

Evaluating The Implementation of Deep Learning in Social Studies at Junior High School: ADKAR Model Analysis

Dicky Noveka Firmanzah¹, Septina Alrianingrum², and Nuansa Bayu Segara³

^{1,2,3} Universitas Negeri Surabaya, Surabaya, Indonesia

Abstract

This study aims to evaluate the implementation of deep learning in Social Studies instruction at junior secondary schools through the ADKAR model, which consists of awareness, desire, knowledge, ability, and reinforcement. A qualitative implementation evaluation design was employed, involving principals, Social Studies teachers, and students from several junior secondary schools in Pasuruan Regency that had participated in deep learning training organized by BBGTK East Java. Data were collected through in-depth interviews, classroom observations, and document analysis, and were analyzed using an interactive model comprising data reduction, data display, and conclusion drawing, with data validity ensured through source triangulation, technique triangulation, member checking, and peer debriefing. The findings reveal that teachers have developed awareness of the importance of deep learning and show positive motivation to implement it; however, their knowledge remains largely conceptual, their ability to translate deep learning principles into consistent classroom practices is still developing, and institutional reinforcement through supervision, evaluation, mentoring, and professional learning communities remains insufficient. This study implies that the sustainable implementation of deep learning requires not only initial training but also systematic school-based reinforcement, continuous professional development, and collaborative instructional support to strengthen teachers' pedagogical transformation in Social Studies learning.

ARTICLE HISTORY

Received : 18 February 2026

Revised : 28 March 2026

Accepted : 27 April 2026

KEYWORDS

ADKAR Model; Deep Learning; Implementation Evaluation; Social Studies; Teacher Professional Development.

PUBLISHER'S NOTE

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY 4.0) license.



CORRESPONDING AUTHOR

*Dicky Noveka Firmanzah, Universitas Negeri Surabaya, Indonesia States.Email: 25040885008@mhs.unesa.ac.id

Introduction

Twenty-first century education demands learning that goes beyond rote memorization and instead promotes critical, reflective, and collaborative thinking, as well as the ability to connect knowledge with real life contexts (Heryahya et al., 2022; Roshid & Haider, 2024; Wijesekera & Hameed, 2026). This aligns with the competencies required in the 21st century, which emphasize learners' responsiveness, their ability to integrate knowledge, and their skills in interacting with information technology (Anwar, 2022; Herlinawati et al., 2024; Noviani et al., 2025). One response to these demands is the adoption of deep learning approaches, which focus on the development of conceptual understanding, higher order reasoning, and the ability to solve complex problems (Ceballos et al., 2026; Isnayanti et al., 2025; Sofroniou et al., 2025). Deep learning has emerged as a pedagogical response to these challenges, emphasizing mindful, meaningful, and joyful conceptual understanding, rather than the superficial learning often associated with artificial intelligence (kosasih et al., 2025; Sinha, 2025; Xuan, 2025). This approach encourages students to connect new information with prior knowledge, engage in critical analysis, and solve complex problems skills that are highly relevant to the demands of producing creative, innovative, and critical individuals in the 21st century (Bidayati Haka et al., 2025; Huda et al., 2025; Oktafiani et al., 2025).

The implementation of this approach is particularly relevant in the context of Social Studies education. As a discipline rich in civic values, Social Studies requires an approach that integrates theoretical knowledge with practical application, enabling students to understand and contribute effectively to society (Fried & Mette, 2026; Kurniawati, 2025; Sakti et al., 2024). Therefore, Social Studies should not merely function as a medium for the transfer of factual knowledge, but also as a strategic platform for fostering a comprehensive understanding of social dynamics and developing students' reflective capacities in addressing social complexities. However, the implementation of deep learning in Social Studies education at the school level faces several challenges, particularly the tendency of teachers to maintain conventional, teacher-centered instructional methods (Feri et al., 2025). This is often attributed to teachers' limited understanding of deep learning as a pedagogical approach rather than merely a teaching method, as well as constraints in developing students' social skills and critical literacy (Defa et al, 2023; Suarti et al, 2023). Consequently, Social Studies learning often remains focused on memorization, lacks contextual relevance, and fails to foster students' concrete understanding of the importance of the material being studied (Sulistiyosari et al, 2022; Susanti et al, 2023). As a result, students frequently struggle to provide comprehensive explanations or demonstrate deep understanding of the subject matter and tend to exhibit limited participation in classroom discussions due to their familiarity with passive learning approaches.

This phenomenon creates an urgency to evaluate the effectiveness of teacher capacity-building programs in the implementation of deep learning. One such initiative is the deep learning training program organized by the BBGTK of East Java, which involved several junior secondary schools in Pasuruan Regency. For Social Studies teachers in particular, this program represents an important initial step in introducing the concepts, principles, and directions for implementing deep learning in schools. Specifically, this study evaluates the implementation of the training program using the ADKAR framework to identify gaps between the intended objectives of the training and its actual practices in the field (Afwan et al, 2025). Accordingly, this study aims to identify the factors that hinder or support the adoption of deep learning by Social Studies teachers, as well as to explore adaptive strategies that may be employed to overcome these challenges (Khofifah et al, 2025). This research adopts the ADKAR framework developed by Hiatt, which consists of Awareness, Desire, Knowledge, Ability, and Reinforcement (Hiatt, 2006). The selection of the ADKAR framework as an evaluation tool is based on its capacity to analyze change implementation at the individual level an aspect that is crucial in the adoption of new pedagogical approaches but is often overlooked in conventional program evaluations (Patra et al, 2026; Prunuske et al., 2022).

