



## **ISMAIL LEARNING MODEL: ADVANCING DEEP LEARNING IN SOCIOLOGY EDUCATION FOR SENIOR HIGH SCHOOLS**

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### **Abstract**

*This study aims to develop a hypothetical learning model to strengthen the implementation of deep learning approaches in senior high schools (SMA). The research employs a qualitative methodology utilizing a 4D development model (Define, Design, Develop, Disseminate). In the Define stage, a needs analysis was conducted to identify problems and instructional requirements in sociology education. This was achieved through in-depth interviews with sociology teachers, driving teachers, school principals, and an extensive literature review. The findings informed the foundational concepts and specific needs for a deep learning-focused instructional framework. The Design stage involved developing the ISMAIL learning Model, which stands for Inovatif (Innovative), Sistematis (Systematic), Mandiri (Independent), Aktif (Active), Interaktif (Interactive), and Lestari (Sustainable). The design was guided by educational theories emphasizing critical thinking, active engagement, and sustainable learning practices. In the Develop stage, the model underwent iterative testing in controlled educational settings to refine its application and effectiveness. Feedback from educators and students was used to optimize the model for fostering deeper cognitive engagement and comprehensive skill development. Finally, the Disseminate stage focused on sharing the refined ISMAIL learning Model through academic publications, workshops, and seminars to promote its adoption and adaptability in diverse educational contexts. This methodological framework demonstrates the model's capacity to support the integration of deep learning principles in sociology education, aiming to enhance students' understanding, foster active participation, and develop critical social competencies. Future research is necessary to validate the model's effectiveness and explore its potential across varied educational settings.*

**Key words:** deep learning, learning model, senior high school, sociology.

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## INTRODUCTION

Education is one of the crucial factors that determine the quality of human resources and national development. Quality education can enhance students' competencies, creativity, and character, preparing them to face the challenges of the 21st century (Egan et al., 2017). Therefore, the Indonesian government continuously strives to improve the quality of education through various policies and programs. One such policy is replacing the 2013 curriculum with the Independent Curriculum. The Independent Curriculum is a concept that grants learning autonomy to students, teachers, and schools to develop their potentials and talents according to their needs and interests (Rahayu et al., 2022). The Independent Curriculum aims to improve students' literacy, numeracy, character, and creativity, preparing them for the challenges of the 21st century (Ardianti & Amalia, 2022).

However, its implementation faces many challenges and obstacles for teachers and schools. One of the main challenges is how teachers can plan, execute, and evaluate learning using the Independent Curriculum. Teachers must be able to design, implement, and evaluate learning that aligns with students' interests, talents, and abilities. Teachers must also utilize technology and information as relevant, current, and varied learning resources (Jannati et al., 2023). In reality, teachers in the field remain similar to those in the past, as evidenced by the official Kemendikbud website, where regional education balance data shows that the quality of teachers in Indonesia has not improved, as indicated by the average UKG score still being below the standard, at 60 in 2022, especially in Tasikmalaya, which only scored an average of 58 (npd.kemdikbud.go.id, 2023).

Many teachers currently understand "independence" as granting unlimited freedom to students without realizing that this freedom should be directed towards developing critical and creative thinking skills, not just unstructured freedom (Fitriya & Latif, 2022). This misinterpretation hinders the effective application of deep learning, which emphasizes students' ability to deeply engage with, critically analyze, and apply knowledge to solve complex real-world problems. Without structured guidance, the goals of deep learning and the Independent Curriculum cannot be effectively achieved.

Given these significant issues, an innovative learning model like the ISMAIL model is crucial. The ISMAIL learning model, which stands for Inovatif (Innovative), Sistematis (Systematic), Mandiri (Independent), Aktif (Active), Interaktif (Interactive), and Lestari (Sustainable), is explicitly designed to foster deep learning. By integrating structured innovation and promoting independence, the ISMAIL model enables students to engage critically and creatively with their learning materials while emphasizing contextual and cultural relevance. Moreover, its interactive and sustainable components ensure that students actively participate in and retain meaningful learning experiences, aligning with the core principles of deep learning.

Through this research, it is hoped that the ISMAIL model will provide concrete guidance to teachers in designing learning that not only aligns with the vision of the Independent Curriculum but also effectively incorporates the principles of deep learning. By fostering a rich, engaging, and culturally contextual educational environment, this model is expected to create a generation of students who understand, appreciate, and contribute to the preservation of Indonesia's cultural diversity while mastering essential 21st-century competencies.

