., Abduh, A., & Basri, M. (2022). A meta-analysis of multicultural education paradigm in Indonesia. *Heliyon*, 8(1). <https://doi.org/10.1016/j.heliyon.2022.e08828>
- Kaihlainen, A. M., Hietapakka, L., & Heponiemi, T. (2019). Increasing cultural awareness: Qualitative study of nurses' perceptions about cultural competence training. *BMC Nursing*, 18(1). <https://doi.org/10.1186/s12912-019-0363-x>
- Kaya, H O. (2013). Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges. In *Alternation* (Vol. 20).
- Kaya, Hassan O, & Seleti, N. (2013). African indigenous knowledge systems and relevance of higher education in South Africa. In *The International Education Journal: Comparative Perspectives* (Vol. 12, Issue 1). www.iejcomparative.org
- Lexy J. Moleong, D. M. A. (2019). Moleong, Lexi J, 2014. " Metodologi Penelitian Kualitatif Edisi Revisi". Bandung: Remaja Rosdakarya. In *PT. Remaja Rosda Karya* (Vol. 4, Issue 2).
- Liu, L. A., Chiu, C. Y., & Zhang, Z. X. (2020). Dynamic transformation of communal and exchange schemata in multicultural relationships. *Cross Cultural and Strategic Management*, 28(2). <https://doi.org/10.1108/CCSM-08-2019-0162>
- Mandikonza, C. (2019). Integrating indigenous knowledge practices as context and concepts for the learning of curriculum science: A methodological exploration. *Southern African Journal of Environmental Education*, 35(1). <https://doi.org/10.4314/sajee.v35i1.13>
- Manyau, T., Cronje, A., & Mokoena, M. A. (2018). Linking life orientation and indigenous knowledge education in South Africa: lessons learnt from literature. ... of *Indigenous Knowledge* <https://journals.co.za/doi/abs/10.10520/EJC-13956e3aec>
- Mawere, M. (2019). Indigenous Knowledge and Public Education in Africa: In *Harnessing Cultural Capital for Sustainability* (pp. 307–328). Langaa RPCIG, <https://doi.org/10.2307/j.ctvh9vwzb.16>
- Mulyani, M., & Julianto, J. (2018). Pembelajaran Sains Berbasis Budaya Lokal Sebagai Bentuk Integratif Pendidikan Karakter. *EduStream: Jurnal Pendidikan Dasar*, 2(1), 35–42. <https://journal.unesa.ac.id/index.php/jpd/article/view/6261>
- Neeganagwedgin, E. (2020). Indigenous systems of knowledge and transformative learning practices: turning the gaze upside down. *Diaspora, Indigenous, and Minority Education*,

- 74(1), 1–13. <https://doi.org/10.1080/15595692.2019.1652815>
- Nugraha, M. T., Hidayatulloh, Y., Ruswandi, U., & Erihadiana, M. (2020). IMPLEMENTASI PENDIDIKAN MULTIKULTURAL DI MASA ADAPTASI KEBIASAAN BARU (AKB). *At-Ta'dib: Jurnal Ilmiah Prodi Pendidikan Agama Islam*, 138. <https://doi.org/10.47498/tadib.v12i02.379>
- Overmars, D. (2020). Indigenous Knowledge, Community and Education in a Western System: An Integrative Approach. *First Peoples Child & Family Review*, 5(2), 88–95. <https://doi.org/10.7202/1068934ar>
- Perry, L. B., & Southwell, L. (2011). Developing intercultural understanding and skills: models and approaches. *Intercultural Education*, 22(6). <https://doi.org/10.1080/14675986.2011.644948>
- Quintriqueo, S., & Arias-Ortega, K. (2019). Intercultural education articulated with the indigenous episteme in Latin America. The mapuche case in Chile. *Dialogo Andino*, 59, 81–91. <https://doi.org/10.4067/S0719-26812019000200081>
- Retnowati, A., Anantasari, E., Marfa'i, M. A., & Dittmann, A. (2014). Environmental Ethics in Local Knowledge Responding to Climate Change: An Understanding of Seasonal Traditional Calendar PranotoMongso and its Phenology in Karst Area of GunungKidul, Yogyakarta, Indonesia. *Procedia Environmental Sciences*, 20. <https://doi.org/10.1016/j.proenv.2014.03.095>
- Sadler, T. D. (2011). *Socio-scientific Issues-Based Education: What We Know About Science Education in the Context of SSL*. https://doi.org/10.1007/978-94-007-1159-4_20
- Seehawer, M. (2018). South African science teachers' strategies for integrating indigenous and western knowledges in their classes: Practical lessons in decolonisation. *Educational Research for Social Change*, 7(SpecialEdition), 91–110. <https://doi.org/10.17159/2221-4070/2018/v7i0a7>
- Shizha, E. (2014). Rethinking Contemporary Sub-Saharan African School Knowledge: Restoring the Indigenous African Cultures. *International Journal for Cross-Disciplinary Subjects in Education*, 4(Special 1). <https://doi.org/10.20533/ijcdse.2042.6364.2014.0260>
- Sleeter, C. (2018). Multicultural education past, present, and future: Struggles for dialog and power-sharing. *International Journal of Multicultural Education*, 20(1), 5–20. <https://doi.org/10.18251/ijme.v20i1.1663>
- Suardana, I. N., Redhana, I. W., Sudiatmika, A. A. I. A. R., & Selamat, I. N. (2018). Students' critical thinking skills in chemistry learning using local culture-based 7E learning cycle model. *International Journal of Instruction*, 11(2). <https://doi.org/10.12973/iji.2018.11227a>
- UNESCO. (2016). Education for people and planet: Creating sustainable futures for all. In *The Global Education Monitoring Report 2nd Edition*.
- Vilbar, A. P., Yaakub, R., Ahmad, N., Makaramani, R., Bayarchimeg, Z., Laus, M., Ferrer-Malague, C., & Gumalal, J. (2021). "Telecollaboration to Promote Preservation of Asian Local Indigenous Knowledge and Intercultural Communicative Competence." In *Theory and Practice of Computation*.
- Wei, Y., Spencer-Rodgers, J., Anderson, E., & Peng, K. (2021). The Effects of a Cross-Cultural Psychology Course on Perceived Intercultural Competence. *Teaching of Psychology*, 48(3), 221–227. <https://doi.org/10.1177/0098628320977273>
- Weyant, E. (2022). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 5th Edition. *Journal of Electronic Resources in Medical Libraries*, 19(1–2). <https://doi.org/10.1080/15424065.2022.2046231>

Williams, L. (2018). *Ti wa7 szwatanem. What we know: Indigenous knowledge and learning. BC Studies: The British Columbian Quarterly, 200*, 31–44.

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