

# Teacher Strategies in Realizing Teacher Pedagogical Competence in High School

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#### ABSTRACT

**Purpose of the study:** The aim of this research is to find out teacher strategies in realizing teacher pedagogical competence in high school.

**Methodology:** This research is included in the type of descriptive qualitative research with a phenomenological approach. Data collection comes from interviews and observations. Interviews were conducted with six informants, consisting of two history subject teachers and two sociology subject teachers. The other informants were one class X student and one class XI student who still received instruction from the four teachers.

**Main Findings:** The results of the research show: (1) The meaning of pedagogical competence for teachers in high school (2) Teacher strategies in realizing teacher pedagogical competence in high school are (a) the approach taken by teachers towards students, (b) teacher strategies are based on the approach taken by teachers towards students . Erving Goffman's dramaturgical theory provides an overview of the daily lives of individuals that occur on a stage. In the show there are two parts, namely the front stage which consists of setting, appearance and attitude.

**Novelty/Originality of this study:** The research that is currently being carried out is updated with different approaches from the four high school teachers, resulting in different strategies. An approach can be likened to a map of the geographical conditions of an area, while a strategy is a plan for developing the potential of that area. So, to develop student potential, a teacher must be able to understand student needs in the teaching and learning process.

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# 1. INTRODUCTION

Schools are formal educational institutions whose task is to educate students to become complete humans [1]–[3]. Schools are formed with the aim of creating a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, and skills needed by themselves, society, nation and state [4]–[6]. In schools there is an educator/teacher whose job is to shape the character and morals of students so that they are able to develop their potential and become human beings who are able to live in society [7]–[9].

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Teachers are tasked with forming students' morals and character. The teacher's job is not just to convey knowledge in front of the class, but teachers are professional educators who must be able to educate, guide and direct their students in accordance with educational goals [10], [11].

Teachers must be professional and have complete pedagogical competence. Increasing teacher pedagogical competence will make learning activities dynamic, liked by students, high absorption capacity, and increased student learning concentration [10], [12], [13]. Teacher competence includes pedagogical competence, personality competence, social competence and professional competence. Pedagogical competence is the ability to manage student learning, what is meant by personality competence is the ability to have a strong personality, have noble character, wisdom and authority and be a role model for students, what is meant by professional competence is the ability to master subject matter broadly and deeply, what is meant by competence Social is the teacher's ability to communicate and interact effectively and efficiently with students, fellow teachers, parents/guardians of students, and the surrounding community.

It is important for a teacher to fulfill these four competencies, so that the quality of education increases [14]–[16]. But what is no less important in education are students. Education must place students as educational subjects, not educational objects. Students are intelligent human beings and have their own thoughts, while the teacher's position here is only to facilitate and guide [17].

This research is in line with research conducted by Sulastri et al, [18] where the results of this research are the efforts made by school principals and teachers in developing professional competence by participating in training, upgrading training, workshops, and teacher working groups, and the obstacles faced including lack of mastery of science and technology, lack of teacher creativity, teachers who teach not in their field. The difference between this research and previous research lies in the school level. The novelty of this research is the different approaches of the four high school teachers, resulting in different strategies. An approach can be thought of as a map of the geographical conditions of a region, while a strategy is a plan for developing the potential of that region. So, to develop student potential, a teacher must be able to understand student needs in the teaching and learning process.

The urgency of conducting this research is that it can contribute to the development of teacher professionalism. Teachers who continuously develop their pedagogical competence can have a positive impact on overall educational development. Thus, research on teacher strategies in realizing teacher pedagogical competence in high school is very important to create an optimal learning environment and make a positive contribution to student development and the education system as a whole. So the aim of this research is to find out teacher strategies in realizing teacher pedagogical competence in high school.

# 2. RESEARCH METHOD

# 2.1 Research Type

This research uses a phenomenological approach. Research from a phenomenological perspective seeks to understand the meaning of events and their relationship to ordinary people in certain situations. The type of research that researchers use is descriptive qualitative. Qualitative descriptive investigations focus on solving problems that exist today [19].

## 2.2 Research Sample

The sample in this study consisted of a good number of teachers, namely two history subject teachers and two sociology subject teachers, one class X student and one class XI student who still received teaching from these four teachers.