## METHODOLOGY

This research uses a qualitative approach. The qualitative approach was chosen because it aligns with the effort to discover a learning model expected to be more easily understood by education practitioners. As we know, there is an essential difference between quantitative and qualitative research approaches. The target of quantitative research is phenomena, while the target of qualitative research is the general principles of these phenomena (Sugiyono, 2010, p. 407). Therefore, choosing this research approach is appropriate for the research to be conducted. This study employs a hypothetical method with 4D analysis. "The hypothetical method allows researchers to design and test innovative learning models" (Windarni, 2018, p. 70). According to Gustiani (2019) and Maulana (2019), in the hypothetical method, researchers analyze the needs and challenges faced in implementing the research object, design a learning model, and test it in an actual school environment. The analysis framework of 4D, which consists of Define, Design,

Develop, and Disseminate, guides each stage of the research (Salsabila et al., 2023).

In the Define stage, researchers conducted a comprehensive needs analysis through interviews with sociology teachers across several schools in West Java, specifically focusing on their experiences and challenges in implementing effective sociology learning. This stage helped identify critical issues and areas requiring improvement. Furthermore, observations and discussions with driving teachers and principals at SMAN 1 Sariwangi provided localized insights into the practical challenges faced in the field.

During the Design stage, the researchers formulated the ISMAIL learning model based on data gathered from the Define stage. The model incorporates innovative and contextual approaches tailored to address the specific needs identified in the Define stage. The Develop stage saw the ISMAIL learning model being further refined and tested in an actual educational setting. The model was piloted at SMAN 1 Sariwangi, involving sociology teachers and students, to evaluate its practical applicability and effectiveness. Feedback from this trial was used to adjust and enhance the model.

Finally, the Disseminate stage focused on sharing the ISMAIL learning model with a broader audience of educators through workshops, training sessions, and publications, ensuring the model's relevance and utility in various educational contexts. By combining a robust qualitative approach, real-world data collection through teacher interviews in West Java, and a successful pilot at SMAN 1 Sariwangi, this study ensures that the ISMAIL learning model is both evidence-based and practically applicable for strengthening sociology education in high schools.

## **RESULT & DISCUSSION**

### **1. Characteristics of a Sociology Learning Model to Strengthen the Implementation of Deep Learning in Senior High Schools**

Deep Learning aims to create an adaptive, relevant, and responsive education system that emphasizes critical thinking, creativity, and meaningful understanding. One of its primary challenges is developing a learning model aligned with the principles of deep learning, encouraging students to engage in higher-order thinking and develop a deeper comprehension of concepts. Based on this

research, the following characteristics are essential for an effective sociology learning model in senior high schools.

#### **a. Innovative Learning**

Innovative learning introduces new methods and approaches that address contemporary needs and challenges. Interviews with sociology teachers in West Java revealed that students tend to be more engaged when learning materials are connected to their social contexts, such as local environmental issues, regional cultures, and the impact of globalization. Within the framework of this study, the proposed learning model includes:

**Integration of Digital Technology:** Utilizing interactive media such as locally themed educational videos, virtual discussions, and simulations to bridge theoretical concepts with students' real-life experiences.

**Community-Based Social Projects:** Engaging students in analyzing real social phenomena, such as local customs or social changes in their communities, as part of their project assignments.

**Experiential Social Learning:** Employing methods that involve direct observation or participation in community activities to deepen their sociological understanding.

The trial conducted at SMAN 1 Sariwangi demonstrated that these methods not only enhanced student engagement but also enriched their perspectives on social issues.

#### **b. Systematic Learning**

Systematic learning ensures a well-structured and organized process that effectively achieves learning objectives. This model incorporates the following:

**Comprehensive Planning:** Each learning activity is meticulously designed, encompassing goals, materials, and methods tailored to the students' abilities. Teachers interviewed emphasized the importance of flexible planning to accommodate classroom dynamics.

**Clear Learning Stages:** The learning process is broken into phases, such as concept introduction, group discussions, and presentations of observational findings. This approach ensures students comprehend the material progressively and thoroughly.

**Continuous Evaluation:** Ongoing assessments provide constructive feedback to students. For instance, students are asked to reflect on their

social projects and compile reports on how sociological theories apply to real-world situations.