Empirical studies that specifically examine the implementation of deep learning in the context of Social Studies at the school level particularly following teacher training programs and evaluate it using the ADKAR framework remain very limited. (Watimena et al, 2026) employed the ADKAR framework to analyze teacher readiness; however, the study focused solely on readiness at the primary school level and did not evaluate the implementation of deep learning within the context of Social Studies at the junior secondary level. Similarly, the study by (nurjanah, 2025) examined teachers' readiness to implement deep learning in history education, but it was limited to a single subject at the senior secondary level, thus failing to provide a comprehensive understanding of its application across disciplines at the junior secondary level. This gap highlights the need for further investigation into the effectiveness of teacher professional development programs in promoting the

adoption and internalization of deep learning pedagogy, as well as in analyzing the resulting changes in classroom practices, the supporting factors, and the challenges encountered by teachers.

Specifically, the ADKAR framework will help reveal the extent to which Social Studies teachers implement deep learning in classroom practice. This study aims to analyze the effectiveness of the deep learning training program conducted by BBGTK East Java, particularly in Pasuruan, by employing the ADKAR model as an evaluative lens to identify the enabling and constraining factors in the implementation of this pedagogical approach in Social Studies (Patra et al., 2026; Prunuske et al., 2022). In addition, the findings of this study may serve as an important reference for educational policymakers in formulating strategies to improve teacher quality, particularly in responding to the demands of 21st-century learning. More specifically, this study evaluates the implementation of a deep learning approach in junior secondary schools aimed at supporting the transformation of 21st-century learning (Ariyani et al, 2026).

This study not only evaluates the implementation of deep learning but also develops an ADKAR-based analytical framework within the context of Social Studies pedagogy at the junior secondary level. Unlike previous studies that primarily focus on measuring teachers' readiness or perceptions, this study identifies patterns of pedagogical change based on the five dimensions of the ADKAR model in a more comprehensive manner. Furthermore, this research provides an empirical synthesis of the interrelationships among ADKAR components in supporting learning transformation, thereby offering a conceptual contribution to the adaptation of the ADKAR model in educational contexts, particularly in the implementation of deep learning in schools.

Method

This study employed a qualitative research approach. The research method used was implementation evaluation, which is designed to assess the effectiveness of a program after it has been fully implemented by examining how and to what extent the program has been carried out in practice (Patton, 2008). Evaluation was chosen because this study does not merely describe the implementation of learning, but also evaluates how deep learning is implemented in Social Studies, the supporting factors available, the challenges and constraints encountered, and the forms of reinforcement needed to ensure that the implementation can be sustained consistently over time.

The selection of research sites and informants was conducted using purposive sampling. The study was carried out at SMPN 2 Sukorejo, SMPN 1 Beji, SMPN 2 Beji, and SMP AT-Tibyan. These schools were considered relevant as research sites because they had received initial intervention in the form of deep learning training organized by the BBGTK of East Java. A total of 20 participants were involved in this study, consisting of 4 principals, 8 Social Studies teachers, and 8 students.

Data were collected through in-depth interviews, observations, and document analysis. Semi-structured interviews were conducted with principals, teachers, and students as informants, observations were carried out through limited participatory observation during classroom learning activities; and document analysis was conducted on various supporting documents. To ensure data validity, this study employed several validation techniques, including source triangulation, technique triangulation, member checking, and peer debriefing. Source triangulation was conducted by comparing data from different informants, while technique triangulation was carried out by examining the consistency of data across multiple data collection methods. The research instruments, including interview guides and observation sheets, were developed based on indicators

derived from the ADKAR model to ensure alignment with the objectives of evaluating the implementation of instructional change.

Data analysis in this study followed an interactive model consisting of data reduction, data display, and conclusion drawing. During the data reduction stage, the researcher performed data selection, focusing, and simplification through interview transcription, coding, and categorization based on themes relevant to the ADKAR components. The next stage, data display, involved organizing the data into descriptive narratives and thematic matrices to facilitate the identification of patterns, relationships, and emerging trends. In the final stage, conclusions were drawn through a gradual process of data interpretation, pattern identification, and repeated verification to ensure the validity of the findings. This analytical process was iterative, meaning that it was conducted continuously from the data collection phase to the final stage of the study.

This study evaluates the implementation of deep learning in Social Studies using the ADKAR framework, which comprises five key components: awareness, desire, knowledge, ability, and reinforcement.

Table 1. The ADKAR Focus Inquiry

ADKAR Component	Focus of Inquiry
Awareness	Teachers' awareness of the importance of deep learning, including their understanding of the reasons, objectives, and benefits of instructional change.
Desire	Teachers' willingness to support and their motivation to implement deep learning approaches in Social Studies instruction.
Knowledge	Teachers' knowledge of concepts, strategies, and techniques for implementing deep learning in Social Studies instruction.
Ability	Teachers' ability to apply deep learning in the classroom, including skills in managing instruction and integrating real-world contexts into the learning process.
Reinforcement	Supporting factors that sustain implementation, such as principal support, ongoing training, and a school culture conducive to instructional innovation.

