
Implementing Local Content-Based Science and Social Studies Learning through Broiler Chicken Farming Education in Elementary Schools

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ABSTRACT

The implementation of contextual learning remains a challenge in elementary schools, particularly in connecting Science and Social Studies (IPAS) learning with students' real-life environments and local resources. This study aimed to examine the implementation of local content-based IPAS learning through broiler chicken farming education and to explore its contribution to students' cognitive, practical, and character development. The study was conducted at SDN 2 Klirong, Kebumen Regency, Indonesia, using a qualitative descriptive design. Data were collected through classroom observations, semi-structured interviews, questionnaires, and document analysis. The learning activities were organized through a partnership between the school and a local broiler chicken farm, enabling students to engage directly in observing and practicing various farming processes. The findings suggest that integrating broiler chicken farming into IPAS learning created meaningful and authentic learning experiences. Students demonstrated high levels of learning engagement, environmental awareness, and participation throughout the activities. Responses from students and parents also reflected positive perceptions of the program, highlighting its role in fostering curiosity, responsibility, collaboration, discipline, and environmental stewardship. Furthermore, experiential learning activities helped students connect theoretical concepts with practical applications encountered in their local community. The study contributes a contextual learning model that utilizes local agricultural potential as a learning resource, offering an alternative approach for strengthening science and social studies instruction while supporting character education and the development of competencies expected in elementary school graduates.

Keywords: *broiler chicken farming, contextual learning, IPAS learning, local content*

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INTRODUCTION

Elementary education plays a fundamental role in developing students' knowledge, skills, attitudes, and character from an early age. Within the implementation of the Merdeka Curriculum, learning is expected to provide meaningful experiences that enable students to connect academic concepts with real-life situations. Science and Social Studies (IPAS) is designed to foster scientific literacy, critical thinking, problem-solving skills, and environmental awareness among elementary school students. Consequently, IPAS learning should not merely emphasize theoretical understanding but also provide authentic learning experiences that allow students to apply knowledge in real-world contexts.

Contextual learning has been widely recognized as an effective approach for promoting meaningful learning experiences. Based on constructivist learning theory, contextual learning enables students to construct knowledge through direct interaction with their environment and everyday experiences. Research indicates that contextual learning enhances conceptual understanding, student engagement, motivation, and knowledge transfer because learning occurs in meaningful situations rather than isolated classroom settings. Furthermore, contextual science learning that integrates local cultural and environmental resources can make learning more relevant and meaningful for students while bridging the gap between school science and community life ([Supriyadi & Nurvitasari, 2019](#)).

The utilization of local potential as a learning resource represents an important strategy for implementing contextual learning in elementary schools. Local resources provide authentic learning opportunities that are closely related to students' social and cultural environments. Through direct interaction with community-based activities, students can develop a deeper understanding of scientific concepts while simultaneously strengthening social awareness and character values. Place-Based Education (PBE) emphasizes the use of local environments, community resources, and cultural contexts to create meaningful learning experiences and improve students' environmental literacy, collaboration skills, and sense of place ([Isnawati et al., 2025](#)).

One local potential that can be integrated into IPAS learning is broiler chicken farming. Broiler farming activities involve concepts related to living organism growth, animal nutrition, environmental management, sanitation, and local economic systems. These concepts are closely associated with the learning outcomes of IPAS in elementary schools. Learning through broiler farming education enables students to observe real-life phenomena directly, engage in practical activities, and connect classroom concepts with authentic experiences. Experiential learning theory suggests that knowledge acquired through direct experience tends to be more meaningful, applicable, and long-lasting than knowledge obtained solely through lectures or textbooks.