#### 2.3 Data Collection Technique

This research uses the technique of taking informants using purposive sampling. Data collection comes from interviews and observations. Interviews were conducted with six informants consisting of two history subject teachers and two sociology subject teachers. The other informants were one class X student and one class XI student who still received instruction from the four teachers.

### 2.4 Data Analysis technique

The data analysis technique uses interactive analysis which consists of data reduction, data presentation, drawing data conclusions (data verification) [20]–[23]. Each step plays an important role in the process of understanding and gaining insights from data. Data reduction is the stage of processing and simplifying a data set with the aim of making the data set more manageable for analysis without losing important information. Once the data has been reduced and prepared, it needs to be presented in a way that is easy to understand and facilitates analysis. The final step is drawing conclusions (data verification) where it is important to verify and validate the conclusions by analyzing the findings with previous research.

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#### 3. RESULTS AND DISCUSSION

#### 3.1. The Meaning of Pedagogical Competency for Teachers

Schools as formal educational institutions are a forum for students to develop character which will then be applied in the community. Schools as educational institutions must be able to provide education that can shape students' character and develop their potential in accordance with students' talents and interests.

The main goal of education is to develop the potential of students so that they have the skills needed by themselves, society, or the nation and state. This goal can be realized if the components contained in education are willing to work together to make it happen. Teachers and students are the most important components in education. Students are the main focus and goal of education itself, while the main task of education is to be able to produce students who have religious spiritual strength, self-control, personality, intelligence, noble morals, and the skills needed by themselves, society, nation and state. To realize this goal, teachers are needed who are able to create an active learning process so that students are able to develop their potential. Teachers have an important role in the learning process, because a teacher's job is not only to convey the knowledge they have to students, but a teacher must be able to educate students so that they are able to develop their potential and shape students' character according to national education goals.

Apart from that, in carrying out his professional duties, a teacher must uphold the principles of professionalism, namely a) having talent, interest, calling and idealism, b) having a commitment to improving the quality of education, security, piety and noble morals, c) having academic qualifications and educational background in accordance with the field of assignment, d) has the required competencies according to the area of assignment, and e) has responsibility for the implementation of professional duties.

The results of the initial research carried out by researchers carried out observations in the classroom. It can be seen that each teacher has a different approach to their students. Students who feel comfortable with the teacher's way of teaching and approach will appear more enthusiastic in participating in the lesson. Indirectly, the approach taken by teachers towards students has a big influence on students' understanding of subject matter. For example, teachers who teach history subjects. History is a subject that requires teachers to tell a lot of stories, this is also felt by history teachers. Therefore, he inserted several jokes when explaining so that students would not get bored and remain enthusiastic about listening to the material. After conducting four classroom observations and one interview, the researcher also learned about the approaches taken by the four resource persons towards students. The approach taken by each teacher will determine the teacher's strategy in realizing pedagogical competence in the classroom. Researchers conducted interviews with four teachers at high school. The first teacher teaches Sociology subjects in class XI Social Sciences, is a civil servant and has obtained teacher certification. The third teacher teaches Sociology class X Social Sciences, is a civil servant and has not yet received teacher certification. The fourth teacher teaches Sociology class XI social sciences, is a civil servant and has not yet received teacher certification.

Teaching is a profession that is directly related to education. The teaching profession requires teachers to interact directly with students, where students are members of society who try to develop their potential through the learning process. Every teacher has a different perception of their profession. From observations and interviews conducted with four high school teachers, researchers found that the four teachers differed in their interpretation of teacher pedagogical competence. According to the first teacher, the indication of a teacher who has mastered pedagogical competence is, *First, he must have insight and foundation in the field of education. Second, understanding of students. Third, being able to implement the learning process both inside and outside the classroom so that students are able to achieve the required competencies.* 

In observations carried out by researchers four times in class, it was seen that the first teacher always innovated using new media and learning methods. However, in his approach to students he lacked mastery. In explaining too, the first teacher was not in depth so that the students did not understand the lesson material. This is in line with what BG said, who is a class XI student, BG said that, "The first teacher prefers lectures, in terms of presentation, 60% lectures and 40% use other methods. Apart from that, the first teacher only used one-way interaction."

