

## **DIFFERENTIATION-BASED LEARNING: UNDERSTANDING INDIVIDUAL DIFFERENCES IN DEVELOPING LEARNING STRATEGIES**

### **Syibrans Mulasi**

Sekolah Tinggi Agama Islam Negeri Teungku Dirundeng Meulaboh  
[syibrans@staindirundeng.ac.id](mailto:syibrans@staindirundeng.ac.id)

### **Mujiburrahman**

Universitas Islam Negeri Ar-Raniry  
[mujiburrahman.mujib@ar-raniry.ac.id](mailto:mujiburrahman.mujib@ar-raniry.ac.id)

### **Habiburrahim**

Universitas Islam Negeri Ar-Raniry  
[habiburrahim@ar-raniry.ac.id](mailto:habiburrahim@ar-raniry.ac.id)

### **Silahuddin**

Universitas Islam Negeri Ar-Raniry  
[silahuddin@ar-raniry.ac.id](mailto:silahuddin@ar-raniry.ac.id)

### **Nor Hasnida Md Ghazali**

Universiti Pendidikan Sultan Idris Malaysia  
[hasnida@fpm.upsi.edu.my](mailto:hasnida@fpm.upsi.edu.my)

### **Abstract**

Understanding the differences in students' learning styles is critical to designing effective learning development strategies. This article discusses differences in student learning styles in the context of developing learning strategies. The method used is a literature study that explores various research findings relevant to the discussion's purpose. Next, an in-depth literary analysis of the literature was carried out through the data collection stages. Data sources include scientific journals, books, research results, and other references. Next, the findings were analyzed using the content analysis method to identify the main themes. The research results found that every teacher needs to understand the diversity of students' learning styles more comprehensively and other factors that can influence how students learn. Through a deep understanding of styles, it will be easier to increase students' knowledge and experience in a meaningful way because it is implemented in their learning styles. This approach not only helps students reach their optimal academic potential but also creates a learning environment that is responsive to the unique needs of each student. Differentiation-based learning is the key to improving educational effectiveness and learning outcomes.

**Keywords:** *Individual learning differences, differentiated learning strategies, Exploration of Learning Strategies.*

### **INTRODUCTION**

Education is one of the main pillars of sustainable national development. In the education process, the role of teachers is not only limited to delivering lesson materials but also understanding the differences in character and learning styles of each student. Differences in character and learning styles significantly affect how students receive, process, and apply the information given to them. Teachers who can understand and accommodate these differences will be more effective in creating

an inclusive and conducive learning environment so that each student can maximize their potential. Each student is unique in personality, interests, and cognitive abilities. Some students may excel in visual learning styles, while others may be more responsive to kinesthetic or auditory approaches. With a deep understanding of these learning styles, teachers can design more targeted and relevant learning strategies for each individual in their class. In addition, this understanding also helps teachers conduct more accurate assessments of students' talents and interests. Good assessments not only aim to measure academic achievement but also to recognize potentials that may not be visible and direct students to fields that suit their interests and talents.

To improve in-depth understanding in conducting assessments, teachers need to be equipped with adequate knowledge and skills. Continuous training and professional development are essential, and teachers need to understand various assessment methods, ranging from aptitude and interest test observations to the use of sophisticated educational technology so that they can provide constructive feedback and help students plan further self-development steps. The urgency of this article lies in the need to evaluate and increase teacher awareness of the importance of paying attention to students' learning styles before providing lesson materials. Through critical evaluation, it is hoped that teachers can be more reflective and adaptive in their teaching practices. This will not only improve the quality of learning but also help students feel more appreciated and motivated in the learning process. By understanding and accommodating differences in character and learning styles, teachers can create more personal and meaningful learning experiences, ultimately contributing to students' academic success and holistic development.

In education, understanding learning theory and individual differences are key elements that influence the effectiveness of the learning process.<sup>1</sup> Learning theories provide a profound conceptual basis for how students acquire knowledge, understand information, and develop skills.<sup>2</sup> This understanding provides a foundation for teachers to design appropriate and effective learning strategies and models.

In addition, each individual has unique characteristics and learning needs.<sup>3</sup> Individual differences include cognitive abilities, learning styles, interests, motivations, and other factors that influence how they receive and process information.<sup>4</sup> Understanding individual differences is

---

<sup>1</sup> Deri Firmansyah and Dadang Saepuloh, "Social Learning Theory: Cognitive and Behavioral Approaches," *Jurnal Ilmiah Pendidikan Holistik (JIPH)* 1, no. 3 (2022): 297–324; Mega Rahmawati and Edi Suryadi, "Guru Sebagai Fasilitator Dan Efektivitas Belajar Siswa," *Jurnal Pendidikan Manajemen Perkantoran* 4, no. 1 (2019): 49–54; Lestari Nugraha Ningrum and Ina Magdalena, "KONSEP MODEL DESAIN PEMBELAJARAN SEKOLAH DASAR," *Sindoro: Cendikia Pendidikan* 3, no. 6 (2024): 12–22.

<sup>2</sup> Ina Magdalena, Elsa Rizqina Agustin, and Syahnia Maulida Fitria, "Konsep Model Pembelajaran," *Sindoro: Cendikia Pendidikan* 3, no. 1 (2024): 1–10.