The integration of local wisdom and community resources into educational practices has been increasingly emphasized in contemporary educational research. Ethnopedagogical approaches encourage the incorporation of local knowledge and community practices into learning activities, enabling students to understand scientific concepts through familiar cultural contexts. Research conducted among the Malind community in Papua demonstrated that local environmental knowledge can be integrated into science learning to enhance relevance and improve students' understanding of scientific concepts ([Betaubun, 2019](#)). Similarly, educational practices rooted in local wisdom have been shown to strengthen environmental awareness, collaboration, and sustainable development competencies among learners ([Perdani et al., 2024](#)).

In the Indonesian educational context, the Tri-N philosophy (Niteni, Nirokke, and Nambahi) proposed by Ki Hadjar Dewantara also emphasizes meaningful learning through observing, imitating, and developing knowledge based on learners' direct experiences. These principles support contextual and experiential learning by encouraging students to construct understanding through active interaction with their environment ([Andayani et al., 2021](#)).

Kebumen Regency is one of the regions with considerable agricultural and livestock potential. These local resources can be utilized as authentic learning environments that support contextual and experiential learning. In response to this opportunity, SDN 2 Klirong implemented an IPAS learning program based on broiler chicken farming education through collaboration with a local broiler farm owned by Mrs. Tri Ratnaningsih. Through observation, discussion, and hands-on

activities, students were encouraged to connect classroom concepts with real-world farming practices.

Several previous studies have reported positive outcomes from contextual and environment-based learning. Livestock-based local-content learning has been found to improve students' social skills, responsibility, and collaboration. Environment-based learning has also been shown to enhance student engagement and strengthen character education. Moreover, educational innovations that integrate curriculum implementation, community participation, and authentic learning experiences have contributed positively to students' academic achievement and character development.

Despite these positive findings, research specifically examining the integration of broiler chicken farming education into IPAS learning at the elementary school level remains limited. Most previous studies have focused on contextual learning, environmental education, place-based education, or local-content implementation separately. Few studies have investigated how broiler farming can simultaneously support conceptual understanding, life-skill development, environmental awareness, and character formation within a single learning framework. Furthermore, IPAS learning in many elementary schools continues to rely heavily on textbooks and classroom-based instruction, limiting students' opportunities to engage in authentic learning experiences derived from their local environment.

Therefore, this study aims to investigate the implementation of local content-based IPAS learning through broiler chicken farming education at SDN 2 Klirong, Kebumen Regency, and to examine its contribution to students' knowledge, practical skills, and character development. The study seeks to answer the following research question: How is broiler chicken farming education implemented as a local-content innovation in IPAS learning, and what impacts does it have on elementary students' cognitive, practical, and character development?

The novelty of this study lies in the integration of broiler chicken farming education into IPAS learning as a local-content innovation that combines contextual learning, experiential learning, character education, environmental literacy, and life-skill development within a single instructional framework. Unlike previous studies that primarily focused on environmental learning or local-content education separately, this research utilizes a commercial broiler farming environment as an authentic learning resource where students actively participate in observation, livestock management activities, environmental maintenance, and reflective learning processes. Furthermore, the study emphasizes collaboration among schools, families, and local community members in supporting meaningful educational experiences. The findings are expected to contribute to the development of innovative IPAS learning models that are relevant to local potential, support the implementation of the Merdeka Curriculum, and strengthen twenty-first-century competencies among elementary school students.

Recent educational studies have further emphasized that integrating local contexts into learning contributes to the development of higher-order thinking skills and twenty-first-century competencies while maintaining students' cultural identity ([Iriandre et al., 2025](#)).

METHODS

Research Design

This study employed a descriptive qualitative case study design to investigate the implementation of local content-based Science and Social Studies (IPAS) learning through broiler chicken farming education at the elementary school level. The case study approach was selected because it allows in-depth exploration of educational practices within their real-life context, and it helps researchers understand how curriculum implementation, learning activities, and the local environment interact ([Yin, 2017](#)). A qualitative design was considered appropriate because the study aimed to explore participants' experiences, perceptions, and interactions during contextual learning, rather than to measure causal relationships or the effectiveness of an intervention ([Creswell & Poth, 2016](#)). Descriptive quantitative data from questionnaires and observations are presented as supporting evidence, but the orientation of the study remains qualitative. Frequencies and percentages are

therefore reported to strengthen the interpretation of the qualitative findings and should not be read as statistical indicators of effectiveness or as tests of hypotheses.