### **c. Independent Learning Model**

The independent learning model focuses on empowering students to take ownership of their learning processes, which aligns closely with the goals of deep learning. Based on this research, the characteristics of an independent learning model include: Freedom in Learning: Students are given the autonomy to select topics or social phenomena of personal interest, such as gender equality issues in their villages or local cultural traditions. This freedom fosters intrinsic motivation and encourages deeper engagement.

**Inquiry-Based Learning:** Students are encouraged to explore, formulate critical questions, and seek answers through observation, interviews, or group discussions. Teachers act as facilitators, guiding the inquiry process toward meaningful insights. **Development of Lifelong Learning Skills:** The model equips students with essential skills, such as time management, identifying credible sources of information, and self-reflection, which are vital for their future success.

By integrating the characteristics of innovation, systematic structuring, and independence, the sociology learning model developed through this research has proven effective in strengthening the implementation of deep learning at SMAN 1 Sariwangi. This model not only enhances students' critical and creative thinking abilities but also instills local values relevant to their daily lives.

## **2. ISMAIL Learning Model**

**The ISMAIL Learning Model: A Transformative Approach to Strengthen Deep Learning in Senior High Schools.** The ISMAIL Model (Innovative, Systematic, Independent, Active, Interactive, and Sustainable) is a strategic educational framework designed to meet the challenges of contemporary education. By integrating innovative pedagogies and sustainability principles, the ISMAIL Model offers a comprehensive and student-centered approach to strengthen the implementation of deep learning in senior high schools. This model aims to develop students' critical thinking, creativity, and active engagement while fostering a profound

understanding of sociological concepts.

### **a. Why Choose the ISMAIL Learning Model?**

Education in the era of globalization demands a learning approach that is both effective and relevant to modern needs. The ISMAIL Model is built to enhance student engagement and achievement by aligning learning activities with deep learning principles. This model promotes an adaptable framework that nurtures not only academic excellence but also personal growth, creativity, and social awareness.

### **b. Syntax of the ISMAIL Learning Model**

The ISMAIL Learning Model is designed to maximize students' potential through contextual and sustainable learning approaches. Below is the syntax, enriched with its influence on promoting deep learning principles.

#### *Innovative (Inovatif)*

**Objective:** Encourage students to think creatively and innovatively in solving social and academic problems.

**Steps:**

- a. **Brainstorming Ideas:** Students brainstorm creative solutions to social problems.
- b. **Prototyping Solutions:** Students design prototypes such as digital applications or social campaigns.
- c. **Presentation and Feedback:** Students present their innovations and receive constructive feedback.
- d. **Small-Scale Implementation:** Testing their solutions on a small scale to assess effectiveness.

**Impact:** This stage fosters higher-order thinking and the ability to synthesize knowledge with real-world applications, key components of deep learning.

#### *Systematic (Sistematis)*

**Objective:** Develop systematic thinking and structured problem-solving abilities.

**Steps:**

- a. **Task Planning:** Students create detailed work plans, guided by teachers.
- b. **Data Collection:** Students gather data using observation, interviews, and literature reviews.
- c. **Data Analysis:** Analyze findings to identify patterns and relationships.
- d. **Synthesis and Conclusion:** Present

comprehensive reports or presentations based on the analysis.

#### **Ethno-Pedagogical Integration:**

Through identifying local cultures and studying sociological concepts, the ISMAIL Model leverages students' cultural contexts to deepen their understanding. For instance: Identifying local culture through surveys and discussions. Exploring sociological concepts with group research and field studies. Utilizing media and materials to create engaging resources. Impact: This stage integrates cultural understanding and systematic exploration, essential for achieving the depth and relevance emphasized in deep learning.

#### ***Independent (Mandiri)***

Objective: Cultivate independence in learning and problem-solving.

Steps:

- a. Setting Personal Goals: Students define their learning objectives.
- b. Independent Learning: Engage in self-directed study with minimal guidance.
- c. Self-Assessment: Reflect on learning progress through journals or tools.
- d. Peer Review: Share outcomes with classmates for feedback.

Impact: By empowering students to manage their learning processes, this stage aligns with deep learning's focus on autonomy and lifelong learning skills.

#### ***Active (Aktif)***

Objective: Enhance active participation and experiential learning.

Steps:

- a. Group Discussions: Encourage collaborative exploration of topics.
- b. Practical Work and Experiments: Hands-on activities to test concepts.
- c. Role-Playing: Simulations of social roles to understand perspectives.
- d. Collaborative Projects: Integrate multiple subjects into cohesive projects.

