



## THE ROLE OF TEACHERS IN DESIGNING CREATIVE LEARNING WITH A DEEP LEARNING APPROACH AT ELEMENTARY SCHOOL LEVEL

### PERAN GURU DALAM MERANCANG PEMBELAJARAN KREATIF DENGAN PENDEKATAN DEEP LEARNING DI KKG KECAMATAN ANGKOLA BARAT

**Rosmanila Lubis<sup>1</sup>, Nenni Hairani Harahap<sup>2</sup>, Ali Imran<sup>3</sup>, Hamka<sup>4</sup>**

<sup>1</sup>Masters student in elementary education, Syahada State Islamic University, Padangsidimpuan, Email: [rosmanilalubis13@gmail.com](mailto:rosmanilalubis13@gmail.com)

<sup>2</sup>Masters student in elementary education, Syahada State Islamic University, Padangsidimpuan, Email : [nenni.br.angin@gmail.com](mailto:nenni.br.angin@gmail.com)

<sup>3</sup>Master student in elementary education, Syahada State Islamic University, Padangsidimpuan, Email : [imranharahap1983@gmail.com](mailto:imranharahap1983@gmail.com)

<sup>4</sup>Lecturer at Syahada State Islamic University, Padangsidimpuan, Email: [hamka@uinsyahada.ac.id](mailto:hamka@uinsyahada.ac.id)

\*email Koresponden: [rosmanilalubis13@gmail.com](mailto:rosmanilalubis13@gmail.com)

DOI: <https://doi.org/10.62567/micjo.v2i4.1407>

Submitted: 08/10/25                      Article info:                      Accepted: 16/10/25                      Published: 30/10/25

#### Abstract

Learning in the 21st century requires teachers to act not only as conveyors of information but also as designers of creative learning that is relevant to students' needs. The application of a deep learning approach is believed to improve critical thinking skills, in-depth conceptual understanding, and collaborative skills, which are crucial in facing the challenges of the independent curriculum. In this context, the role of teachers in the West Angkola District Teacher Working Group (KKG) is crucial to examine, particularly in designing creative learning oriented toward developing higher-order thinking skills. This study aims to analyze the role of teachers in designing creative learning based on deep learning and explore the strategies used to integrate deep learning principles into learning planning and practice. The method used is descriptive qualitative, with data collection through observation, in-depth interviews, and documentation studies involving teachers who are members of the West Angkola District KKG. The results indicate that teachers play a strategic role in designing creative learning through the use of interactive media, developing problem-based activities, and implementing collaborative learning models. Teachers also strive to foster students' critical thinking skills through structured discussions, explorations, and reflections. The learning design implemented has been proven to not only increase student motivation but also strengthen teachers' professional competence in managing more meaningful learning. Thus, it can be concluded that the role of teachers in designing creative learning using a deep learning approach significantly contributes to the quality of the learning process in elementary schools. The results of this study are expected to serve as a reference in developing creative learning practices based on deep learning in the Teachers' Working Group (KKG) and other teacher professional development forums.



**Keywords :** role of teachers, creative learning, deep learning, KKG West Angkola

### Abstrak

Pembelajaran di abad 21 menuntut guru tidak hanya berperan sebagai penyampai informasi, tetapi juga sebagai perancang pembelajaran yang kreatif dan relevan dengan kebutuhan siswa. Penerapan pendekatan *deep learning* diyakini mampu meningkatkan keterampilan berpikir kritis, pemahaman konsep secara mendalam, serta kemampuan kolaborasi yang sangat dibutuhkan dalam menghadapi tantangan kurikulum merdeka. Dalam konteks tersebut, peran guru di Kelompok Kerja Guru (KKG) Kecamatan Angkola Barat menjadi penting untuk ditelaah, khususnya dalam merancang pembelajaran kreatif yang berorientasi pada pengembangan kemampuan berpikir tingkat tinggi. Penelitian ini bertujuan untuk menganalisis peran guru dalam merancang pembelajaran kreatif berbasis *deep learning* serta menggali strategi yang digunakan dalam mengintegrasikan prinsip *deep learning* ke dalam perencanaan dan praktik pembelajaran. Metode yang digunakan adalah deskriptif kualitatif dengan pengumpulan data melalui observasi, wawancara mendalam, dan studi dokumentasi yang melibatkan guru-guru anggota KKG Kecamatan Angkola Barat. Hasil penelitian menunjukkan bahwa guru memainkan peran strategis dalam merancang pembelajaran kreatif melalui pemanfaatan media interaktif, penyusunan aktivitas berbasis masalah, serta penerapan model pembelajaran kolaboratif. Guru juga berupaya menumbuhkan kemampuan berpikir kritis siswa melalui kegiatan diskusi, eksplorasi, dan refleksi yang terstruktur. Perancangan pembelajaran yang dilakukan terbukti tidak hanya meningkatkan motivasi belajar siswa, tetapi juga memperkuat kompetensi profesional guru dalam mengelola pembelajaran yang lebih bermakna. Dengan demikian, dapat disimpulkan bahwa peran guru dalam merancang pembelajaran kreatif dengan pendekatan *deep learning* memberikan kontribusi signifikan terhadap kualitas proses pembelajaran di sekolah dasar. Hasil penelitian ini diharapkan menjadi rujukan dalam pengembangan praktik pembelajaran kreatif berbasis *deep learning* di KKG maupun forum pengembangan profesional guru lainnya.