Result and Discussion

Awareness

Most Social Studies teachers were first introduced to the concept of deep learning through training programs organized by the BBGTK of East Java, which were conducted in Pasuruan Regency. Teachers reported that the training provided a clearer understanding of the importance of shifting instructional approaches from rote memorization to more active and deep learning. Social Studies teacher stated.

"I was first introduced to this concept during the training, and I immediately felt that it was a crucial step toward increasing student engagement."

This finding indicates that deep learning remains relatively new to many teachers; however, they begin to recognize its benefits after participating in such training programs. Teachers also acknowledged that Social Studies instruction previously implemented in classrooms often provided limited opportunities for students to think critically and actively engage in the learning process. They further emphasized that deep learning is essential in addressing these challenges by involving students in more meaningful and contextual learning experiences.

The principal also stated strong support for the implementation of deep learning in the school as part of a national policy aimed at improving the quality of education. According to the principal,

this policy is intended to enhance instructional effectiveness and better prepare students to face the challenges of the 21st century. However, the principal acknowledged that not all teachers fully understand or are ready to implement this approach effectively. It was also noted that despite having received training, some teachers have not yet fully applied the principles of deep learning in Social Studies instruction. This finding indicates a gap between conceptual understanding and practical implementation, which requires further guidance and sustained support from the school.

Overall, the interview findings from both teachers and the principal indicate that although there is a high level of awareness regarding the importance of deep learning, there are variations in teachers' understanding and readiness to implement it in the classroom. While some teachers have begun to recognize the importance of this change and are ready to adopt it, many still face challenges in both understanding and practice. These challenges highlight the need for continuous support through professional development and school-level policies. Therefore, deep learning must be more comprehensively understood by all stakeholders within the school to ensure its effective and sustainable implementation.

Desire

Not all teachers demonstrate the same level of motivation to implement deep learning. While some teachers show high levels of enthusiasm and commitment, others remain only partially adaptive in their approach. This variation is influenced by several factors, including workload, limited time, long-established teaching habits, and differing levels of understanding of the deep learning concept.

Most of the Social Studies teachers interviewed reported that they feel encouraged to implement deep learning due to their belief that this approach can improve the quality of student learning. As one teacher stated.

"I feel challenged and interested in applying deep learning because I believe students will be more engaged and have a better understanding of the material."

This willingness to transform their teaching practices stems from the understanding that deep learning can reshape how students interact with content, making it more relevant and meaningful in their daily lives.

However, some teachers also expressed doubts and concerns regarding the implementation of deep learning, particularly in relation to limited time and available resources. This indicates that although there is a desire to change teaching practices, external constraints such as time limitations and insufficient support resources act as barriers that affect teachers' motivation to sustain instructional transformation. Several teachers further noted that their motivation to implement deep learning increases when they recognize its potential to enhance students' critical thinking skills. This suggests that the willingness to adopt this approach becomes stronger when teachers perceive its significant impact on students' competencies, particularly in critical thinking and problem-solving.

In addition, school principals play an important role in supporting the implementation of deep learning by encouraging teachers to actively engage in the process. Principals provide ongoing support through training and mentoring to sustain teachers' motivation, especially during the initial stages of implementation when challenges are more prominent. Nevertheless, despite the strong intention to implement deep learning, some teachers reported that their motivation occasionally declines due to contextual challenges, such as low student engagement during late school hours. This finding highlights that the sustainability of teachers' motivation largely depends on continuous

institutional support and early successful implementation experiences that can reinforce positive perceptions among teachers.

Knowledge

The findings indicate that teachers' understanding of deep learning remains at a basic to intermediate level. In general, teachers have grasped key principles such as meaningful and contextual learning; however, they have not yet fully mastered systematic implementation strategies, particularly in designing learning activities and appropriate assessment practices. Most of the Social Studies teachers interviewed reported that they gained their knowledge of deep learning through training programs organized by BBGTK. This knowledge helped them understand that deep learning is not merely about delivering content, but also about creating learning experiences that connect students to real world contexts.

However, despite having received training, some teachers acknowledged that their understanding is still limited to foundational concepts and does not yet extend to practical implementation techniques, such as selecting appropriate instructional models based on subject matter and student needs. This finding suggests that while foundational knowledge has been established, the primary challenge lies in translating theory into concrete classroom practices. Other teachers also noted that they developed a deeper understanding of appropriate assessment strategies for deep learning through collaborative sharing sessions during the training. Nevertheless, several teachers expressed the need for additional training or concrete examples, particularly in designing assessments aligned with deep learning principles.

The principal also acknowledged that training serves as the primary source of knowledge for teachers in understanding deep learning, including aspects such as graduate profile dimensions, learning principles, learning experiences, and instructional frameworks. The school plans to organize follow up training and internal discussions among teachers to further strengthen their understanding and practical application of deep learning. Despite these efforts, some teachers reported difficulties in accessing more in-depth and applicable learning resources. This indicates that, although foundational knowledge has been established, there remains a need for ongoing support and access to resources that provide practical examples of deep learning implementation in the classroom.