Meanwhile, according to Teacher 4, the indication of a teacher who has mastered pedagogical competence is, "Teachers who work according to their profession, that profession is in accordance with their expertise. If I were a teacher in the field of history by profession, I would teach the knowledge I have mainly about history and develop it in everyday life. "I gave it to students to develop and disseminate until the children finally understand history and can emulate the figures in the historical material."

During classroom observations, the researcher found that teacher 4 told a lot of stories when teaching in class. Even so, it seemed that the students were quite enthusiastic in listening to the material he presented. Maybe this is because the interaction that Teacher 4 has with students can go both ways. Apart from that, it can also be seen that Teacher 4 is able to understand the psychology of each of his students.

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# 3.2. Teacher Strategies in Realizing Teacher Pedagogical Competence

The strategy referred to here is the effort made by the teacher to realize pedagogical competence in the classroom by using an approach that is appropriate to student psychology. Every teacher has their own strategy for realizing these pedagogical competencies, including high school teachers. According to Teacher 1: "I have to have a good way of teaching, I have to have a good understanding of students, curriculum development, syllabus, lesson planning, use of technology and carrying out correct evaluations. Of course, we have to master the science we teach. If I were a Sociology teacher, I would have to know as much as possible about the subject of sociology."

Teacher 4 also shared his experience, he said that: "In the past, I took part in training, took part in training, took part in seminars until I finally got certification. This is an effort I made to improve my professionalism as a certified teacher. In my opinion, I have a lot of experience and insight that can later be applied in the classroom. The problem is that as time goes by, the methods available become more diverse. So, like it or not, teachers must be able to follow these developments."

Apart from Teacher 4, Teacher 2 also shared his experiences and efforts that had been made to improve pedagogical competence, he said that: "My efforts in realizing pedagogical competence are many, bro, I took part in training, seminars, training until finally I made a portfolio to get teacher certification. "That way, I have gained a lot of experience, so if I apply it in the classroom, it must have a good impact on my students."

Teacher 3 also has an opinion regarding the efforts he has made to improve pedagogical competence, according to him: "For me, first a teacher must have sincerity, totality in carrying out his work, and especially dedication. What we now know is that if you are not yet a civil servant, it is very difficult, but if we have dedication, have motivation, have aspirations in this field, then professionalism can automatically be realized. Maybe if you look at the demands and rights we get, they don't match, but this has become our way of life."

From interviews and observations conducted by researchers, it can be concluded that the strategies used by the four teachers in realizing pedagogical competence were different. These different strategies are because the four teachers interpret pedagogical competence differently. The interpretation of the different pedagogical competencies of the four teachers is implemented in the form of approaches to students. This approach influences students' understanding of the subject matter taught by the four teachers. This approach is then formulated in the form of teacher strategies to realize pedagogical competence during teaching and learning activities.

Based on the results of observations and interviews with four high school teachers, researchers obtained data that each teacher has a different meaning regarding teacher pedagogical competence. The meaning of different teachers' pedagogical competencies is then applied in teaching and learning activities. This meaning is applied through the approach each teacher takes towards students. Then, from the approach taken, the teacher is able to design strategies to realize teacher pedagogical competence. As a result of observations and interviews with the four teachers, the researchers obtained results regarding the meaning of pedagogical competence for teachers, the approach taken based on this meaning, and the strategies created based on this approach.

#### 3.3. The Class as a Teacher's Front Stage Construction in Erving Goffman's Dramaturgical Theory

In a performance, an actor needs a platform and attributes. This container can be a stage that the actor uses to play a role. Meanwhile, attributes can be in the form of equipment or items that support the actor in deepening his role. In other words, it can be explained that when a person communicates, he will manage himself to appear as he wishes, and vice versa, other people who are his communication partners will do the same thing. That's why, everyone will perform for other people, so that he becomes an actor who deliberately shows his appearance in order to make a certain impression as he hopes.

Just like actors, teachers will build an impression and image of themselves when they are in front of the class. The class becomes a front stage for the teacher. In front of the class the teacher must be able to carry out his role as a teacher. In supporting his role as a teacher, he also needs attributes that support his role when in front of the class. These attributes can include official clothes and batik, loafers, and course books. The items worn by the teacher will help the teacher build an image of himself.