Research Setting

The research was conducted at SD Negeri 2 Klirong, Kebumen Regency, Central Java, Indonesia, from February to April 2026, during the second semester of the Merdeka Curriculum. The school was purposively selected for two reasons. First, it has an established partnership with a local broiler chicken farm, which enables the integration of local agricultural resources into IPAS learning. Second, it has consistently implemented contextual learning activities that use the surrounding community as an authentic learning resource. This setting therefore offered an appropriate context for examining how local content-based learning can be implemented through real-world experiences.

Learning activities took place at the school and at a commercial broiler chicken farm owned by Mrs. Tri Ratnaningsih, located near the school. The program comprised four meetings over a period of four weeks: one classroom orientation session followed by three field-based experiential learning sessions. Each meeting lasted approximately 140 minutes (4×35 -minute lesson periods). Across the meetings, students took part in classroom preparation, direct field observation, practical farming activities, group discussions, reflective learning, and follow-up assignments, followed by an evaluation.

Participants

Participants were selected through purposive sampling because they had direct experience of the learning program. The sample comprised 41 participants: 19 fifth-grade students who took part in the broiler farming-based IPAS activities; 19 parents or guardians, who reported on students' behavioral changes after the program; one fifth-grade classroom teacher, who facilitated the learning activities; one school principal, who supervised curriculum implementation; and one local broiler farmer, who served as a learning resource during the field activities. The inclusion criteria required participants to be directly involved in the implementation of the learning activities and to be willing to participate voluntarily throughout the research process. This selection strategy was intended to yield information-rich cases capable of providing comprehensive insights into the implementation of local content-based learning, consistent with the principles of purposive sampling in qualitative research ([Patton, 2014](#)).

Data Collection Techniques

Data were collected using four complementary techniques: observation, semi-structured interviews, questionnaires, and documentation. Together these provided comprehensive information on the implementation of broiler farming-based IPAS learning.

1. Observation

Participant observation was conducted throughout the classroom and field-based learning activities to document students' engagement and participation. A structured observation sheet, with indicators developed from the learning objectives of the Merdeka Curriculum, guided the process. The sheet covered five indicators: student participation, collaboration, curiosity, responsibility, and environmental awareness. Each indicator was rated on a five-point scale ranging from 1 (very low) to 5 (very high).

2. Semi-structured interviews

Interviews were conducted with the classroom teacher, the school principal, the broiler farm owner, selected students, and several parents. They explored participants' learning experiences, perceived benefits, implementation challenges, and recommendations for improving future learning activities, which formed the four main themes of the interview guidelines. Each interview lasted approximately 20–40 minutes, was audio-recorded with the participants' consent, and was transcribed verbatim.

3. Questionnaires

After all learning activities were completed, questionnaires were administered to all participating students and parents to capture their perceptions of the program. The student questionnaire contained 15 items and the parent questionnaire 12 items. Both used a five-point Likert scale ranging from strongly disagree to strongly agree and covered learning engagement, perceived usefulness, motivation, environmental awareness, responsibility, collaboration, and overall satisfaction. Responses were analyzed descriptively and used solely as supporting evidence for the qualitative interpretation.

4. Documentation

Documentation included lesson plans, student worksheets, field notes, photographs, learning reflection sheets, and school documents related to the implementation of the program. These materials were used to enrich and verify the findings obtained through observations, interviews, and questionnaires.

Research Instruments

Four instruments supported data collection: (a) structured observation sheets measuring students' participation, collaboration, responsibility, curiosity, and environmental awareness; (b) semi-structured interview guidelines for the teacher, students, parents, school principal, and farm owner; (c) student and parent questionnaires using a five-point Likert scale; and (d) documentation checklists for gathering supporting evidence such as lesson plans, photographs, student worksheets, and reflective journals. Before implementation, all instruments were reviewed by experts in elementary education to ensure their relevance to the research objectives.