Overall, the interview findings suggest that while teachers have acquired basic knowledge of deep learning, challenges persist in translating this knowledge into concrete and contextually relevant teaching practices. Therefore, continued professional development and improved access to practical resources are essential to ensure that this knowledge can be effectively implemented in classroom settings.

Ability

The findings indicate that teachers' ability to implement deep learning in the classroom remains limited. Although some teachers have attempted to integrate contextual approaches and group discussions, these efforts have not been consistently applied and do not yet fully reflect the characteristics of deep learning. These limitations are primarily attributed to a lack of practical experience, time constraints, and insufficient ongoing mentoring. Most of the Social Studies teachers interviewed reported that their ability to implement deep learning is still in the developmental stage. Some teachers have attempted to connect learning materials with real social issues or students' everyday experiences; however, they continue to face difficulties in applying this approach

comprehensively. This suggests that, despite their efforts, teachers still lack confidence in effectively implementing deep learning in classroom practice.

Several teachers also reported challenges in creating a classroom environment that is truly *mindful, meaningful, and joyful*, as emphasized in deep learning. Time limitations and the pressure to meet established curriculum standards often hinder teachers from fully applying deep learning principles that prioritize reflective and meaningful learning experiences. In addition, managing heterogeneous classrooms with varying student abilities presents another challenge. This indicates that the successful implementation of deep learning largely depends on teachers' ability to manage classrooms effectively and adapt instructional strategies to diverse student needs.

The principal acknowledged that, although teachers have received training in deep learning, many still require additional support to enhance their practical skills. It was also noted that some teachers do not yet feel sufficiently equipped to fully implement deep learning in the classroom. Therefore, the school plans to provide continuous training and allocate dedicated time for teachers to plan and discuss the implementation of deep learning collaboratively. Overall, despite a strong intention to implement deep learning, teachers' ability to apply this approach effectively remains limited. This highlights the importance of ongoing professional development and more intensive mentoring to build teachers' confidence and competence. Teachers who have greater opportunities to share experiences and receive feedback from peers and school leaders tend to demonstrate stronger capabilities in implementing this approach in classroom settings.

Reinforcement

The findings indicate that school support remains suboptimal. Although initial training has been provided, reinforcement in the form of supervision, professional learning communities, and sustained school policies is still limited. This condition has hindered the development of a school culture that consistently supports the implementation of deep learning. Most of the teachers interviewed stated that support from principals and fellow teachers plays a crucial role in implementing deep learning, particularly as a means of reflecting on classroom practices. This support is not only manifested through school policies but also through opportunities to share experiences and discuss challenges with colleagues. These findings suggest that peer-based social reinforcement is a key factor in sustaining the implementation of deep learning.

However, despite the presence of support from school leadership and colleagues, several teachers reported that reinforcement in the form of supervisory evaluation and feedback remains limited. As one teacher stated.

"We receive supervision only once per semester regarding the implementation of deep learning in the classroom."

This indicates that, although teachers receive moral support, the lack of systematic evaluation and collaborative reflection hinders the reinforcement process. Therefore, teachers emphasized the need for more structured reinforcement through regular supervision and discussion forums that can support reflective evaluation of instructional practices. The principal also acknowledged the importance of reinforcement through continuous evaluation and reflection within professional learning communities and supervision activities. Although efforts have been made to provide time for teachers to share experiences, limited time remains a significant challenge in conducting in depth evaluations. Consequently, schools need to increase the frequency of reflective sessions and enhance supervisory practices to ensure the consistent implementation of deep learning.

Overall, the interview findings suggest that while support from the school and peers exists, more systematic and structured reinforcement particularly in the form of evaluation, supervision, and recognition is still required. Teachers who receive consistent reinforcement tend to be more motivated to continue implementing deep learning and to improve their teaching practices. Thus, school-level reinforcement, whether through moral support, evaluation, or recognition, is a critical factor in ensuring the sustainability and success of deep learning implementation.

These findings further indicate that, although social support and school policies are already in place, more structured and sustained reinforcement mechanisms are essential for maintaining teachers' motivation and commitment. Schools need to strengthen evaluation and feedback processes within supervision practices to ensure the long-term effectiveness and sustainability of deep learning implementation.

The interview findings indicate that although social support and school policies are in place, more structured and sustained reinforcement is crucial for ensuring the success and sustainability of deep learning implementation. Schools need to focus on evaluation and feedback during supervision to maintain teachers' enthusiasm and motivation.

Based on the data analysis, it was found that the implementation of deep learning in Social Studies instruction can be categorized into five main dimensions based on the ADKAR model, with the following characteristics:

Table 2. Findings Using The ADKAR Model

ADKAR Component	Findings
Awareness	Teachers have developed an awareness of the importance of deep learning as a requirement for 21st-century education. However, this understanding is not uniformly distributed among all teachers.
Desire	Teachers show motivation to implement deep learning, but this desire is fluctuating due to factors such as workload, time constraints, and established teaching habits.
Knowledge	Teachers' knowledge of deep learning remains at a conceptual level and has not yet fully developed into implementable skills in classroom practice.
Ability	Teachers' ability to apply deep learning is still in development and lacks consistency, particularly in classroom management and the integration of instructional strategies.
Reinforcement	Reinforcement for the implementation of deep learning exists but is not yet systematic and sustained, especially in the aspects of supervision, evaluation, and it has not yet become part of the school culture.