Impact: Active involvement helps students connect abstract concepts to practical experiences, reinforcing the core principles of deep learning.

#### ***Interactive (Interaktif)***

Objective: Foster collaboration and meaningful interactions in learning.

Steps:

- a. Technology Integration: Use e-learning platforms and interactive applications.
  - b. Online Discussion Forums: Facilitate discussions on key topics.
  - c. Interactive Simulations: Model social situations using advanced tools.
  - d. Q&A Sessions: Teachers engage students through dynamic questioning.
- Impact: Interactive environments encourage knowledge construction through dialogue and shared understanding, vital for deep learning.

#### ***Sustainable (Lestari)***

Objective: Embed sustainability principles to enhance social and environmental consciousness.

Steps:

- a. Environmental Case Studies: Analyze and propose solutions for sustainability challenges.
- b. Sustainable Projects: Design and implement eco-friendly initiatives.
- c. Ethical Reflection: Reflect on the broader impact of actions.
- d. Community Collaboration: Partner with local communities for hands-on projects.

Impact: Promoting sustainability aligns with deep learning's emphasis on real-world relevance and ethical responsibility.

The ISMAIL Learning Model integrates innovation, systematic planning, independence, active participation, interactivity, and sustainability to create a holistic educational framework. By leveraging local culture and fostering higher-order thinking, the ISMAIL Model supports the goals of deep learning in sociology education. It nurtures critical thinking, creativity, and active engagement, ensuring students are prepared to face the complexities of a rapidly changing world.

## **CONCLUSION**

In this chapter, the researcher presents the conclusions regarding the research problems addressed in this study. The research has identified the essential characteristics of an effective instructional model to strengthen the implementation of Deep Learning principles in education, culminating in the formulation of the ISMAIL model. This model comprises six main components: Innovative, Systematic, Independent, Active, Interactive, and Sustainable. Each component is pivotal in fostering a holistic and effective learning

environment.

The Innovative aspect of the ISMAIL model introduces creative methods and materials that stimulate students' curiosity and engagement, aligning with the core of Deep Learning, which emphasizes meaningful understanding and application of knowledge. The Systematic component ensures a clear and organized structure in the learning process, providing students with a framework to delve deeper into concepts and make connections between ideas, a fundamental principle of Deep Learning. The Independent aspect encourages students to take ownership of their learning journey, fostering initiative and self-regulation, which are critical for mastering complex and layered knowledge.

The Active component emphasizes student participation through discussions, projects, and collaborative activities, ensuring that students are not passive recipients of information but actively construct their understanding. The Interactive component enhances dynamic interactions between students and teachers, as well as peer-to-peer collaborations, supporting the dialogic process that is central to Deep Learning environments. Lastly, the Sustainable aspect integrates local cultural values and environmental awareness, ensuring that learning remains contextually relevant and promotes the long-term application of knowledge in addressing real-world issues.

The discovery of the ISMAIL Instructional Model offers a comprehensive framework to enhance the implementation of Deep Learning principles, particularly in sociology education at the senior high school level. By fostering critical thinking, problem-solving skills, and deep understanding, this model provides an innovative approach to overcoming challenges in creating meaningful and transformative educational experiences. Furthermore, it promotes the development of students' character and social skills through contextual and sustainable learning approaches.

The study recommends that teachers adopt the ISMAIL Instructional Model to align their practices with Deep Learning principles, thereby enriching the teaching and learning process. School principals should support this by encouraging innovation and creativity within their schools' instructional approaches. Active student engagement and independence

in applying knowledge to real-life contexts are essential for cultivating lifelong learners.

Additionally, the study highlights the need for educational programs to encourage ongoing research and development of instructional models, including ISMAIL, to evaluate their adaptability and effectiveness across various educational settings. Future researchers are encouraged to conduct further studies to validate the efficacy of the ISMAIL Instructional Model in fostering Deep Learning. Involving diverse samples, exploring additional variables, and utilizing a variety of research methodologies will contribute to obtaining more comprehensive insights and advancing the application of this model in diverse learning contexts.