<sup>3</sup> Fauziah Nasution et al., "Variasi Individual Dalam Pendidikan," *Jurnal Edukasi Nonformal* 4, no. 1 (2023): 146–56; Ilham Farid et al., "Strategi Pembelajaran Diferensiasi Dalam Memenuhi Kebutuhan Belajar Peserta Didik Di Sekolah Dasar," *Jurnal Pendidikan Dan Konseling (JPDK)* 4, no. 6 (2022): 11177–82.

<sup>4</sup> Mihrab Afnanda, "Menelaah Kembali Teori Belajar Dan Gaya Belajar," *Qualitative Research in Educational Psychology* 1, no. 01 (2023): 12–22, <https://doi.org/https://orcid.org/0009-0000-4207-1374>; Siska Nerita, Jamaris Jamna, and Solfema Solfema, "Perbedaan Individu Dalam Proses Pembelajaran Dan Faktor-Faktor Yang Mempengaruhinya," *Bioscientist: Jurnal Ilmiah Biologi* 10, no. 2 (2022): 1077–84.

important for educators to be able to adapt relevant learning approaches and support the development of each student.<sup>5</sup> However, the learning approaches used in educational contexts often tend to be homogeneous and do not consider the diversity of individuals in the class<sup>6</sup>. As a result, there is a potential that some students may not reach their full learning potential. This article aims to understand better individual differentiation in learning and how it can be applied in developing effective learning strategies.

## RESEARCH METHODS

This research uses a qualitative approach with a literature review method<sup>7</sup> to analyze relevant articles related to differentiation-based learning and individual learning strategies. Data collection and data sources are taken from relevant articles from various academic journals, conferences, books, and other sources. The selection criteria articles are selected to meet criteria such as being Published in the last 5 (five) years to ensure their relevance and actuality, focusing on the topic of differentiation-based learning and improving individual learning strategies, and being published in accurate and indexed academic journals. In comparison, the number of articles in this study is at least 25-50 to gain a more comprehensive and representative understanding. The analysis approach uses the deductive and inductive approaches used in literature analysis. The Deductive approach tests existing theories and concepts related to differentiation-based learning and individual learning strategies. The Inductive approach is used to identify new themes and patterns that emerge from the literature data collected. Several procedures are carried out when conducting data analysis, including coding. This process is carried out to identify themes, categories, and patterns from the articles studied. In thematic analysis, techniques determine the main themes from the collected literature data. Finally, the validity of the analysis. At the same time, the implementation steps are carried out through several stages: preparation, data collection, data analysis, and validation and presentation.

## DISCUSSION

### Learning Theory and Learning Styles

Learning theory is a conceptual framework presenting a view of the learning process.<sup>8</sup> Learning theory can explain the various factors influencing how individuals acquire new knowledge, skills, and behavior. Several learning theories are often encountered and studied in education, such

---

<sup>5</sup> Ahmad Zain Sarnoto, "Model Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka," *Journal on Education* 6, no. 3 (2024): 15928–39; Ahmad Teguh Purnawanto, "Pembelajaran Berdiferensiasi," *Jurnal Pedagogy* 16, no. 1 (2023): 34–54; Elfin Warnius Waruwu and Dyulius Thomas Bilo, "Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka Belajar: Strategi Untuk Meningkatkan Hasil Belajar Siswa Dalam Pendidikan Agama Kristen," *Sinar Kasih: Jurnal Pendidikan Agama Dan Filsafat* 2, no. 2 (2024): 254–68; Nerita, Jamna, and Solfema, "Perbedaan Individu Dalam Proses Pembelajaran Dan Faktor-Faktor Yang Mempengaruhinya."

<sup>6</sup> M Yusuf, Abdul Kholiq, and Muhammad Zainul Mahya, "Strategi Peningkatan Kualitas Pendidikan Kelas Homogen Di MTs Darussalam Krempeyang Tanjunganom Nganjuk," *Salimiya: Jurnal Studi Ilmu Keagamaan Islam* 3, no. 2 (2022): 11–30.

<sup>7</sup> Conny R Semiawan, *Metode Penelitian Kualitatif* (Grasindo, 2010); Imam Gunawan, *Metode Penelitian Kualitatif: Teori Dan Praktik* (Bumi Aksara, 2022).

<sup>8</sup> Hari Wibowo, *Pengantar Teori-Teori Belajar Dan Model-Model Pembelajaran* (Puri cipta media, 2020); Regina Ade Darman, *Belajar Dan Pembelajaran* (Guepedia, 2020).

as behaviorism learning theory, constructivism, social cognitive, and cognitive load theory. All of these theories can be described as follows:

*a. Behaviorism theory*

This theory emphasizes the importance of external stimuli and observed responses in learning. According to this view, individuals learn through associations between external stimuli and the resulting reactions.<sup>9</sup> The behaviorism learning style focuses on observable changes in behavior as a result of interaction with the environment.<sup>10</sup> This theory emphasizes the importance of reinforcement and punishment in shaping student behavior. According to behaviorism, learning occurs when responses to specific stimuli are consistently reinforced.<sup>11</sup> There are several behaviorist learning strategies, including:<sup>12</sup> First, positive reinforcement teachers can give gifts or praise when students show desired behavior or achievements, such as completing assignments on time or showing active class participation. Second, provide reinforcement; by providing this reinforcement, teachers can reduce homework if students behave well or leniency in other forms if students show a positive attitude towards learning compliance. Third, punishment, such as giving additional assignments to students who are not obedient. Fourth, provide practice or repetition. This method strengthens the desired response, such as practice questions or drilling. These strategies aim to form good study habits and positive academic behavior.