Discussion

The findings show that most teachers have developed an awareness of the importance of implementing deep learning as a response to the demands of 21st century education. This awareness is reflected in the understanding that learning should no longer be solely focused on memorization, but should encourage active student engagement and contextual understanding. In the ADKAR model framework, awareness is a crucial initial stage in the change process as it forms the foundation for subsequent stages such as desire, knowledge, ability, and reinforcement (Hiatt, 2006). Without adequate awareness, individuals tend to maintain old practices and show resistance to change (Patra et al., 2026).

In this study, teachers' awareness is also influenced by professional training and reflection on previous teaching practices that were deemed ineffective. This aligns with research that states that ongoing professional development and training play a critical role in enhancing teachers' awareness and readiness for educational innovation (Heryahya et al., 2022b; Kosasih et al., 2025). Additionally, the global educational demand for the development of 21st-century skills further strengthens teachers' awareness of the importance of pedagogical transformation towards more meaningful learning (Darling-Hammond et al., 2020). Thus, awareness is shaped not only by educational policies but also by teachers' understanding of the need for change in teaching practices.

However, this awareness is not yet evenly distributed among teachers, with some still understanding deep learning in general terms without being able to concretely apply it in Social Studies instruction. This suggests that awareness is not only about recognizing the need for change but also about the depth of understanding of the implications of that change. In the change management literature, this condition indicates that awareness is still in its early stages and requires reinforcement through ongoing communication and more intensive mentoring (Prunuske et al., 2022). Furthermore, the role of school leadership is crucial in building collective awareness through policy support and a shared vision (Hargreaves & Fullan, 2012; Rochaendi et al., 2021), so that the awareness developed can evolve into a more mature readiness to implement deep learning consistently.

The findings indicate that teachers possess a relatively strong desire to implement deep learning, primarily driven by the belief that this approach can enhance student engagement and the quality of learning. In the ADKAR model, desire represents an individual's willingness to support change, which is heavily influenced by internal factors such as personal motivation, as well as external factors like organizational support (Hiatt, 2006; Patra et al., 2026). This desire is also related to teachers' perceived benefits of the proposed changes, where the higher the perceived benefits, the greater the tendency for individuals to engage in the change process.

Teachers' motivation in this study can also be explained through intrinsic motivation theory, which emphasizes that individuals are driven to make changes when they understand the meaning and positive impact of their actions (Deci & Ryan, 2000). Teachers who see that deep learning can develop students' critical thinking skills and promote active participation tend to show a higher level of desire. Additionally, a supportive school environment, such as the presence of training and teacher collaboration, further strengthens this motivation. This aligns with research indicating that school leadership and professional learning communities play a critical role in enhancing teachers' motivation to adopt educational innovations (Hargreaves & Fullan, 2012; Timperley et al., 2007).

However, the results of this study show that teachers' desire is fluctuating and not yet fully stable. Factors such as administrative workload, time constraints, and long-established teaching habits serve as barriers to maintaining teachers' motivation for change. External challenges, such as administrative workload and time constraints, align with findings from other studies which show that although teachers initially have the desire to change, structural barriers within the school environment can diminish their intention to sustain the change in the long term (Gorozidis & Papaioannou, 2014). This condition suggests that pedagogical change is influenced not only by individual factors but also by structural and organizational cultural conditions. Therefore, it is necessary to implement reinforcement strategies that focus not only on enhancing individual

motivation but also on providing continuous systemic support, so that teachers' desire can evolve into a consistent commitment to implementing deep learning.

The findings indicate that teachers' knowledge of deep learning remains at a conceptual level and has not yet fully developed into implementable skills in classroom practice. Teachers have understood basic principles such as meaningful, contextual, and student-centered learning; however, they have not yet been able to systematically apply these principles in lesson planning and assessment. In the ADKAR model, knowledge refers to an individual's understanding of how to implement change, including the strategies, methods, and skills required (Hiatt, 2006; Patra et al., 2026). Without adequate knowledge, change cannot be effectively implemented, even if individuals have the awareness and desire to change.

This condition suggests a gap between theoretical knowledge and implementational ability, which can be explained through the theory of experiential learning, which emphasizes that effective learning occurs through direct experience and reflective practice (Kolb, 2015). Furthermore, the availability of contextual learning resources and support from professional learning communities also plays an important role in strengthening teachers' knowledge (Darling-Hammond et al., 2020; Timperley et al., 2007). Therefore, improving teachers' knowledge should focus on practice-based training, continuous mentoring, and strengthening collaboration among teachers so that the knowledge acquired can be developed into implementational competence in deep learning.

In this study, teachers' knowledge was largely gained through training programs organized by BBGTK East Java, which played a role in enhancing their conceptual understanding of deep learning. This aligns with research indicating that professional development is crucial in enhancing teachers' pedagogical capacity and readiness to implement learning innovations (Heryahya et al., 2022b; kosasih et al., 2025). However, theoretical training often falls short of developing practical abilities, meaning that the knowledge acquired has not been fully internalized into classroom practice.