**Kata Kunci :** peran guru, pembelajaran kreatif, *deep learning*, KKG Angkola Barat.

## 1. INTRODUCTION

21st-century education demands students possess critical, creative, and collaborative thinking skills, requiring teachers to act as learning designers capable of addressing these challenges. According to Kovač (2023), a deep learning approach enables students to develop in-depth conceptual understanding, rather than simply memorizing information, making it more relevant to future needs. This demonstrates the crucial role of teachers in designing creative learning that fosters meaningful learning.

From a global perspective, Modrek et al (2022) emphasize that creativity in education can be fostered through learning strategies that emphasize exploration, imagination, and reflection, all of which are closely linked to the principles of deep learning. The implementation of these strategies leads students not only to understand the material but also to relate it to real-life experiences. Therefore, teachers, as learning designers, play a strategic role in integrating creative elements with a deep learning approach.

Previous research has focused largely on the application of deep learning in higher education, particularly in the fields of science and technology. For example, research by Weng et al (2022), which found that project-based learning can foster collaboration. However, this research has not examined the context of elementary education, particularly how elementary school teachers design creative, deep learning-based learning. This indicates a research gap that needs to be bridged to integrate deep learning principles at the elementary school level.



In the Indonesian context, research conducted by Zulfitria (2021) shows that teachers play a significant role in developing student creativity through innovative lesson planning. However, this research has not specifically examined how this creativity is combined with a deep learning approach within the Teachers' Working Group (KKG) forum. This gap underlies the need for research on the role of teachers in integrating these two aspects more systematically.

At the elementary school level, many teachers still tend to rely on conventional methods with a teacher-centered approach, thus providing students with little space for exploration. Jannah (2022) emphasized that teacher quality significantly influences the quality of learning, including how they adapt strategies to current developments. Therefore, it is important to examine how teachers in KKG forums are able to transform from mere curriculum implementers to creative and meaningful learning designers.

International experience also demonstrates the importance of teacher involvement in collaborative learning planning. A study by Bao et al (2023) found that teachers involved in professional communities are able to design more creative and challenging lessons because they exchange best practices. Therefore, the Teacher Working Group (KKG) forum can be a potential platform for teachers in West Angkola District to design creative, deep learning-based lessons.

Furthermore, Leijen et al (2020) emphasized that teacher reflection in the planning process plays a crucial role in integrating deep learning with student needs. This reflection can strengthen teachers' strategies in designing learning activities that are not only creative but also oriented towards developing higher-order thinking skills. This aligns with the government's efforts to promote the independent curriculum, which emphasizes competency-based learning.

Based on this description, this study aims to analyze the role of teachers in designing creative learning using a deep learning approach in the KKG in West Angkola District. This research also focuses on identifying concrete strategies used by teachers to integrate deep learning principles into lesson plans. With this understanding, it is hoped that the research results can provide theoretical and practical contributions to the development of teacher professionalism in the KKG forum and to improving the quality of learning in elementary schools.

## 2. RESEARCH METHOD

The research method used in this study was qualitative with a descriptive approach. This design was chosen because it allows researchers to explore the phenomenon of teachers' roles in designing creative, deep learning-based instruction contextually. According to Azzam et al (2023), qualitative research provides researchers with the opportunity to understand social meanings and professional practices through direct interaction with participants. This aligns with the findings of Choy et al (2022), who emphasized the effectiveness of qualitative approaches in exploring complex and contextual educational practices in the field.

After the research design was established, participants were identified using a purposive sampling technique. The participants selected were elementary school teachers in the Teachers' Working Group (KKG) in West Angkola District, based on their active involvement in KKG activities. According to Robinson (2022), purposive sampling provides researchers with the flexibility to select informants with the most relevant experience and knowledge to the research focus. Furthermore, Kim et al (2021) added that this technique allows for richer data collection and is aligned with the research objectives because participants are selected based on their direct involvement in the context being studied.