*b. Constructivism Theory*

This theory says learning occurs by constructing new understanding based on existing experiences and knowledge.<sup>13</sup> Each individual actively constructs their knowledge through reflection and interaction with the environment. Constructivism theory emphasizes the importance of understanding individual differences in the context of education.<sup>14</sup> According to this theory, each student constructs their knowledge through interaction with the environment and personal experiences. Therefore, a teacher needs to recognize and appreciate individual differences to adjust the relevant learning approach and support the development of each student. This approach allows teachers to create a learning environment responsive to students' unique needs, interests, and abilities.

---

<sup>9</sup> Herie Saksono et al., *Teori Belajar Dalam Pembelajaran* (Cendikia Mulia Mandiri, 2023); Miftahul Huda, Ach Fawaid, and Slamet Slamet, "Implementasi Teori Belajar Behavioristik Dalam Proses Pembelajaran," *Pendekar: Jurnal Pendidikan Berkarakter* 1, no. 4 (2023): 64–72.

<sup>10</sup> Afnanda, "Menelaah Kembali Teori Belajar Dan Gaya Belajar."

<sup>11</sup> (Wahyuni and Ariyani 2020)

<sup>12</sup> Neneng Hoeriah, "Strategi Guru Dalam Meningkatkan Motivasi Belajar Siswa Berdasarkan Teori Behavioristik Di SD Negeri Tri Mekar Jaya," *Guau: Jurnal Pendidikan Profesi Guru Agama Islam* 3, no. 4 (2023): 144–53; Berry Devanda, Neviyarni Suhaili, and Nora Afnita, "Pemikiran Behaviorisme Dan Implikasinya Terhadap Pembelajaran," *Ikhtisar* 2, no. 1 (2022): 105–12, <https://doi.org/DOI: 10.55062/IJPI.2022.v2i1.44>.

<sup>13</sup> Ahmad Suryadi, M Pd Dr Muljono Damopolii, and M Ag Dr Ulfiani Rahman, *Teori Konstruktivisme Dalam Pembelajaran PAI Di Madrasah: Teori Dan Implementasinya* (CV Jejak (Jejak Publisher), 2022).

<sup>14</sup> Bakhrudin All Habsy, Jerry Sheva Christian, and Unaisah Unaisah, "Memahami Teori Pembelajaran Kognitif Dan Konstruktivisme Serta Penerapannya," *TSAQOFAH* 4, no. 1 (2024): 308–25.

Thus, teachers can help students construct a deeper and more meaningful understanding, increasing motivation and engagement in learning.

In constructivism theory, experience is the core of learning.<sup>15</sup> Students develop relevant knowledge and skills through active interaction with the environment. These experiences include interactions with learning materials, peers, teachers, and the wider social context. In an environment that supports constructivism, students are encouraged to explore, ask questions, and find answers, which helps them internalize new concepts more effectively. Environmental touches, such as using learning aids, collaborative projects, and hands-on activities, are essential in developing students' learning experiences. By providing opportunities for exploration and reflection, teachers can help students connect new knowledge to previous experiences, strengthening understanding and encouraging further cognitive development. This approach facilitates more profound learning and prepares students to become lifelong learners who can think critically and creatively when facing future challenges.

#### *c. Social Cognitive Theory*

This theory emphasizes the important role of observation and modeling in learning. Students learn by observing the behavior of others (models) and through internal processes such as attention, memory, and motivation. Social Cognitive Theory emphasizes that learning occurs through observing the behavior of others (models) and through internal processes such as attention, memory, and motivation. According to this theory, individuals not only learn from direct experience but also by observing the actions and consequences of the actions of others. This process is known as observational learning or modeling. For example, a student can learn how to solve a math problem by watching their teacher solve a similar problem on the board. Internal processes such as attention play an important role in observational learning. Students must pay attention to the model to understand the observed behavior. Furthermore, information gained from observation must be stored in memory for future use. Motivation is also a key factor; students are more likely to imitate behavior that they see as rewarded or believe will result in positive outcomes. By understanding and applying social cognitive theory, educators can design learning environments that maximize positive observations and reinforce internal processes, effectively supporting students' cognitive and skill development.

#### *d. Cognitive Load Theory*

This theory examines how learning is related to the cognitive workload experienced by individuals. It focuses on how information is processed, stored, and remembered by the brain in the context of learning. Cognitive load theory is one of the learning theories that emphasizes how information is processed, stored, and remembered by the brain in the context of learning. According

---

<sup>15</sup> Yuni Budyastuti and Endang Fauziati, "Penerapan Teori Konstruktivisme Pada Pembelajaran Daring Interaktif," *Jurnal Papeda: Jurnal Publikasi Pendidikan Dasar* 3, no. 2 (2021): 112–19; Ndaru Kukuh Masgumelar and Pinton Setya Mustafa, "Teori Belajar Konstruktivisme Dan Implikasinya Dalam Pendidikan Dan Pembelajaran," *GHAITSA: Islamic Education Journal* 2, no. 1 (2021): 49–57.

to this theory, the brain is limited to processing information at any given time, and excessive cognitive load can hinder learning. Cognitive load can be divided into three types: intrinsic load, extrinsic load, and information processing-related load. Intrinsic load is related to the complexity of the material itself, while extrinsic load is generated by how information is presented to students. Information processing-related load is the load required to integrate new knowledge with existing knowledge in long-term memory.