Data Analysis

Qualitative data were analyzed using the interactive model of Miles and Huberman ([1994](#)), which comprises four interconnected stages: data collection, data condensation, data display, and conclusion drawing and verification. Interview recordings were transcribed verbatim and coded in three steps. Open coding first identified meaningful statements related to students' learning experiences. Similar codes were then grouped through axial coding, and selective coding was used to develop broader themes representing the implementation and impact of broiler farming-based learning. The first and second authors independently carried out the initial coding, and differences were discussed until consensus was reached before broader categories and themes were finalized. The analysis produced several major themes: authentic learning experiences, student engagement, environmental awareness, responsibility, collaboration, and character development.

Questionnaire data were analyzed using descriptive statistics (frequencies and percentages) to complement the qualitative findings rather than to establish statistical significance. Observation records, interview transcripts, questionnaire responses, and documentation were interpreted collectively to obtain a comprehensive picture of the implementation of local content-based IPAS learning.

Trustworthiness of the Data

Several strategies were used to ensure the credibility and trustworthiness of the findings. Source triangulation compared information from students, parents, the teacher, the school principal, and the farm owner, while method triangulation integrated observations, interviews, questionnaires, and documentation. Member checking was carried out by allowing selected participants to review interview summaries to confirm the accuracy of the researchers' interpretations. Peer debriefing with colleagues in elementary education was conducted to evaluate coding consistency and thematic interpretation. An audit trail documenting research procedures, coding processes, analytical decisions, and field notes was maintained throughout the study to enhance dependability and confirmability. Together, these procedures followed the trustworthiness criteria of credibility, dependability, transferability, and confirmability proposed by Lincoln and Guba ([1985](#)).

Ethical Considerations

Before data collection, permission to conduct the research was obtained from the principal of SD Negeri 2 Klirong and from the owner of the collaborating broiler farm. Participation was entirely voluntary. Written informed consent was obtained from teachers and parents, and verbal assent was obtained from students. Participants were informed that their identities would remain confidential and that the data would be used exclusively for academic research purposes. Throughout the study, the researchers ensured that all learning activities complied with school safety procedures and with animal welfare practices during field observations.

RESULT AND DISCUSSION

Overview of Learning Implementation

The implementation of local content-based Science and Social Studies (IPAS) learning through broiler farming education was organized into five interconnected stages designed according to the principles of contextual and experiential learning. Rather than relying solely on classroom instruction, the learning process integrated authentic field experiences with reflective classroom activities, enabling students to connect scientific concepts with real-life situations encountered in their local environment. The learning program was implemented over four consecutive meetings involving classroom orientation, field observation, guided practical activities, collaborative discussion, reflective learning, and follow-up presentations.

The learning sequence was intentionally structured to encourage students to construct knowledge progressively. During the initial stage, students observed the broiler farming environment to identify characteristics of poultry houses, animal needs, hygiene management, and environmental conditions. Subsequently, students participated directly in practical activities such as feeding chickens, providing drinking water, and maintaining poultry sanitation. These authentic experiences were followed by collaborative discussions in which students interpreted their observations, related them to Science and Social Studies concepts, and exchanged ideas with peers. Reflection activities enabled students to evaluate their learning experiences and formulate conclusions, while the final follow-up stage required students to communicate their findings through presentations and classroom reports.

This reflective learning process is also consistent with the Tri-N philosophy, which encourages students not only to observe and imitate but also to develop and enrich their own understanding through meaningful learning experiences (Firdausia, 2024).

Figure 1 illustrates the sequence of learning activities implemented throughout the study. The instructional process progressed systematically from observation to practical experience, discussion, reflection, and classroom presentation. This sequence provided authentic learning experiences that became the contextual foundation for the qualitative findings presented in the subsequent sections.