Teachers will try to build their own image when interacting with students. The teacher will think about how to build his image from his appearance, behavior, and the way he speaks when in front of the class. A teacher will try to build his or her image as a teacher who is a role model for his students. So that in interacting with students, other teachers, and the community he will present himself like a teacher in general. This is in line with Goffman's statement that the personal front is divided into two, namely appearance and attitude. Performance includes items that tell us the social status of the performer. Attitude tells the audience what kind of role the performer is expected to play in the situation (e.g., use of physical habits, mannerisms). A rough style and a soft style indicate very different types of showman. In general, we expect appearance and attitude to be consistent [24].

In the classroom, teachers also want to show their status as a teacher when dealing with their students. For this reason, teachers need items that support their status as teachers, such as official clothes or batik, loafers, belts and subject books. These attributes are attributes commonly worn by teachers in general. So these attributes are a reflection that he works as a teacher. Apart from that, so that the role carried out is consistent, attitude is another determinant in reflecting the character that a teacher must have. In general, teachers are identified with a

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friendly, polite and well-spoken attitude. It is the obligation of a teacher to have this attitude if he chooses the profession as a teacher. However, in the teacher's efforts to build this impression on a stage (class), it is possible that the teacher will encounter various kinds of obstacles that can interfere with his role.

From the results of interviews and observations with four high school teachers and two high school students, the researcher obtained the results that the meaning of teacher pedagogical competence, approaches to students, and strategies used to realize these competencies, each teacher created a different impression in front of his students. For example, Teacher 1, he creates the impression of a teacher who understands technology and learning media. So when teaching in front of the class, he always uses modern media such as PowerPoint, interesting pictures and short films. This is to create the impression that he is able to use technology and learning media well. Likewise with Teacher 4, he created the impression that history subjects and history teachers are not always synonymous with boring things. Therefore, Teacher 4 tries to understand the psychology of his students and gives the impression that history teachers can be friendly and funny when teaching. So, he often inserts jokes in his teaching so that students don't get bored listening to stories about history. Meanwhile, Teacher 3, he created the impression of being a friendly teacher, easy to mingle with, willing to accept criticism. This is what makes Teacher 3 always try to create fun learning using language that is easy for students to understand. He also tries to create two-way communication so that students feel comfortable in class. It will also make students feel that their opinions are valued by both the teacher and their friends. Teacher 2 did something that was not much different, the impression he wanted to build was that of a teacher who taught according to the procedures and goals he wanted to achieve. In learning, he wants to create the impression that he is a democratic teacher, by using methods that make his students more active in learning [3]. This is what Goffman calls the front stage. The foreground is the part of the play that generally functions in somewhat standardized and general ways to define the situation for the people observing the play. In the front stage, Goffman further differentiates the front-setting (setting front).

Similar to Goffman's thoughts, the four high school teachers wanted to build an image of themselves like a teacher when they were in the environment where they carried out their activities as a teacher, namely the classroom. The classroom becomes the front stage for a teacher. When the four teachers are in front of the class and interact with students, the teacher will build an image of himself as a teacher in general. He will carry out his duties as a teacher, act like a teacher, speak like a teacher, and look like a teacher.

The front stage construction created by the four teachers is different, this depends on how the teacher wants to build an impression in front of his students. However, the impression created in front of the class is not necessarily in line with what happens outside the classroom. Thus, to get the attention of students with the aim of making students like the subjects taught, teachers need several efforts or strategies. Through the appearance and attitude displayed by the four teachers in front of the class, they aim to be recognized as teachers in general. Just like what Teacher 1 did, he used different learning technologies, so that he gave the impression that he was a teacher who was able to keep up with the times. Likewise with Teacher 4, who wanted to create the impression that history lessons were not boring, he inserted several jokes when teaching. Teacher 3 also did something different, to create the impression of a teacher who respects students' opinions and is easy to communicate with, he tries to understand his students' mindset. So, from the four informants above, the researcher concluded that the classroom is a forum or front stage that teachers use to build their self-image. This self-image can be the impression that the teacher wants to convey to his students. The approaches taken by the four teachers towards their students influenced the students' impressions of the teachers.