In the context of learning, educators must design materials and activities that minimize extrinsic cognitive load and maximize beneficial cognitive processing. For example, excessive use of multimedia or overly complex explanations can increase the extrinsic load, making it difficult for students to understand the material.<sup>16</sup> Conversely, a well-structured presentation of information and providing clear examples can help reduce cognitive load and facilitate better understanding. Techniques such as chunking, which breaks information down into smaller, more manageable units, can also help reduce cognitive load and support the retention of information in long-term memory. By understanding how to apply the principles of cognitive load theory, educators can create a more effective learning environment where students can process, store, and recall information more efficiently. This not only improves learning outcomes but also allows students to develop better critical thinking and problem-solving skills.

While all learning theories can provide diverse views of the learning process and lead to practical implications in the development of learning strategies, in the context of understanding individual differences in learning strategies, the use of these theories can help educators design more effective and inclusive approaches for students with diverse learning needs that are appropriate for learner differences.

### **Individual Differences in Learning**

Differentiated learning allows students to increase their potential according to their learning readiness, interests, and learning profile.<sup>17</sup> Individual differences in learning refer to the diversity of characteristics and learning needs of each individual. Each student is unique in cognitive abilities, learning styles, interests, motivations, cultural backgrounds, and other factors that influence how they acquire knowledge and skills.<sup>18</sup> Individual diversity in learning can be influenced by various factors formed naturally within a person<sup>19</sup>. These factors can be experiences, learning environment

---

<sup>16</sup> Arum Dwi Rahmawati, Ferri Ardianzah, and Pratiwi Novitasari, "Penerapan Teori Beban Kognitif Dalam Pengajaran Matematika Dalam Mengurangi Beban Kognitif Tak Esensial," *Jurnal Jendela Pendidikan* 4, no. 04 (2024): 463–72.

<sup>17</sup> Muhammad Qorib, "Analysis Of Differentiated Instruction As A Learning Solution In Student Diversity In Inclusive And Moderate Education," *International Journal Reglement & Society (IJRS)* 5, no. 1 (2024): 43–55, <https://doi.org/https://doi.org/10.55357/ijrs.v5i1.452>.

<sup>18</sup> Aan Withi Estari, "Pentingnya Memahami Karakteristik Peserta Didik Dalam Proses Pembelajaran," in *Social, Humanities, and Educational Studies (SHEs): Conference Series*, vol. 3, 2020, 1439–44.

<sup>19</sup> Sri Muliati Abdullah, "Social Cognitive Theory: A Bandura Thought Review Published in 1982-2012," *Psikodimensia: Kajian Ilmiah Psikologi* 18, no. 1 (2019): 85–100.

backgrounds, or other factors. Individual differences in learning can also occur due to the following factors:

### 1. *Cognitive Abilities*

Each student has different levels of cognitive ability, including the ability to understand, remember, and apply information and complete academic tasks.<sup>20</sup> Differences in students' cognitive abilities are one of the important aspects that educators must understand in the learning process. These cognitive abilities include the ability to understand, remember, and apply information, as well as the ability to complete academic tasks. Each student has a different level of cognitive ability.<sup>21</sup>, which is influenced by various factors such as educational background, previous learning experiences, and environmental support. The ability to understand information varies from one student to another. For example, some students may be able to grasp concepts and ideas quickly through oral or written explanations. In contrast, others may need visual aids or practical experience to truly understand the material. Teachers must be able to guide students in developing according to their characteristics and the potential possessed by each student<sup>22</sup>. These differences often require teachers to use various teaching methods to ensure that all students follow the lesson well.

In addition, the ability to remember information also differs among students. Some students have strong short-term and long-term memory, so they can easily recall information that has been learned.<sup>23</sup> On the other hand, some students may have difficulty remembering information, especially if there is no repetition or reinforcement. This requires learning strategies that include memory-strengthening techniques, such as mnemonics, concept maps, or repeated practice. The ability to apply information is another aspect of cognitive ability that varies between students. Some students can quickly apply the theory they have learned to practical situations or problem-solving, while others may need more time and guidance to connect theory to practice. These differences require teachers to provide various opportunities and exercises that allow students to apply their knowledge in different contexts. Finally, the ability to complete academic tasks also shows variations in cognitive ability. Some students can complete tasks quickly and accurately, while others may need more time and support to complete the same task. Concentration levels, organizational skills, and individual learning strategies are essential. By understanding these differences in cognitive ability, teachers can design more effective and

---

<sup>20</sup> Wira Suciono, *Berpikir Kritis (Tinjauan Melalui Kemandirian Belajar, Kemampuan Akademik Dan Efikasi Diri)* (Penerbit Adab, 2021).

<sup>21</sup> Iska Kurnia Wulan Sari, "Analisis Kemampuan Kognitif Dalam Pembelajaran IPA SMP," *Jurnal Pendidikan Dan Pembelajaran Sains Indonesia (JPPSI)* 3, no. 2 (2020): 145–52.

<sup>22</sup> Yuli Mulyawati, M S Zulela, and Edwita Edwita, "Differentiation Learning to Improve Students Potential in Elementary School," *Pedagonal: Jurnal Ilmiah Pendidikan* 6, no. 1 (2022): 68–78, <https://doi.org/10.55215/pedagonal.v6i1.4485>.