1. Observation	2. Practical Activity	3. Discussion	4. Reflection	5. Follow-Up Activity
				
Students observe the condition of the broiler house and chickens and record important findings.	Students participate in feeding, providing drinking water, and cleaning the broiler house.	Students discuss chicken growth, animal needs, and the benefits of broiler farming.	Teachers reflect on the learning experience and draw conclusions from the lesson.	Students prepare reports or presentations and apply positive practices in the school environment.

Figure 1. Implementation stages of local content-based ipas learning through broiler farming education

To provide a clearer relationship between the implementation stages and the qualitative findings, Table 1 summarizes the main learning activities conducted at each stage, the

corresponding sources of evidence collected during the research process, and the emerging themes identified through qualitative data analysis.

Table 1. Learning Stages of the Broiler Farming-Based IPAS Program

Learning Stage	Main Activities	Data Sources	Emerging Theme
Observation	Students observed broiler houses, chicken growth, environmental sanitation, and farming practices.	Observation notes, interviews, documentation	Authentic Learning Experiences
Practical Activity	Students participated in feeding chickens, providing drinking water, cleaning poultry houses, and observing animal care practices.	Observation notes, interviews	Student Engagement
Discussion	Students discussed their field observations, connected them with Science and Social Studies concepts, and exchanged ideas within groups.	Interview transcripts, students' worksheets	Contextual Understanding
Reflection	Students reflected on their learning experiences and identified values related to responsibility, cooperation, and environmental awareness.	Reflection journals, interviews	Character Development
Follow-Up Activity	Students prepared reports and presented their learning experiences in the classroom while relating them to everyday life.	Documentation, presentations, interviews	Contextual Understanding

The implementation stages presented in [Figure 1](#) and summarized in Table 1 demonstrate that the learning activities were designed as a continuous contextual learning process rather than isolated classroom events. Analysis of observations, interviews, questionnaires, and documentation generated four interconnected themes describing students' learning experiences during the implementation of broiler farming-based IPAS learning. These themes are presented and discussed in the following sections.

Authentic Learning Experiences through Local Environmental Resources

Analysis of observations, interviews, documentation, and questionnaires consistently demonstrated that broiler chicken farming provided authentic learning experiences enabling students to connect classroom concepts with real-world situations. During field activities, students observed poultry growth, feeding management, environmental sanitation, and poultry housing while relating these observations to concepts of living organisms, ecosystems, and local economic activities.

Observation data indicated that 17 of 19 students (89%) actively participated throughout all learning activities, while 18 students (93%) demonstrated high enthusiasm during practical sessions. Students were categorized as "highly engaged" when they obtained an average observation score of ≥ 4.00 on a five-point observation rubric consisting of five indicators: participation, collaboration, curiosity, responsibility, and environmental awareness. These percentages are presented as descriptive evidence supporting qualitative findings rather than measures of statistical effectiveness.

Interview findings further strengthened these observations.

"I understood the lesson more easily because I could directly observe how broiler chickens grow and how they are cared for." (Student S7)

"Learning at the farm was much more enjoyable than reading textbooks because we could immediately practice what we learned." (Student S12)

These findings suggest that authentic field experiences enabled students to connect theoretical knowledge with concrete experiences. Rather than demonstrating measurable improvement, the findings indicate that contextual learning environments facilitated meaningful conceptual understanding through direct interaction with local resources.

Student Engagement during Contextual Learning

Triangulation of observation records, interview transcripts, questionnaires, and documentation consistently indicated high levels of student engagement during the implementation of broiler farming-based IPAS learning.

Observation records revealed that 18 of 19 students (93%) consistently showed enthusiasm during practical learning activities, whereas 17 students (89%) actively collaborated within their working groups.

The classroom teacher explained:

"Compared with ordinary classroom lessons, students were noticeably more active. Almost every student wanted to ask questions and participate during the farm visit."