## REFERENCE LIST

- Al-Samarraie, H., & Saeed, N. (2018). A systematic review of cloud computing tools for collaborative learning: Opportunities and challenges to the blended-learning environment. *Computers & Education*, 124, 77-91. <https://doi.org/10.1016/j.compedu.2018.05.016>
- Antin, A., & Kiflee, D. N. B. A. (2018). Pengaruh beban tugas dan motivasi terhadap keefisienan kerja guru sekolah menengah di Sabah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 3(2), 77-84. <https://doi.org/10.47405/mjssh.v3i2.81>
- Ardianti, Y., & Amalia, N. (2022). Kurikulum Merdeka: Pemaknaan Merdeka dalam Perencanaan Pembelajaran di Sekolah Dasar. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 6(3).
- Effendi, D., & Wahidy, A. (2019, July). Pemanfaatan teknologi dalam proses pembelajaran menuju pembelajaran abad 21. In *Prosiding Seminar Nasional Program Pascasarjana Universitas PGRI Palembang*. <https://jurnal.univpgripalembang.ac.id/index.php/Prosidingpps/article/view/2977>
- Egan, A., Maguire, R., Christophers, L., & Rooney, B. (2017). Developing creativity in higher education for 21st century learners: A protocol for a scoping review. *International Journal of educational research*, 82, 21-27.
- Fahrozy, F. P. N., Iskandar, S., Abidin, Y., & Sari,

- M. Z. (2022). Upaya Pembelajaran Abad 19-20 dan Pembelajaran Abad 21 di Indonesia. *Jurnal Basicedu*, 6 (2), 3093–3101. <https://doi.org/10/gqj8cs>
- Fajri, K., & Taufiqurrahman, T. (2017). Pengembangan Buku Ajar Menggunakan Model 4D dalam Peningkatan Keberhasilan Pembelajaran Pendidikan Agama Islam. *Jurnal Pendidikan Islam Indonesia*, 2(1), 1-15.
- Fitriani, D., Nurlaela, N., & Sudarwadi, D. (2019). Lingkungan Kerja Fisik, Lingkungan Kerja Non Fisik, Dan Disiplin Kerja Terhadap Kinerja Pegawai Guru Smk Negeri 1 Manokwari. *Cakrawala Management Business Journal*, 1(1), 119-133. <https://doi.org/10.30862/cm-bj.v1i1.8>
- Fitriya, Y., & Latif, A. (2022, December). Miskonsepsi guru terhadap implementasi proyek penguatan profil pelajar pancasila di sekolah dasar. In *Seminar Nasional Pendidikan Sultan Agung IV* (Vol. 4, No. 1).
- Haryani, S., Prasetya, A. T., & Wardani, S. (2011). Upaya Meningkatkan Keterampilan Guru-Guru Kimia Dalam Menerapkan Model Pembelajaran Berbasis Masalah Melalui Kegiatan MGMP. *Jurnal Abdimas*, 15(2), 93–99. <https://doi.org/10.15294/abdimas.v15i2.9900>
- Ismail & Nur. (2023) Constructing Online Work-Based Learning Placements Approaches to Pedagogy, Design, Planning and Implementation, *Journal of Latinos and Education*, DOI: 10.1080/15348431.2023.2256874
- Jannati, P., Ramadhan, F. A., & Rohimawan, M. A. (2023). Peran Guru penggerak dalam implementasi kurikulum merdeka di sekolah dasar. *Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah*, 7(1), 330-345.
- John W. Creswell. (2013). *Research Desain Pendekatan Kualitatif, Kuantitatif dan Mixed*. Jakarta: Pustaka Pelajar.
- Magdalena, dkk. (2024). Konsep Model Pembelajaran. *Sindoro: Cendikia Pendidikan*, 3(1), 1-10. DOI: <https://doi.org/10.9644/sindoro.v3i1.2027>
- Maulana F, T. (2019). Pengaruh penggunaan bahan ajar komik berbasis masalah terhadap kemampuan pemecahan masalah dan kemandirian belajar matematis murid: Penelitian RnD dan eksperimen pada murid kelas VIII MTsN 4 Sukabumi (Doctoral dissertation, UIN Sunan Gunung Djati Bandung).
- Muhbar, F., & Rochmawati, D. H. (2019). Hubungan Antara Tingkat Stres Dengan Beban Kerja Guru Di Sekolah Luar Biasa. *Jurnal keperawatan jiwa*, 5(2), 82-86. DOI: <https://doi.org/10.26714/jkj.5.2.2017.82-86>
- Ningrum, A. (2015). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: Priyatna, M. (2017). Pendidikan karakter berbasis kearifan lokal. *Edukasi Islami: Jurnal Pendidikan Islam*, 5(10). <http://dx.doi.org/10.30868/ei.v12i03.4296>
- Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini, P. (2022). Implementasi Kurikulum Merdeka Belajar di Sekolah Penggerak. *Jurnal basicedu*, 6(4), 6313-6319. DOI: 10.31004/basicedu.v6i4.3237
- Ramadhan, Z. H. (2019). Etnopedagogi di SD Negeri 111 Kota Pekanbaru. *Elementary School Journal Pgsd Fip Unimed*, 9(3), 190-199. DOI: <https://doi.org/10.24114/esjpsd.v9i3.16354>
- Ramdani, E. (2018). Model pembelajaran kontekstual berbasis kearifan lokal sebagai penguatan pendidikan karakter. *JUPIIS: Jurnal Pendidikan Ilmu-Ilmu Sosial*, 10(1), 1-10. DOI: <https://doi.org/10.24114/jupiis.v10i1.8264>
- Sennen, E. (2018). Mengenal Administrasi Guru di Sekolah. *JIPD (Jurnal Inovasi Pendidikan Dasar)*, 2(1), 72-76. <https://jurnal.unikastpaulus.ac.id/index.php/jipd/article/view/257>
- Setyawan, R. I., & Purwanto, A. (2019). Model Pembelajaran Berbasis Proyek (Project Based Learning) Untuk Meningkatkan Hasil Belajar. *Jurnal Dikdas Bantara*, 2(2). <https://doi.org/10.32585/jdb.v2i2.372>
- Siahaan, C. D., & Pramusinto, H. (2018). Pengaruh Disiplin Belajar, lingkungan sekolah, dan fasilitas belajar terhadap hasil belajar. *Economic Education Analysis Journal*, 7(1), 279-285. DOI: <https://journal.unnes.ac.id/sju/eeaj/article/view/22879>
- Sugiyono. (2017). *Metode Penelitian Kualitatif*. Alfabeta: Jakarta.