The research instruments included a semi-structured interview guide, observation sheets, and an analysis of learning documents. Alsaawi (2020) explains that combining various research instruments supports the data triangulation process, thereby increasing the validity of research results. Meanwhile, Kallio et al (2021) emphasize that semi-structured interviews provide flexibility in exploring teachers' perceptions and experiences in depth. Observation also plays a crucial role, as, according to Tewksbury (2022), this method allows researchers to directly understand participants' behavior and social



dynamics. Document analysis, such as lesson plans and teacher reflection notes, is viewed by O'Leary (2021) as a complementary source that enriches interpretations of the learning context.

The data collection process was conducted through in-depth interviews, observations of Teacher Working Group (KKG) activities, and document review. According to Noblit (2023), a variety of data collection techniques strengthens the depth of understanding of the phenomena being studied. Furthermore, Gray and Jones (2022) emphasize that repeating the data collection process across multiple occasions can increase the consistency and credibility of research findings. The use of supporting documents is also crucial because, according to Mergler et al (2021), document analysis helps interpret teacher practices more contextually and factually.

Data analysis was conducted using an interactive model, encompassing reduction, presentation, and conclusion drawing. Crespo et al (2020) emphasized that an interactive analysis model helps researchers systematically organize data based on key themes. Furthermore, Nowell et al (2022) emphasized the importance of thematic analysis in identifying meaningful patterns and generating in-depth interpretations of qualitative data. To maintain validity, Saldaña (2023) suggested the application of triangulation of sources and methods to enhance the credibility and reliability of the research results.

Through these stages, this research seeks to capture teachers' experiences holistically within their social and professional contexts. According to Braun and Clarke (2023), qualitative analysis enables researchers to uncover the deeper meaning of teachers' daily educational practices. Therefore, this research is expected to provide a comprehensive understanding of how teachers design creative, deep learning-based learning within the Teachers' Working Group (KKG) forum.

### 3. RESULTS AND DISCUSSION

The research results show that of the 250 teachers participating in the West Angkola District Teacher Working Group (KKG), the majority have a good understanding of creative learning using a deep learning approach. A total of 140 teachers (56%) were in the good category, 60 teachers (24%) in the very good category, 40 teachers (16%) in the adequate category, and only 10 teachers (4%) in the poor category. This distribution indicates a positive trend in teacher readiness, in line with the view of Darling-Hammond et al (2020), who emphasized that teacher readiness in pedagogical aspects is crucial for the quality of innovative learning.

**Table 1.**  
**Level of Teacher Understanding of the Deep Learning Concept (n=250)**

Category Understanding	Number of Teachers	Percentage
Very Good	60	24%
Good	140	56%
adequate	40	16%
Poor	10	4%

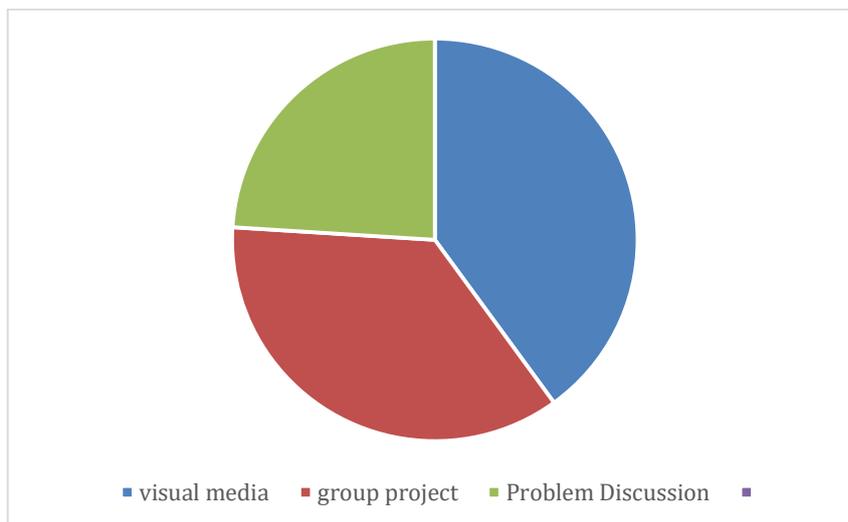
As shown in Table 1, 80% of teachers achieved good and excellent levels of understanding. This figure indicates strong potential for developing creative learning in elementary schools. This readiness forms the basis for improving the quality of the learning process, emphasizing active student engagement and the development of higher-order thinking. This aligns with Huang et al.'s (2021) findings, which state that reflective and collaborative practices can enable teachers to become agents of change in realizing meaningful learning.