#### 3.4. Teacher Strategy as the Teacher's Back Stage Reality in Erving Goffman's Dramaturgical Theory

In an effort to make an impression on the front, sometimes actors need a strategy to carry out their play. A certain strategy is needed to be able to construct the front part to suit the actor's wishes. Goffman also discusses the back stage where facts suppressed on the front stage or various types of informal actions can be seen. A back stage is usually adjacent to the front stage, but also disconnected from it. The performers hope in a reliable way that no members of the front stage audience appear on the back stage. Next, they perform various types of impression management to ensure that. A play is likely to be difficult to perform if the actors are unable to prevent the audience from entering the back of the stage. There is also a third part, the residual realm, the outer part, which is neither the front nor the back [24].

This is the same as what the four high school teachers did. The four teachers have strategies for building front stage construction and building their impressions on students. This strategy is built through several processes, starting from the teacher's understanding of pedagogical competence, the teacher's approach to students, and finally the teacher's strategy for realizing pedagogical competence. This is like what Teacher 1 did, he interpreted pedagogical competence based on the final results obtained by students in the learning process. From this meaning, Teacher 1 uses a conceptual approach. Furthermore, this approach is used as a reference for creating strategies to realize pedagogical competence. The strategy used is to explain the subject matter with a concept to make it easier for students to understand the subject matter. This concept is created in such a way that students are able to understand the material and this concept is used as a framework for students' thinking in understanding the material.

Likewise with Teacher 4, in interpreting pedagogical competence he focused more on the psychology of his students. So, he focuses more on the student's process in understanding the lesson material. From this meaning, the approach used is a discovery approach. The strategy he uses is to give students the opportunity to understand the material by discovering facts and concepts about a scientific phenomenon for themselves. Another informant, namely Teacher 3, his meaning of pedagogical competence is that communication between students and teachers goes well, where communication that goes well will make students feel comfortable in understanding the lessons being taught. The approach used is an environmental approach. The strategy used is to provide students with an understanding of the material with material that is closely related to everyday life. Finally, Teacher 2 uses a learning objectives approach, the strategy used is to create learning procedures that have been prepared systematically based on the learning implementation plan that has been created so that teaching and learning activities run in accordance with the learning objectives. The approach taken by Teacher 4 is more oriented towards the final goal to be achieved in learning. The method used to achieve this goal can be a task method or demonstration method. From this strategy, the four teachers wanted to show their social status as teachers in front of their students. This was done so that the four teachers received recognition from their students. So, if the front stage construction is the impression the teacher displays in front of the class, then the back stage reality is the teacher's strategy in building that impression.

The results of research Handayani and Purnami, show that the use of strategies by school principals in developing teachers' professional competence in realizing the quality of education is very good because of the four coaching strategies the principal implemented three coaching strategies with a score of 85. The strategies that have been implemented include 1). The coaching strategy as a system is coaching time discipline and coaching classroom action research. 2). Coaching strategy through supervision, namely coaching teacher learning tools 3). The coaching strategy is through training, namely seminars [25]. This is updated with current research with different approaches from the four high school teachers, resulting in different strategies. An approach can be likened to a map of the geographical conditions of an area, while a strategy is a plan for developing the potential of that area. So, to develop student potential, a teacher must be able to understand student needs in the teaching and learning process.

This research is in line with research conducted by Ilyas [26] which states that quality education really depends on quality teachers, where quality teachers are teachers who have the personality requirements and technical teaching abilities. The implication of this research is that the findings from this research can provide a basis for improving education policies at the national or regional level. This information can be used to adjust educational policies to support the development of teachers' pedagogical competencies.

### 4. CONCLUSION

Based on the results of observations and research conducted by researchers, it can be identified that teachers' strategies for achieving pedagogical competence applied in teaching and learning activities originate from the teacher's meaning of pedagogical competence which is then implemented in the approach to students. The approaches used by teachers include the concept approach, discovery approach, environmental approach, and learning objectives approach. This approach is the teacher's interpretation of understanding pedagogical competence. The meaning of pedagogical competency for the four teachers depends on the teacher's point of view in understanding a pedagogical competency and applying it to students with an approach that is appropriate to the student's psychology. This approach is then formulated in the form of a strategy to realize these pedagogical competencies. Researchers obtained data that the four teachers had different approaches to their students. This approach is the result of the four teachers interpreting teacher pedagogical competence. The different approaches of the four high school teachers resulted in different strategies. An approach can be likened to a map of the geographical conditions of an area, while a strategy is a plan for developing the potential of that area. So, to develop student potential, a teacher must be able to understand student needs in the teaching and learning process. The recommendation from this research is that it is hoped that future research will further examine internal factors (motivation, attitudes, knowledge) and external factors (institutional support, educational policies) that influence the development of teacher pedagogical competence in high school.