<sup>23</sup> Mustafa Kamal, "Pengaruh Pelaksanaan Program Menghafal Al Qur'an Terhadap Prestasi Belajar Siswa:(Studi Kasus Di MA Sunan Giri Wonosari Tegal Semampir Surabaya)" (Universitas Muhammadiyah Surabaya, 2016); Gita Safirah Nuskin, "Pengaruh Program Brain-Breaks Terhadap Memori Jangka Pendek Dan Atensi Pada Siswa Kelas V SD Di Kota Makassar= The Effect of Brain-Breaks Program on Short-Term Memory and Attention in Fifth Grade Elementary School Students in Makassar City" (Universitas Hasanuddin, 2022).

inclusive learning strategies that help each student reach their full potential and create a learning environment that is equitable and supportive for all learners.

## 2. *Learning Styles*

Learning styles refer to individual preferences in accessing and processing information.<sup>24</sup> Some students prefer to learn through visual methods, while others prefer an auditory or kinesthetic approach. Visual learning style is a preference for learning through seeing, where these students tend to have an easier time understanding the information presented in graphs, diagrams, maps, or videos. They often have a good ability to remember faces, pictures, and writing. Meanwhile, students with an auditory learning style are more effective at understanding information through listening. They follow better oral instructions, class discussions, or verbal materials. Auditory learners often show skills in remembering words and tones of voice and enjoy learning through music or recordings.

On the other hand, kinesthetic students prefer to learn through movement and touch.<sup>25</sup> They usually need physical activity to help process information, such as using their hands to build models, participating in experiments, or doing other hands-on activities. Kinesthetic learning styles allow students to learn by directly involving their bodies, which helps them understand and remember information better. By understanding these learning style differences, educators can tailor teaching methods to meet the needs of each student, creating a more inclusive and effective learning environment.

## 3. *Motivation to learn*

Motivation plays a key role in learning. Differences in motivation levels and types of motivation (intrinsic vs. extrinsic) can affect how effectively students learn and achieve their academic goals.<sup>26</sup> Motivation plays a vital role in student's learning and can be divided into intrinsic and extrinsic. Intrinsic motivation comes from within the student, such as curiosity and interest in the subject matter. Intrinsically motivated students tend to be more active and enthusiastic in learning, often resulting in more profound understanding and higher academic achievement. In contrast, extrinsic motivation comes from external factors, such as rewards, praise, or pressure from others. While extrinsic motivation can improve performance in the short term, more sustained academic success is usually achieved when students have strong intrinsic motivation. By understanding and

---

<sup>24</sup> Rahmahtrisilvia Rahmahtrisilvia et al., "Validasi Buku Referensi Asesmen Gaya Belajar Anak Gangguan Spektrum Autisme (GSA) Pasca Pengukuran Quantitative Electroencephalography (QEEG)," *JPPi (Jurnal Penelitian Pendidikan Indonesia)* 8, no. 4 (2022): 1281–91; Ricky Alfredo Silaban et al., "Gaya Belajar Peserta Didik," *Penerbit Mifandi Mandiri Digital* 1, no. 01 (2024).

<sup>25</sup> Arylien Ludji Bire and Josua Bire, "Pengaruh Gaya Belajar Visual, Auditorial, Dan Kinestetik Terhadap Prestasi Belajar Siswa," *Jurnal Kependidikan: Penelitian Inovasi Pembelajaran* 44, no. 2 (2014): 128164; Febi Dwi Widayanti, "Pentingnya Mengetahui Gaya Belajar Siswa Dalam Kegiatan Pembelajaran Di Kelas," *Erudio Journal of Educational Innovation* 2, no. 1 (2013).

<sup>26</sup> Rena Rismayanti et al., "Pengaruh Motivasi Instrinsik Dan Motivasi Ekstrinsik Terhadap Proses Pembelajaran Mahasiswa Universitas Pendidikan Indonesia," *Jurnal Pendidikan, Sains Dan Teknologi* 2, no. 2 (2023): 251–61.

managing both types of motivation, educators can create more effective learning environments and support students' better achievement of academic goals.

#### 4. *Student interest in learning*

Interest or preference for a particular topic also affects student engagement and motivation in learning. Students tend to be more enthusiastic and actively participate in engaging lessons. Interest significantly influences a person's learning process because a strong interest in a subject or topic can increase student engagement and motivation. Students with high interest tend to be more eager to dig deeper, understand concepts better, and actively participate in learning activities. Interest also encourages students to spend more time and effort in learning, which can improve comprehension and retention of information. Conversely, a lack of interest often results in a lack of motivation, attention, and participation, which can hinder learning. By adjusting teaching methods to accommodate student interests, teachers can create a more engaging and effective learning environment, ultimately helping students reach their full academic potential.

#### 5. *Cultural Background*

Students' cultural backgrounds, including language, norms, values, and life experiences, also influence how they interact with learning materials and the learning environment. Cultural background and life experiences significantly affect a person's learning outcomes. Culture shapes the ways of thinking, values, and norms that students bring into the learning environment.<sup>27</sup> For example, students from cultures emphasizing hard work and discipline may be more motivated to study consistently. Life experiences also play an essential role; students with access to educational resources, family support, and supportive environments tend to have better learning outcomes; conversely, students from less supportive backgrounds may face more significant challenges in learning.<sup>28</sup> In addition, life experiences such as extracurricular activities, part-time work, or travel can enrich their learning by providing practical context and relevance to the subject matter.<sup>29</sup> By understanding and acknowledging the influence of these cultural backgrounds and life experiences, educators can more effectively adapt their teaching approaches to meet individual students' needs, maximizing learning potential and improving overall learning outcomes.