Furthermore, field observations revealed a diversity of creative strategies used by teachers in the learning process. Of the total respondents, 100 teachers (40%) utilized interactive visual media, 90 teachers (36%) used group projects, and 60 teachers (24%) implemented problem-based discussions. This diversity demonstrates that teachers have the flexibility to choose approaches that best suit student characteristics and teaching materials. Consistent with Mayer (2021) perspective, the use of visual and



interactive media has been shown to help students understand abstract concepts more deeply through contextual and multisensory learning experiences.

**Figure 1.**  
**Creative Strategies Used by Teachers in Learning Design (n=250)**



The tendency of teachers to use visual media, as shown in Figure 1, reflects a preference for practical and efficient learning approaches. However, the significant proportion of teachers who implemented group projects demonstrates a deep understanding of the importance of collaboration in the learning process. This aligns with Fullan and Quinn (2019), who explain that collaborative learning can strengthen students' critical thinking, communication, and social empathy skills, all of which are essential 21st-century skills.

In addition to quantitative data, in-depth interviews with teachers revealed that the KKG forum plays a crucial role as a space for collaboration and innovation. Through regular meetings, teachers can exchange experiences, gain new inspiration, and develop reflective practices regarding the learning processes they design. These findings support Schleicher (2020) view that professional learning communities are a crucial instrument in strengthening teachers' pedagogical capacity and reducing isolation in teaching practice, particularly in elementary education contexts.

An analysis of lesson plan documents produced by teachers showed that most integrated elements of deep learning, such as the use of provocative questions, critical reflection, and project-based assessment. However, approximately 20% of lesson plans still did not consistently develop students' higher-order thinking skills. This situation indicates the need for ongoing mentoring so that teachers can optimally implement approaches that encourage students to think analytically and reflectively. According to Zhu and Liu (2020), the transition to student-centered learning requires time and continuous methodological adaptation on the part of teachers.

Furthermore, the relationship between teacher readiness and digital literacy skills is a crucial factor in the successful implementation of creative learning strategies. Teachers with higher technological competencies are more likely to effectively integrate digital media to enrich students' learning experiences. Trust and Prestridge (2021) emphasized that digital literacy not only improves learning effectiveness but also strengthens student motivation and engagement through contextual and engaging approaches.

Overall, the findings of this study illustrate that the role of teachers in designing creative learning using a deep learning approach in the Teachers' Working Group (KKG) in West Angkola District has grown significantly. Although challenges such as limited facilities and digital competency gaps persist, the positive trend in teachers' pedagogical readiness is a crucial asset for improving the quality of basic education. This aligns with Sanjaya (2019), who emphasized that the KKG forum serves as a strategic



platform for teacher professional development and encourages the development of learning innovations that adapt to the demands of the modern curriculum.

#### 4. CONCLUSION

The results of this study confirm that the role of teachers in designing creative learning using a deep learning approach in the Teachers' Working Group (KKG) in West Angkola District has shown positive development. Most teachers ranked between good and excellent in understanding concepts and integrating learning strategies that encourage active student engagement. This finding indicates that teachers are increasingly ready to implement learning models that focus on deep understanding, not just superficial mastery of material.

However, some groups of teachers still face challenges in implementing deep learning, particularly regarding the consistent use of authentic assessments and the integration of critical thinking skills. This fact indicates that teacher readiness is not evenly distributed, necessitating further mentoring. This is crucial because the quality of learning is determined not only by teachers' understanding but also by their ability to adapt learning methods to the classroom context and student needs.

The role of the KKG in this study proved to be highly significant as a collaborative forum capable of strengthening teacher competency through discussion, sharing experiences, and reflection on learning practices. The support of the learning community allows teachers to gain new inspiration while enriching their creative teaching strategies. However, the effectiveness of the KKG also depends heavily on the availability of supporting resources, including technology facilities and access to relevant information for ongoing teacher professional development.

Based on the research results, it can be concluded that the primary objective of uncovering teachers' roles in designing creative learning using a deep learning approach has been achieved. Going forward, stronger support from policymakers is needed in the form of technology-based training, development of teaching tools, and ongoing evaluation. Further research is recommended to link teacher readiness with student learning outcomes, so that the tangible contribution of deep learning-based creative learning to improving the quality of basic education can be more comprehensively demonstrated.