Students similarly reported positive learning experiences.

"Usually I am shy to ask questions, but at the farm I became curious because I could directly observe the chickens." (Student S4)

The triangulated findings suggest that contextual learning activities appeared to encourage behavioural, emotional, and cognitive engagement because students perceived learning activities as meaningful and personally relevant.

Character Development Emerging from Authentic Learning

Interviews with teachers, parents, and students consistently identified responsibility, collaboration, environmental awareness, and discipline as dominant themes.

A parent stated: *"After joining the activity, my child became more willing to clean the yard and often talked about keeping the chicken house clean."*

The classroom teacher also explained: *"Students appeared to become more responsible during group activities because each student had specific responsibilities."*

Among 19 participating parents, 18 parents (95%) agreed that the learning activities provided meaningful experiences for their children, while 17 parents (89%) reported increased environmental awareness after participation. These findings should be interpreted as participants' perceptions rather than evidence of behavioural change because the study did not employ pre-test/post-test measurements or longitudinal observations.

Similarly, Inayati (2024) highlights that integrating the Tri-N philosophy into learning activities encourages students to become more independent, reflective, and actively engaged in constructing knowledge through authentic learning experiences. This perspective is consistent with the present study, where students demonstrated responsibility, collaboration, and environmental awareness while participating directly in broiler farming activities. Through observing, practicing, and reflecting on authentic situations, students developed not only conceptual understanding but also positive character values aligned with the principles of Tri-N learning.

Contextual Understanding through School–Community Collaboration

Triangulation demonstrated that collaboration between the school and the local broiler farm enabled students to experience contextual learning closely connected with the Merdeka Curriculum.

The school principal stated: *"The partnership with the local farm enables students to experience learning directly from the surrounding environment rather than depending solely on textbooks."*

The farm owner similarly explained: *"We explained every farming activity using language that elementary school students could easily understand."*

These findings indicate that partnerships with community resources may strengthen contextual learning while simultaneously supporting local content integration. Previous studies have also demonstrated that integrating local cultural practices into classroom learning enables students to understand academic concepts through familiar community contexts, thereby increasing the relevance and meaningfulness of learning (Khasanah et al., 2023). Likewise, the present study demonstrates that broiler chicken farming, as a local community resource, provided authentic contexts that enabled students to relate Science and Social Studies concepts to everyday life through direct observation, discussion, and practical experience (see Table 2).

Table 2. Themes, Initial Codes, and Data Sources

Theme	Initial Codes	Supporting Data Sources
Authentic Learning	Direct observation, real objects, hands-on practice	Observation, Interview
Student Engagement	Enthusiasm, curiosity, participation	Observation, Interview, Questionnaire
Character Development	Responsibility, discipline, cooperation	Parent Interview, Teacher Interview, Questionnaire
Contextual Understanding	Connecting theory and practice	Observation, Interview, Documentation

These findings are also consistent with Nur et al. (2024), who reported that integrating local cultural content into student-centered learning environments provides richer and more meaningful learning experiences by encouraging learners to actively explore authentic contexts. Although their study focused on writing instruction, both studies highlight the educational value of utilizing local resources as meaningful learning contexts. In the present study, broiler chicken farming served not only as local content but also as an authentic learning environment that enabled students to connect scientific concepts with everyday community practices through direct observation, collaborative inquiry, and reflective learning.

Triangulation of the Findings

Each emergent theme was supported by at least three of the four data sources, as summarized in Table 3. Authentic learning experiences and contextual understanding were supported by observation, interview, and documentation data. Student engagement was supported by observation, interview, and questionnaire data, while character development was supported by interview, questionnaire, and documentation data.