- Oktavianti, I., & Ratnasari, Y. (2018). Etnopedagogi dalam pembelajaran di sekolah dasar melalui media berbasis kearifan lokal. *Refleksi Edukatika: Jurnal Ilmiah Kependidikan*, 8(2). DOI: <https://doi.org/10.24176/re.v8i2.2353>
- Putri, A. D. K., & Imaniyati, N. (2017). Pengembangan profesi guru dalam meningkatkan kinerja guru (Professional development of teachers in improving the performance of teacher). *Jurnal Pendidikan Manajemen Perkantoran*, 2(2), 93-101. Doi: <http://ejournal.upi.edu/index.php/jpmanper/article/view/00000>
- Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini, P. (2022). Implementasi Kurikulum Merdeka Belajar di Sekolah Penggerak. *Jurnal basicedu*, 6(4), 6313-6319.
- Widati, T. (2018). Pengaruh Lingkungan Fisik Terhadap Performa Belajar Murid. *Jurnal Perspektif Arsitektur* | Volume, 13(1). <https://doi.org/10.36873/jpa.v13i01.1992>
- Wijayanti, S., & Sungkono, J. (2017). Pengembangan perangkat pembelajaran mengacu model creative problem solving berbasis somatic, auditory, visualization, intellectually. *Al-Jabar: Jurnal Pendidikan Matematika*, 8(2), 101-110. <https://doi.org/10.24042/ajpm.v8i2.9656>
- Wibowo, H. (2020). Pengantar Teori-teori belajar dan Model-model pembelajaran. Puri cipta media
- Widayati, N. S., & Muaddab, H. (2012). 29 Model-Model Pembelajaran Inovatif. ElHaf Publishing Buku
- Witoko, R., & Wardono, W. (2019, February). Analisis Model Pembelajaran Open-Ended Learning (OEL) Dengan Assessment for Learning (AfL) Ditinjau Dari Kreativitas Belajar Matematika. In *PRISMA, Prosiding Seminar Nasional Matematika* (Vol. 2, pp. 748-753). <https://journal.unnes.ac.id/sju/index.php/prisma/> Othman, A., & Gloaguen, R. (2013). *River Courses Affected by Landslides and Implications for Hazard Assessment: A High Resolution Remote Sensing Case Study in NE Iraq-W Iran. Remote Sensing*, 5(3), 1024-1044.