---

<sup>27</sup> Nurdeni Nurdeni et al., "Kemampuan Siswa Sekolah Menengah Pertama Dengan Pembelajaran Etnosains," *Jurnal Pendidikan Dan Konseling (JPDK)* 4, no. 6 (2022): 9799–9807; Hamzah B Uno, *Landasan Pendidikan* (Bumi Aksara, 2022).

<sup>28</sup> Nurdeni et al., "Kemampuan Siswa Sekolah Menengah Pertama Dengan Pembelajaran Etnosains"; Glori Debora Palungan and Dewita Karema Sarajar, "Harmoni Budaya: Dukungan Keluarga Dalam Membangun Prestasi Mahasiswa Melalui Tradisi Rambu Solo," *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia* 10, no. 1 (2024): 144–52.

<sup>29</sup> Anggi Cerlin, Galih Dewi Utami, and Sandi Iswara, "Peran Ekstrakurikuler Dalam Pembentukan Karakter Siswa MTsN 3 Subang," *Journal of Education Research* 5, no. 1 (2024): 450–59; Hilda Fahira, Ilmi Annisa Khairani, and Zulfa Ishmah Rahadatul Aisy, "Pengaruh Rancangan Kegiatan Ekstrakurikuler Dalam Meningkatkan Minat Belajar Siswa Di Sekolah Dasar," *Jurnal Pendidikan Indonesia (JOUPI)* 1, no. 4 (2023): 252–60; Kasman Kasman et al., "Analisis Kegiatan Ekstrakurikuler Dalam Pengembangan Potensi Peserta Didik Di MTS Negeri 4 Mandailing Natal," *ASPIRASI: Publikasi Hasil Pengabdian Dan Kegiatan Masyarakat* 2, no. 3 (2024): 77–83.

Understanding individual differences in learning is essential to designing and implementing effective learning strategies for each teacher to manage and provide quality learning to students. A differentiation approach, which recognizes and responds to the different learning needs of each student, will be the focus for creating an inclusive and supportive learning environment for all students.

### **Exploration of Learning Strategies**

Exploring learning strategies involves exploring the various approaches and methods that can be used to enhance student's learning process. Learning strategies refer to the different techniques, approaches, and tools educators use to facilitate students' understanding, retention, and application of learning materials.<sup>30</sup> In exploring learning strategies, educators actively seek and evaluate various learning methods appropriate to the needs and characteristics of the class and individual students.<sup>31</sup> Including cognitive, metacognitive, and socio-affective strategies that can help students understand and process information and increase their engagement and motivation in learning.

Some examples of learning strategies frequently explored by educators include group discussions, problem-solving, project-based learning, simulations, technology-based learning, and out-of-class resources.<sup>32</sup> In addition, a teacher can also integrate differentiation strategies, which allow for adjustments in the learning approach to meet the different learning needs of each student. Exploration of learning strategies is an integral part of developing effective learning practices. Through investigating and applying various appropriate learning strategies, a teacher can create diverse, engaging, and meaningful learning experiences for students.

### **Integration of Learning Theory and Individual Differences**

Integrating learning theory and individual differences is a conceptual framework that emphasizes the importance of combining an understanding of learning theory with individual diversity in designing and implementing better learning strategies. This theory recognizes that each student has unique learning needs and that successful learning approaches must consider these factors.<sup>33</sup> First, integrating learning theory and individual differences highlights the importance of understanding various relevant learning theories, such as behaviorism, constructivism, and social

---

<sup>30</sup> A P Jufri et al., *Strategi Pembelajaran: Menggali Potensi Belajar Melalui Model, Pendekatan, Dan Metode Yang Efektif* (Ananta Vidya, 2023).

<sup>31</sup> Muhammad Imam Syafi'i, "Analisis Konseptual Dasar Ilmu Pendidikan Dalam Teori Pembelajaran Modern," *JURNAL ILMU PENDIDIKAN & SOSIAL (SINOVA)* 1, no. 3 (2023): 117–22; Dini Aulia Putri, "Model Pembelajaran: Peningkatan Proses Pembelajaran," 2023; Dwi Indah Lestari and Heri Kurnia, "Implementasi Model Pembelajaran Inovatif Untuk Meningkatkan Kompetensi Profesional Guru Di Era Digital," *JPG: Jurnal Pendidikan Guru* 4, no. 3 (2023): 205–22.

<sup>32</sup> Dek Ngurah Laba Laksana, Eko Prastyo, and Everhard Markiano Solissa, *Desain Sistem Pembelajaran* (Mafy Media Literasi Indonesia, 2024); Abdul Rahmat et al., *Desain Pembelajaran Berbasis Kasus* (Ideas Publishing, 2023); Endang Titik Lestari, *Cara Praktis Meningkatkan Motivasi Siswa Sekolah Dasar* (Deepublish, 2020).

<sup>33</sup> Ina Magdalena, Akhmad Syaifulloh, and Annisa Salsabila, "ASUMSI DASAR DAN DESAIN PEMBELAJARAN," *Sindoro: Cendikia Pendidikan* 2, no. 5 (2024): 41–50; Sarnoto, "Model Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka"; Siti Alfiyana Azizah et al., "Analisis Gaya Belajar Siswa Dalam Menerapkan Pembelajaran Berdeferensiasi," *Jurnal Teknologi Pendidikan* 1, no. 2 (2023): 12.

cognitive theory.<sup>34</sup> These theories provide a good framework for understanding how students acquire knowledge and skills. Second, these theories emphasize the need to understand individual differences in learning, including cognitive abilities, learning styles, motivations, interests, and cultural backgrounds. These abilities can influence educators to accommodate the diverse learning needs of each student.