This condition suggests a gap between theoretical knowledge and implementational ability, which can be explained through the theory of experiential learning, which emphasizes that effective learning occurs through direct experience and reflective practice (Kolb, 2015). Furthermore, the availability of contextual learning resources and support from professional learning communities also plays an important role in strengthening teachers' knowledge (Darling-Hammond et al., 2020; Timperley et al., 2007). Therefore, improving teachers' knowledge should focus on practice-based training, continuous mentoring, and strengthening collaboration among teachers so that the knowledge acquired can be developed into implementational competence in deep learning.

The findings indicate that teachers' ability to implement deep learning is still in the developmental stage and has not yet been consistent in classroom practice. While some teachers have attempted to apply contextual approaches and student centered activities, the implementation has not fully reflected the characteristics of deep learning. In the ADKAR model, ability refers to an individual's capacity to apply changes in practice through skills, experience, and practical readiness (Hiatt, 2006; Patra et al., 2026). This indicates that the success of implementation depends not only on understanding but also on practical ability to manage learning effectively.

The limitations in teachers' abilities in this study are related to a lack of practical experience and complex pedagogical skills, such as differentiated instruction, classroom management, and the integration of meaningful learning strategies. This aligns with the theory of experiential learning,

which asserts that an individual's ability develops through direct experience and reflective practice (Kolb, 2015). Additionally, low self-efficacy in trying new strategies has also become a hindering factor, as belief in one's capabilities affects actions and perseverance in facing challenges (Bandura, 1997). Therefore, teachers' abilities are not only determined by knowledge but also by experience and self-confidence in classroom practices.

On the other hand, school environment support through activities such as micro-teaching, mentoring, and professional learning communities plays an important role in gradually enhancing teachers' abilities. This aligns with the concept of professional capital, which emphasizes the importance of collaboration among teachers to improve the quality of teaching practices (Hargreaves & Fullan, 2012; Timperley et al., 2007). Therefore, improving teachers' ability should focus on strengthening practical experience, continuous mentoring, and the development of a supportive professional learning environment, so that the ability to implement deep learning can develop optimally and sustainably.

The findings indicate that the reinforcement aspect of deep learning implementation is still suboptimal and has not yet been systematically carried out. While initial support through training and school policies has been provided, continuous reinforcement in the form of supervision, evaluation, and monitoring remains limited. In the ADKAR model, reinforcement ensures that the changes made are sustained and become part of ongoing practice (Hiatt, 2006; Patra et al., 2026). Without consistent reinforcement, individuals tend to revert to old habits, causing the initiated changes to become unsustainable.

The study also reveals that social support from school principals and colleagues plays a critical role in strengthening deep learning implementation. Teachers involved in collaboration and professional learning communities are more likely to sustain innovative teaching practices. This aligns with the concept of professional learning communities, which emphasizes the importance of collaboration in supporting sustained pedagogical change (Hargreaves & Fullan, 2012; Timperley et al., 2007). Moreover, reinforcement through feedback and shared reflection also contributes to improving the quality of implementation.

However, reinforcement in the form of recognition and acknowledgment of teachers' efforts is still suboptimal, although this is crucial in maintaining motivation and individual commitment. From a motivation theory perspective, external reinforcement such as rewards can enhance the sustainability of positive behavior (Deci & Ryan, 2000), while continuous evaluation serves as a control mechanism in the change process (Prunuske et al., 2022). Therefore, a more comprehensive reinforcement strategy is needed, including systematic supervision, ongoing evaluation, learning communities, and the development of a collaborative school culture to ensure that deep learning implementation is consistent and sustainable.

Conclusion

This study concludes that the implementation of deep learning in Social Studies at junior secondary schools in Pasuruan Regency has begun to develop but remains uneven and has not yet reached an optimal level across the five dimensions of the ADKAR model. The findings show that teachers have developed awareness of the importance of deep learning as a response to the demands of twenty-first-century education and demonstrate a positive desire to adopt this approach; however, their knowledge remains largely conceptual, their ability to translate deep learning principles into consistent classroom practices is still limited, and reinforcement mechanisms at the school level are

not yet systematic or sustainable. These findings indicate that the effectiveness of deep learning implementation depends not only on initial training but also on continuous professional development, structured mentoring, reflective supervision, collaborative teacher learning communities, and stronger institutional support. This study contributes to the use of the ADKAR model as an evaluative framework for understanding pedagogical change in Social Studies instruction, particularly in identifying the gap between teacher readiness and actual classroom implementation. However, this study is limited by its qualitative scope, the number of participating schools and informants, and its focus on one regional context, which may limit the generalizability of the findings. Future research is recommended to involve broader school contexts, use mixed-method or longitudinal designs, and examine the impact of deep learning implementation on students' critical thinking, conceptual understanding, social literacy, and learning engagement.