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#### REFERENCES

- [1] M. M. Matondang, E. F. Setiya Rini, N. D. Putri, and F. Yolvianysah, "Uji Perbandingan Motivasi Belaajar Siswa Kelas XI MIPA 2 dan XII MIPA 2 di SMA Negeri 1 Muaro Jambi," *J. Sains dan Pendidik. Fis.*, vol. 16, no. 03, pp. 218–227, 2021, doi: https://doi.org/10.35580/jspf.v16i3.15553.
- S. Halimah, "Upaya Guru dalam Pembentukan Akhlak Anak di Raudlotul Athfal Baipas Roudlotul Jannah Kota Malang," J. Dewantara, vol. 1, no. 6, pp. 1–6, 2019.

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- [3] F. P. Sinaga, Jurhana, Yusrita, and M. Hidayat, "Analisis penggunaan metode mengajar (metode demonstrasi, metode eksperimen, metode inquiry, dan metode discovery di SMA Negeri 11 Kota Jambi)," *Relativ. J. Ris. Inov. Pembelajaran Fis.*, vol. 5, no. 2, pp. 103–110, 2022, doi: https://doi.org/10.29103/relativitas.v5i2.7830.
- [4] A. Y. Ridwan, "Implementasi E-Learning Untuk Meningkatkan Kualitas Pembelajaran IPA Pada Siswa Madrasah Tsanawiyah Ar-Ruhama," *Charity*, vol. 3, no. 2, pp. 1–8, 2020, doi: 10.25124/charity.v3i2.2546.
- [5] W. A. Putri, R. Fitriani, E. F. Setya Rini, F. T. Aldila, and T. Ratnawati, "Pengaruh Motivasi terhadap Hasil Belajar Siswa Sekolah Menengah Pertama," SAP (Susunan Artik. Pendidikan), vol. 5, no. 3, pp. 248–254, 2021, doi: 10.36987/jpms.v7i1.1942.
- [6] D. Darmaji, A. Astalini, D. A. Kurniawan, and E. F. Setiya Rini, "Gender Analysis in Measurement Materials: Critical Thinking Ability and Science Processing Skills," *J. Ilm. Pendidik. Fis. Al-BiRuNi*, vol. 11, no. 1, pp. 113–128, 2022, doi: 10.24042/jipf.
- [7] Astalini et al., "Impact of Science Process Skills on Thinking Skills in Rural and Urban Schools," Int. J. Instr., vol. 16, no. 2, pp. 803–822, 2023.
- [8] F. T. Aldila, E. F. S. Rini, S. W. Oktavia, N. N. Khaidah, F. P. Sinaga, and N. Sinaga, "The Relationship of Teacher Teaching Skills and Learning Interests of Physics Students of Senior High School," *EduFisika J. Pendidik. Fis.*, vol. 8, no. 1, 2023.
- [9] F. T. Aldila and E. F. S. Rini, "Teacher's Strategy in Developing Practical Values of the 5th Pancasila Preepts in Thematic Learning in Elementary School," J. Basic Educ. Res., vol. 4, no. 1, 2023.
- [10] S. Syahrial, D. A. Kurniawan, A. Asrial, H. Sabil, S. Maryani, and E. F. S. Rini, "Professional teachers: Study of ICT capabilities and research competencies in urban and rural?," *Cypriot J. Educ. Sci.*, vol. 17, no. 7, pp. 2247–2261, 2022, doi: 10.18844/cjes.v17i7.7590.
- [11] T. Mulyati, "Pendekatan Konstruktivisme Dan Dampaknnya Bagi Hasil Belajar Matematika Siswa SD," *EduHumaniora* / *J. Pendidik. Dasar Kampus Cibiru*, vol. 1, no. 2, 2016, doi: 10.17509/eh.v1i2.2738.