Furthermore, integration theory highlights the importance of linking learning theories to individual student differences in designing inclusive learning strategy approaches.<sup>35</sup> Therefore, teachers need to adjust their learning strategies to meet each student's different learning needs while considering the principles underlying relevant learning theories in building a better learning community.<sup>36</sup> In addition, integrating learning theory and individual differences in learning emphasizes the importance of student involvement in creating connections between learning materials and their experiences. This can be done by utilizing learning strategies relevant to student's learning styles and experiences, so flexibility is needed in the learning process. Integrating learning and individual differences provides a holistic and comprehensive learning framework for designing effective learning approaches so that educators can create learning environments that support the learning development of all students. Learning that pays attention to student differentiation has an excellent impact on learning outcomes.<sup>37</sup> Even as the learning process increases, they show more significant differentiation of learning processes.<sup>38</sup>

However, in accommodating the diversity of student learning styles, there needs to be self-reflection on the part of teachers, and collaboration with other colleagues plays a significant role in conceptual change for teachers as well as efforts to improve the quality of teachers to deconstruct the curriculum according to the needs of their students.<sup>39</sup> Teachers can facilitate the diversity of their students' learning styles<sup>40</sup> to achieve better learning. The integration of learning theory in facilitating individual differences in learning must be taken into account perfectly so that students get the same and appropriate rights to understand learning according to their respective styles and methods.

## CONCLUSION

---

<sup>34</sup> Saksono et al., *Teori Belajar Dalam Pembelajaran*; H Muh Arif et al., *KONSEP DASAR TEORI PEMBELAJARAN* (Cendikia Mulia Mandiri, 2024).

<sup>35</sup> Risna Rombe et al., "Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka Belajar Menurut Ki Hajar Dewantara Pada Mata Pelajaran Pendidikan Agama Kristen," *Jurnal Pendidikan Dan Keguruan* 1, no. 6 (2023): 541–54.

<sup>36</sup> Lou Lovin, Maggie Kyger, and David Allsopp, "Differentiation for Special Needs Learners," *Teaching Children Mathematics* 11, no. 3 (2004): 158–67, <https://doi.org/https://doi.org/10.5951/TCM.11.3.0158>.

<sup>37</sup> Sinta Dameria Simanjuntak et al., "Effectiveness of Differentiation Learning Strategies in Mathematics Learning at Junior High School," *Edunesia: Jurnal Ilmiah Pendidikan* 4, no. 1 (2023): 247–58; Parlindungan Sitorus et al., "The Effect of Differentiation Learning Strategies on Student Learning Results," *Jurnal Penelitian Pendidikan IPA* 8, no. 6 (2022): 2654–61.

<sup>38</sup> John B Biggs, "Differentiation of Learning Processes within Ability Groups," *Educational Psychology* 4, no. 1 (1984): 21–39, <https://doi.org/https://doi.org/10.1080/0144341840040103>.

<sup>39</sup> Theoula Erotocritou Stavrou and Mary Koutselini, "Differentiation of Teaching and Learning: The Teachers' Perspective," *Universal Journal of Educational Research* 4, no. 11 (2016): 2581–88.

<sup>40</sup> Cristina Tulbure, "Do Different Learning Styles Require Differentiated Teaching Strategies?," *Procedia-Social and Behavioral Sciences* 11 (2011): 155–59, <https://doi.org/doi:10.1016/j.sbspro.2011.01.052>.

In developing learning strategies, teachers need to understand the diversity of students' learning styles more optimally. Understanding individual differences and students' learning styles is crucial in developing effective learning strategies. This study highlights that teachers who can identify and understand various learning styles, such as visual, auditory, and kinesthetic, as well as other factors that influence students' learning styles, will find it easier to design appropriate and effective learning strategies. A teacher's deeper understanding of students' learning styles allows teachers to implement teaching methods appropriate to each student's learning style. This not only increases students' knowledge and understanding more deeply and meaningfully but also creates a learning environment that is responsive to the unique needs of each student. With this approach, students can achieve their academic potential more optimally. A differentiation-based learning approach is key to increasing the effectiveness of education and learning outcomes. Teachers who are professional and able to conduct initial assessments of their students' learning styles tend to be more successful in creating meaningful learning spaces.<sup>41</sup> They can design learning strategies tailored to students' needs to make the learning process more effective and enjoyable. Implementing diverse learning methods that are in accordance with students' needs and learning styles has a very significant positive impact on learning outcomes. Therefore, teachers must continue to develop their competence in recognizing and understanding the differences in students' learning styles to achieve better and maximum education.