#### 5. REFERENCES

- Alsaawi, A. (2020). Qualitative interviewing: The art of obtaining in-depth data. *International Journal of Social Research Methodology*, 23(4), 467–479.
- Azzam, R. M., Lee, C., & Zhao, J. (2023). Exploring teachers' lived experiences through qualitative inquiry. *A Phenomenological Approach to Educational Research. International Journal of Qualitative Studies in Education*, 36(8), 1052–1068.
- Bao, X., Zhang, Y., & Liu, H. (2023). Teachers' collaborative learning communities and their impact on instructional innovation in primary education. *Teaching and Teacher Education*, 126, 104093. <https://doi.org/10.1016/j.tate.2023.104093>
- Braun, V., & Clarke, V. (2023). Reflexive thematic analysis in qualitative research: Recent developments and applications. *Qualitative Research in Psychology*, 20(2), 171–189.
- Choy, D., Tan, L. S., & Lee, M. (2022). Understanding teachers' professional practices through qualitative case study research. *Teaching and Teacher Education*, 117, 103818.
- Crespo, R., González, M., & López, A. (2020). Interactive data analysis in qualitative research: Organizing themes and patterns. *Qualitative Research Journal*, 20(5), 534–548.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2020). *Effective teacher professional development*. CA: Learning Policy Institute.
- Fullan, M., & Quinn, J. (2019). *Coherence: The right drivers in action for schools, districts, and systems*. Corwin Press.
- Gray, D., & Jones, B. (2022). Ensuring reliability in qualitative fieldwork through repeated data



- collection cycles. *Qualitative Research Journal*, 22(6), 678–692.
- Jannah, M. (2022). Pengaruh kompetensi guru terhadap kualitas pembelajaran di sekolah dasar. *Jurnal Pendidikan Dasar Indonesia*, 7(2), 101–110.
- Kallio, H., Pietilä, A., & Johnson, M. (2021). Systematic methodological review: Developing a framework for semi-structured interviews in educational research. *International Journal of Research & Method in Education*, 44(5), 457–470.
- Kim, J., Cho, S., & Park, E. (2021). Purposeful sampling in qualitative education research: Balancing depth and diversity. *International Journal of Educational Research Open*, 2, 100074.
- Leijen, Ä., Pedaste, M., & Kullas, L. (2020). Teacher reflection for deep learning: Fostering professional growth and student engagement. *Teaching and Teacher Education*, 89, 102989. <https://linkinghub.elsevier.com/retrieve/pii/S0742051X18303056>
- Mayer, R. E. (2021). Multimedia Learning. In (3rd ed.) (pp. 35–36). Cambridge University Press.
- Mergler, A., Peterson, R., & Walker, S. (2021). Document analysis as a complementary method for understanding teacher practice. *Qualitative Report*, 26(5), 1345–1357.
- Modrek, A. S., Sinno, S., & Cramer, E. (2022). Promoting creativity and imagination through inquiry-based learning in primary classrooms. *Journal of Creative Behavior*, 56(1207–1220).
- Noblit, G. (2023). Integrating multiple data sources in qualitative educational research. *International Journal of Qualitative Methods*, 22, 112.
- Nowell, L. S., Norris, J. M., & White, D. E. (2022). Thematic analysis: Advancements and applications in qualitative education research. *International Journal of Qualitative Studies in Education*, 35(9), 1123–1140.
- O’Leary, Z. (2021). Document analysis as an interpretive tool in educational research. *Qualitative Research Journal*, 21(4), 409–423.
- Robinson, O. (2022). Sampling in qualitative research: Strategic choices and trade-offs. *Qualitative Research in Psychology*, 19(3), 424–443.
- Saldaña, J. (2023). Triangulation and trustworthiness in qualitative educational research. *International Journal of Qualitative Methods*, 22, 1–15.
- Sanjaya, W. (2019). *Strategi pembelajaran berorientasi standar proses pendidikan*. Kencana.
- Schleicher, A. (2020). *Teachers and leaders in schools: OECD education policy perspectives*. OECD Publishing.
- Tewksbury, R. (2022). Observation as a data collection technique in educational settings: Balancing engagement and neutrality. *Qualitative Report*, 27(1), 88–101.
- Trust, T., & Prestridge, S. (2021). Teaching with technology during emergencies: A review of teachers’ professional learning. *Educational Technology Research and Development*, 69(1), 19–28.
- Weng, F., Chen, Y., & Wang, G. (2022). Project-based deep learning for science and technology education: Enhancing students’ collaboration and conceptual understanding. *Computers & Education*, 186, 104533.
- Zhu, C., & Liu, H. (2020). Student-centered learning in higher education: International perspectives and practices. *Higher Education Research & Development*, 39(4), 651–654.
- Zulfitri. (2021). Peran guru dalam mengembangkan kreativitas siswa melalui pembelajaran inovatif di sekolah dasar. *Jurnal Pendidikan Dan Pembelajaran*, 10(3), 211–220.