References

- Afwan, B., Putra, A. D., Abbas, N. A., Muhammad, U. A., & Fadli, M. R. (2025). Persepsi guru terhadap pendekatan deep learning dalam pembelajaran sejarah di sekolah menengah atas. *SOCIAL PEDAGOGY: Journal of Social Science Education*, 6(2), 121–130. <https://doi.org/10.32332/social-pedagogy.v6i2.11519>
- Anwar, R. N. (2022). Pelatihan implementasi Kurikulum Merdeka pada guru di lembaga PAUD se-Kecamatan Madiun. *Journal of Community Service*, 1(1), 21–29. <https://doi.org/10.61987/communautaire.v1i1.7>
- Ariyani, A. H., Martina, E., Saputra, M., Handoko, & Rosidin, U. (2026). Evaluasi program implementasi pendekatan deep learning di sekolah menengah pertama. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, 4(3), 16988–16993. <https://doi.org/10.31004/jerkin.v4i3.4600>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Worth Publishers.
- Bidayati Haka, N., Satiyo Putri, B., Hidayah, N., & Rakhmawati, I. (2025). Cultivating scientific literacy and self-confidence through an Islamic-oriented 9E learning cycle in biology education. *Biosfer: Jurnal Tadris Biologi*, 16(2), 183–199. <https://doi.org/10.24042/biosfer.v16i2.28760>
- Ceballos, H., van den Bogaart, T., van Ginkel, S., Spandaw, J., & Drijvers, P. (2026). How collaborative problem solving promotes higher-order thinking skills: A systematic review of design features and processes. *Thinking Skills and Creativity*, 59, Article 102001. <https://doi.org/10.1016/j.tsc.2025.102001>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. <https://doi.org/10.1080/10888691.2018.1537791>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Defa, D., Lasmawan, I. W., & Kertih, I. W. (2023). Implementasi Kurikulum Merdeka dalam peningkatan pendidikan karakter pada pembelajaran IPS di sekolah dasar. *School Education Journal PGSD FIP UNIMED*, 13(3), 217–226. <https://doi.org/10.24114/sejpgsd.v13i3.47548>
- Feri, M., Ismiati, N., Al-Nur, W. R., & Akbar, F. S. (2025). Implementing deep learning approaches in primary education: A literature review. *Jurnal VARIDIKA*, 37(2), 178–194. <https://doi.org/10.23917/varidika.v37i2.12151>
- Fried, S. A., & Mette, I. M. (2026). Navigating the US social and political landscape to promote equity-oriented change as an educational leader. In *Handbook of educational leadership and social justice* (pp. 1–20). Springer. https://doi.org/10.1007/978-3-031-88898-4_5-1
- Gorozidis, G., & Papaioannou, A. G. (2014). Teachers' motivation to participate in training and to implement innovations. *Teaching and Teacher Education*, 39, 1–11. <https://doi.org/10.1016/j.tate.2013.12.001>
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- Herlinawati, H., Marwa, M., Ismail, N., Junaidi, Liza, L. O., & Situmorang, D. D. B. (2024). The integration of 21st century skills in the curriculum of education. *Heliyon*, 10(15), Article e35148. <https://doi.org/10.1016/j.heliyon.2024.e35148>
- Heryahya, A., Herawati, E. S. B., Susandi, A. D., & Zulaiha, F. (2022). Analisis kesiapan guru sekolah dasar dalam implementasi Kurikulum Merdeka. *Journal of Education and Instruction (JOEAI)*, 5(2), 548–562.