- [12] E. Trisnowati, "Model Keterpaduan Pembelajaran Sains dalam Kurikulum 2013," SPEKTRA J. Kaji. Pendidik. Sains, vol. 2, no. 1, pp. 20–27, 2016, doi: 10.32699/spektra.v2i01.4.
- [13] W. Ningsih, "Etika Psikolog Dalam Pengumpulan Dan Penyampaian Hasil Pemeriksaan Psikologis (Tinjauan Aksiologi)," J. Filsafat Indones., vol. 4, no. 1, p. 53, 2021, doi: 10.23887/jfi.v4i1.31344.
- [14] R. P. Agustami, S. Alimah, and I. Artikel, "Persepsi Guru dan Siswa Terhadap Pembelajaran IPA Terpadu Serta Implikasinya di SMP," J. Innov. Sci. Educ., vol. 6, no. 1, pp. 96–103, 2017, doi: 10.15294/jise.v6i1.17069.
- [15] W. Puspita Hadi, Y. Hidayati, and I. Rosidi, "Respon Guru Ipa Terhadap Pembelajaran Ipa Berintegrasi Etnosains: Studi Pendahuluan Di Kabupaten Bangkalan," *LENSA (Lentera Sains) J. Pendidik. IPA*, vol. 10, no. 1, pp. 46–53, 2020, doi: 10.24929/lensa.v10i1.92.
- [16] S. W. Oktavia, N. Septiani, F. Sinaga, and N. N. Qoidah, "Analysis of the relationship in learning interest to learning outcomes static fluid material in senior high school," *J. Ilm. Ilmu Terap. Univ. Jambi*, vol. 7, no. 1, pp. 22–26, 2023, doi: https://doi.org/10.22437/jiituj.v7i1.26696.
- [17] H. M. Natsir, "Pengembangan Pembelajaran Fikih Kelas X Madrasah Aliyah dalam Model Dick & Carey," J. Pendidik. Agama Islam (Journal Islam. Educ. Stud., vol. 5, no. 1, pp. 45–67, 2017, doi: 10.15642/jpai.2017.5.1.44-67.
- [18] S. Sulastri, H. Fitria, and A. Martha, "Kompetensi Profesional Guru dalam Meningkatkan Mutu Pendidikan", J. Educ. Res., vol. 1, no. 3, pp. 258–264, Dec. 2020.
- [19] S. Syarif and F. Yunus, Metode Penelitian Sosial. Banda Aceh: Ushuluddin Publishing, 2013.
- [20] M. B. Miles and A. M. Huberman, *Qualitatif Data Analysis*. SAGE Publications, 1994.
- [21] P. Y. Ko, "Transcending Conventional Assessment Boundaries in Conducting Learning Study: A Case in Hong Kong," Int. J. Lesson Learn. Stud., vol. 8, no. 3, pp. 212–228, 2019, doi: 10.1108/IJLLS-10-2018-0078.
- [22] E. F. Setiya Rini, D. Darmaji, and D. A. Kurniawan, "Identifikasi Kegiatan Praktikum dalam Meningkatkan Keterampilan Proses Sains di SMPN Se-Kecamatan Bajubang," *Edukatif J. Ilmu Pendidik.*, vol. 4, no. 2, pp. 2476–2481, 2022.
- [23] E. F. S. Rini and F. T. Aldila, "Practicum Activity: Analysis of Science Process Skills and Students' Critical Thinking Skills," *Integr. Sci. Educ. J.*, vol. 4, no. 2, pp. 54–61, 2023, doi: 10.37251/isej.v4i2.322.
- [24] G. Ritzer, *Toward an Integrated Sociological Paradigma*. Boston: Allyn Bacon, 1981.
- [25] B. Handayani and A. S. Purnami, "Strategi Pembinaan Kompetensi Profesional Guru Oleh Kepala Sekolah dalam Mewujudkan Mutu Pendidikan Sekolah Dasar," *Media Manaj. Pendidik.*, vol. 3, no. 3, pp. 429–437, 2021, doi: 10.30738/mmp.v3i3.7952.
- [26] I. Ilyas, "Strategi Peningkatan Kompetensi Profesional Guru", JIEPP, vol. 2, no. 1, pp. 34-40, Aug. 2022