Table 3. Triangulation matrix of the emergent themes

Theme	Observation	Interview	Questionnaire	Documentation
Authentic learning experiences	✓	✓		✓
Student engagement	✓	✓	✓	
Character development		✓	✓	✓
Contextual understanding	✓	✓		✓

Relationship Among the Emergent Themes

The themes were not independent but formed a sequence, illustrated in Figure 2. Authentic learning experiences stimulated student engagement, and sustained engagement was associated with the emergence of responsibility, collaboration, and environmental awareness (character development). These experiences in turn supported students' ability to connect scientific concepts with community practices (contextual understanding).

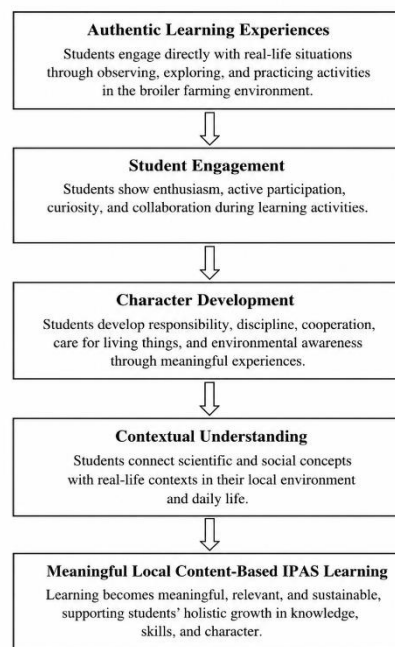


Figure 2. Conceptual relationship among the emergent themes

Discussion

The themes identified in this study are best understood as interconnected components of a single contextual learning process rather than as independent outcomes. Authentic learning experiences provided the foundation for student engagement, which in turn supported character development and enabled students to connect classroom concepts with situations they encountered in their local community. This pattern reflects the multidimensional nature of engagement. Bond et al. (2020) argue that meaningful engagement extends beyond classroom participation to include behavioural, cognitive, and emotional dimensions, all of which are strengthened by authentic learning experiences and active involvement in knowledge construction. The present findings are consistent with this view: direct participation in broiler farming activities appeared to encourage active engagement because learning took place in a meaningful real-life context rather than through passive classroom instruction alone.

Several explanations may account for why broiler farming influenced engagement. Kahu (2013) conceptualizes engagement as the interaction of behavioural, emotional, and cognitive dimensions that emerges when learners perceive educational activities as personally meaningful. In this study, students appeared to participate more actively because they could observe authentic farming practices, interact with community members, and relate scientific concepts to their everyday experiences. These contextual conditions may have fostered stronger engagement than conventional classroom-based instruction. From a cognitive perspective, the findings can also be interpreted through the concept of contextual inference in learning and memory. Heald et al. (2022) emphasize that knowledge is retained more effectively when new information is continuously linked to meaningful environmental contexts and prior experience. The broiler farming activities gave students repeated opportunities to observe, discuss, and reflect upon authentic biological phenomena, which may have supported deeper conceptual understanding.

A further explanation is that broiler farming offered multisensory learning experiences in which students simultaneously observed, discussed, practiced, and reflected. Such experiences may have reduced the abstractness of classroom instruction and encouraged more active participation throughout the learning process. This interpretation is consistent with experiential learning theory, which holds that meaningful knowledge is constructed through concrete experience followed by reflection. It also aligns with Alberts (2022), who argues that science education should emphasize authentic inquiry and real-world problem solving rather than the memorization of isolated

concepts. Through direct interaction with broiler farming activities, students could observe biological processes, environmental management, and local economic practices at the same time, and thus experienced Science and Social Studies (IPAS) as an integrated and meaningful whole. Similarly, Tahapary and Anaktototy (2025) reported that integrating local content into learning increased students' engagement and strengthened their perception of learning as meaningful.