<https://doi.org/10.31539/joeai.v5i2.4826>

- Hiatt, J. M. (2006). *ADKAR: A model for change in business, government, and our community* (1st ed.). Prosci Learning Center Publications.
- Huda, M. B., Faizi, A., Saputra, B. B., & Dzarna, D. (2025). Studi komparatif strategi pembelajaran inovatif: CRL, TaRL, dan DL. *Jurnal Onoma: Pendidikan, Bahasa, dan Sastra*, 11(1), 563–573. <https://doi.org/10.30605/onoma.v11i1.5236>
- Isnayanti, A. N., Putriwanti, P., Kasmawati, K., & Rahmita, R. (2025). Integrasi pembelajaran mendalam (deep learning) dalam kurikulum sekolah dasar: Tantangan dan peluang. *Cokroaminoto Journal of Primary Education*, 8(2), 911–920. <https://doi.org/10.30605/cjpe.8.2.2025.6027>
- Khofifah, E. N., Mislikhah, S., & Usriyah, L. (2025). Teacher leaders' strategies in implementing deep learning within the Merdeka Curriculum: A multi-case study in Islamic primary schools. *Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 15(2). <https://doi.org/10.18592/aladzkapgmi.v15i2.18190>
- Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.
- Kosasih, A., Hyangsewu, P., Faqihuddin, A., Fakhrudin, A., Sartika, R., Nasrudin, E., & Fikri, M. (2025). Strategi peningkatan literasi deep learning bagi guru dalam melaksanakan pembelajaran di abad 21 melalui kegiatan pelatihan. *Publikasi Pendidikan*, 15(3), 652–661. <https://doi.org/10.70713/publikan.v15i3.76656>
- Kurniawati, S. (2025). Social emotional learning on students' learning motivation to young learners. *JPGENUS: Jurnal Pendidikan Generasi Nusantara*, 3(1), 1–8. <https://doi.org/10.61787/gyzbhw61>
- Noviani, L., Setyowibowo, F., Totalia, S. A., Hindrayani, A., Wahyono, B., Sa'adah, S. R., & Oktaviani, L. K. (2025). Implementasi pembelajaran mendalam ekonomi: Pelatihan pembelajaran ekonomi bagi guru-guru ekonomi di Kabupaten Boyolali. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, 4(1), 6325–6333. <https://doi.org/10.31004/jerkin.v4i1.2791>
- Nurjanah, S., & Suryadi, A. (2025). Analysis of teachers' readiness in implementing the deep learning approach in history instruction for grade X at Sint Louis Senior High School. *JKIP: Jurnal Kajian Ilmu Pendidikan*, 6(3), 943–953. <https://doi.org/10.55583/jkip.v6i3.1497>
- Oktafiani, R., Satiyo Putri, B., & Kesumawardani, A. D. (2025). The contribution of the Islamic-integrated 9E learning cycle model to students' scientific literacy. *Indonesian Science Education Journal*, 6(3), 45–52. <https://doi.org/10.62159/isej.v6i3.2074>
- Patra, J. E., Ridwan, C. D., & Budiman, D. (2026). Model ADKAR dalam implementasi manajemen perubahan organisasi: Analisis konseptual melalui literature review naratif. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(4), 13741–13748. <https://doi.org/10.31004/riggs.v4i4.5866>
- Patton, M. Q. (2008). *Utilization-focused evaluation* (4th ed.). SAGE Publications.
- Prunuske, A., Evans-Anderson, H. J., Furniss, K., Goller, C., Mirowsky, J. E., Moore, M. E., Raut, S. A., Swamy, U., Wick, S., & Wolyniak, M. J. (2022). Using personas and the ADKAR framework to evaluate a network designed to facilitate sustained change toward active learning in the undergraduate classroom. *Discover Education*, 1(1), Article 23. <https://doi.org/10.1007/s44217-022-00023-w>
- Rochaendi, E., Wahyudi, A., Arifin, A. S., & Salim, A. (2021). Penerapan model Kirkpatrick dalam mengevaluasi pelaksanaan diklat penguatan kepala sekolah melalui daring dari perspektif pengajar. *LITERASI: Jurnal Ilmu Pendidikan*, 12(2), 59–76. [https://doi.org/10.21927/literasi.2021.12\(2\).59-76](https://doi.org/10.21927/literasi.2021.12(2).59-76)
- Roshid, M. M., & Haider, M. Z. (2024). Teaching 21st-century skills in rural secondary schools: From theory to practice. *Heliyon*, 10(9), Article e30769. <https://doi.org/10.1016/j.heliyon.2024.e30769>
- Sakti, S. A., Endraswara, S., & Rohman, A. (2024). Revitalizing local wisdom within character education through ethnopedagogy approach: A case study on a preschool in Yogyakarta. *Heliyon*, 10(10), Article e31370. <https://doi.org/10.1016/j.heliyon.2024.e31370>
- Sinha, T. (2025). Beyond good AI: The need for sound learning theories in AIED. *Technology, Knowledge and Learning*, 30(4), 2443–2457. <https://doi.org/10.1007/s10758-025-09843-9>
- Sofroniou, A., Patel, M. H., Premnath, B., & Wall, J. (2025). Advancing conceptual understanding: A meta-analysis on the impact of digital technologies in higher education mathematics. *Education Sciences*, 15(11), Article 1544. <https://doi.org/10.3390/educsci15111544>
- Suarti, S., Aswat, H., & Masri, M. (2023). Peran pembelajaran ilmu pengetahuan sosial (IPS) menuju Pelajar Pancasila pada siswa di sekolah dasar. *EDUKATIF: Jurnal Ilmu Pendidikan*, 5(6), 2527–2535. <https://doi.org/10.31004/edukatif.v5i6.5867>

- Sulistiyosari, Y., Karwur, H. M., & Sultan, H. (2022). Penerapan pembelajaran IPS berdiferensiasi pada Kurikulum Merdeka Belajar. *Harmony: Jurnal Pembelajaran IPS dan PKN*, 7(2), 66–75. <https://doi.org/10.15294/harmony.v7i2.62114>
- Susanti, D., Wahyuni, Y. S., & Anastasha, D. A. (2023). Problematika pembelajaran ilmu pengetahuan sosial di tingkat Madrasah Ibtidaiyah Negeri tahun ajaran 2022–2023. *Innovative: Journal of Social Science Research*, 3(6), 5769–5781. <https://doi.org/10.31004/innovative.v3i6.6640>
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration*. Ministry of Education.
- Watimena, J., Destiyani, G., Enus, O. E., Ismanto, B., & Wasitohadi, W. (2026). Analisis tingkat kesiapan guru dalam mengimplementasikan deep learning menggunakan kerangka kerja ADKAR di Sekolah Dasar Inpres Harapan. *Consilium: Education and Counseling Journal*, 6(1), 140–144. <https://doi.org/10.36841/consilium.v6i1.7352>
- Wijesekera, H. D., & Hameed, R. (2026). From rote learning to critical inquiry: Fostering higher order thinking skills through collaborative questioning in a rural secondary English-medium science classroom. *Thinking Skills and Creativity*, 60, Article 102093. <https://doi.org/10.1016/j.tsc.2025.102093>
- Xuan, Q. (2025). Emotional intelligence and holistic student development: An assessment of psychological and social efficacy in vocational university English education. *Frontiers in Psychology*, 16, Article 1664645. <https://doi.org/10.3389/fpsyg.2025.1664645>