Among the learning activities, direct field observation and guided practical farming appeared to elicit the strongest student responses, probably because learners interacted with authentic learning objects rather than relying solely on textbook explanations. Group discussions held after the field observations may have further strengthened conceptual understanding by giving students the chance to exchange ideas and reflect on what they had seen. Taken together, these findings suggest that authentic learning experiences stimulated engagement, and that sustained engagement supported the emergence of responsibility, collaboration, and environmental awareness. These experiences in turn helped students connect scientific concepts with community practices, fostering meaningful local content-based learning. This progression from authentic experience to engagement, character development, and contextual understanding indicates that meaningful learning did not result from a single instructional activity but from a sequence of interconnected experiences. The finding reinforces earlier work suggesting that contextual and community-based learning environments allow students to construct knowledge progressively through active participation, reflection, and social interaction (Bond et al., 2020; Kahu, 2013).

The findings contribute to the development of contextual Science and Social Studies learning by suggesting that local community resources can serve not only as instructional media but also as authentic learning environments that integrate conceptual understanding, student engagement, and character education. Although this study was carried out in partnership with a commercial broiler farm, the underlying model could be adapted to schools with different local resources. Schools in agricultural areas might use rice fields or horticulture, coastal schools might draw on fisheries, and urban schools might collaborate with local industries or community enterprises, while retaining the same contextual learning principles.

CONCLUSION

This study explored the implementation of local content-based Science and Social Studies (IPAS) learning through broiler chicken farming education at SD Negeri 2 Klirong, Kebumen Regency. The findings suggest that using the local environment as an authentic learning resource gave students meaningful opportunities to connect classroom concepts with real-life experiences. Farm observations, broiler care practices, group discussions, reflective sessions, and student presentations appeared to support students' understanding of scientific concepts and to encourage active participation in contextual learning.

Findings triangulated across observations, interviews, questionnaires, and documentation indicate that participants perceived the program positively. Students appeared highly engaged, curious, collaborative, responsible, and environmentally aware during the activities, and parents and teachers reported positive behavioral changes following participation. Because this study used a descriptive qualitative case study design, these findings represent participants' experiences and perceptions. They should not be interpreted as evidence of statistically significant improvement or causal effects.

The study contributes to the growing body of research on contextual and local content-based learning by illustrating how collaboration between schools and local community resources can support authentic IPAS instruction in elementary education. It also offers practical insights for teachers who wish to integrate regional potential into classroom learning while supporting the implementation of the Merdeka Curriculum and character education through experiential learning.

Several limitations should be acknowledged. The study was conducted in a single elementary school with a relatively small number of participants and a short implementation period, so its findings are not intended to be generalized to other educational contexts. In addition, questionnaire responses may have been affected by social desirability bias, as students and parents may have tended to evaluate the program favorably. Future research should examine similar contextual learning models across different schools, regions, and local resource settings, using multiple-case,

mixed-methods, or longitudinal designs. Comparative studies involving other forms of local potential, such as agriculture, fisheries, horticulture, or local industries, would provide broader evidence on the transferability and sustainability of local content-based learning in elementary schools.

CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTIONS STATEMENT

T.R.; contributed to the conceptualization of the study, research implementation, data collection, field observation, interviews, documentation, data interpretation, and preparation of the original manuscript. T.H.; contributed to the development of the research methodology, data analysis, interpretation of findings, and critical revision of the manuscript. E.D.; contributed to methodological review, theoretical interpretation, and critical evaluation of the manuscript. K.W.; contributed to the review of the theoretical framework, interpretation of findings, and critical revision of the manuscript. A.F.N.; contributed to the review of the research design, interpretation of findings, and critical evaluation of the manuscript. All authors reviewed and approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

AI DISCLOSURE STATEMENT

The authors used a generative artificial intelligence tool, ChatGPT, solely to support language refinement, improve sentence clarity, and assist with the editorial organization of the manuscript. The tool was not used to determine the research design, collect or analyze research data, interpret the empirical findings, or make scholarly decisions. All AI-assisted content was thoroughly reviewed, verified, and revised by the authors. The authors take full responsibility for the accuracy, originality, and integrity of the content presented in this publication.

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