## REFERENCES

- Abdullah, Sri Muliati. "Social Cognitive Theory: A Bandura Thought Review Published in 1982-2012." *Psikodimensia: Kajian Ilmiah Psikologi* 18, no. 1 (2019): 85–100.
- Afnanda, Mihrab. "Menelaah Kembali Teori Belajar Dan Gaya Belajar." *Qualitative Research in Educational Psychology* 1, no. 01 (2023): 12–22. <https://doi.org/https://orcid.org/0009-0000-4207-1374>.
- Ambarita, Jenri, M Pd K Pitri Solida Simanullang, and Penerbit Adab. *Implementasi Pembelajaran Berdiferensiasi*. Penerbit Adab, 2023.
- Arif, H Muh, Lalu Suhirman, Perdy Karuru, Aleda Mawene, Agus Supriyadi, M Pd Junaidin, Wayan Mahardika Prasetya Wiratama, Sumarni Rumfot, S Pd Arifin, and Singgih Prastawa. *KONSEP DASAR TEORI PEMBELAJARAN*. Cendikia Mulia Mandiri, 2024.
- Azizah, Siti Alfiyana, Ali Usman, Muhammad Ali Rif'an Fauzi, and Eliana Rosita. "Analisis Gaya Belajar Siswa Dalam Menerapkan Pembelajaran Berdeferensiasi." *Jurnal Teknologi Pendidikan* 1, no. 2 (2023): 12.
- Biggs, John B. "Differentiation of Learning Processes within Ability Groups." *Educational Psychology* 4, no. 1 (1984): 21–39. <https://doi.org/https://doi.org/10.1080/0144341840040103>.
- Bire, Arylien Ludji, and Josua Bire. "Pengaruh Gaya Belajar Visual, Auditorial, Dan Kinestetik Terhadap Prestasi Belajar Siswa." *Jurnal Kependidikan: Penelitian Inovasi Pembelajaran* 44, no. 2 (2014): 128164.
- Budyastuti, Yuni, and Endang Fauziati. "Penerapan Teori Konstruktivisme Pada Pembelajaran Daring Interaktif." *Jurnal Papeda: Jurnal Publikasi Pendidikan Dasar* 3, no. 2 (2021): 112–19.

---

<sup>41</sup> Ropin Sigalingging, *Pembelajaran Berdiferensiasi Pada Implementasi Kurikulum Merdeka The Differentiated Classroom* (Tata Akbar, 2023); Jenri Ambarita, M Pd K Pitri Solida Simanullang, and Penerbit Adab, *Implementasi Pembelajaran Berdiferensiasi* (Penerbit Adab, 2023).

- Cerlin, Anggi, Galih Dewi Utami, and Sandi Iswara. "Peran Ekstrakurikuler Dalam Pembentukan Karakter Siswa MTsN 3 Subang." *Journal of Education Research* 5, no. 1 (2024): 450–59.
- Darman, Regina Ade. *Belajar Dan Pembelajaran*. Guepedia, 2020.
- Devanda, Berry, Neviyarni Suhaili, and Nora Afnita. "Pemikiran Behaviorisme Dan Implikasinya Terhadap Pembelajaran." *Ikhtisar* 2, no. 1 (2022): 105–12. [https://doi.org/DOI: 10.55062/IJPI.2022.v2i1.44](https://doi.org/DOI:10.55062/IJPI.2022.v2i1.44).
- Estari, Aan Withi. "Pentingnya Memahami Karakteristik Peserta Didik Dalam Proses Pembelajaran." In *Social, Humanities, and Educational Studies (SHEs): Conference Series*, 3:1439–44, 2020.
- Fahira, Hilda, Ilmi Annisa Khairani, and Zulfa Ishmah Rahadatul Aisy. "Pengaruh Rancangan Kegiatan Ekstrakurikuler Dalam Meningkatkan Minat Belajar Siswa Di Sekolah Dasar." *Jurnal Pendidikan Indonesia (JOUPI)* 1, no. 4 (2023): 252–60.
- Farid, Ilham, Reka Yulianti, Amin Hasan, and Tatu Hilaiyah. "Strategi Pembelajaran Diferensiasi Dalam Memenuhi Kebutuhan Belajar Peserta Didik Di Sekolah Dasar." *Jurnal Pendidikan Dan Konseling (JPDK)* 4, no. 6 (2022): 11177–82.
- Firmansyah, Deri, and Dadang Saepuloh. "Social Learning Theory: Cognitive and Behavioral Approaches." *Jurnal Ilmiah Pendidikan Holistik (JIPH)* 1, no. 3 (2022): 297–324.
- Gunawan, Imam. *Metode Penelitian Kualitatif: Teori Dan Praktik*. Bumi Aksara, 2022.
- Habsy, Bakhrudin All, Jerry Sheva Christian, and Unaisah Unaisah. "Memahami Teori Pembelajaran Kognitif Dan Konstruktivisme Serta Penerapannya." *TSAQOFAH* 4, no. 1 (2024): 308–25.
- Hoeriah, Neneng. "Strategi Guru Dalam Meningkatkan Motivasi Belajar Siswa Berdasarkan Teori Behavioristik Di SD Negeri Tri Mekar Jaya." *Guau: Jurnal Pendidikan Profesi Guru Agama Islam* 3, no. 4 (2023): 144–53.
- Huda, Miftahul, Ach Fawaid, and Slamet Slamet. "Implementasi Teori Belajar Behavioristik Dalam Proses Pembelajaran." *Pendekar: Jurnal Pendidikan Berkarakter* 1, no. 4 (2023): 64–72.
- Jufri, A P, Wahyu Kurniati Asri, Misnah Mannahali, and Ananta Vidya. *Strategi Pembelajaran: Menggali Potensi Belajar Melalui Model, Pendekatan, Dan Metode Yang Efektif*. Ananta Vidya, 2023.
- Kamal, Mustafa. "Pengaruh Pelaksanaan Program Menghafal Al Qur'an Terhadap Prestasi Belajar Siswa:(Studi Kasus Di MA Sunan Giri Wonosari Tegal Semampir Surabaya)." Universitas Muhammadiyah Surabaya, 2016.
- Kasman, Kasman, Nur Paridah, Juli Annisa Nasution, and Apsah Apsah. "Analisis Kegiatan Ekstrakurikuler Dalam Pengembangan Potensi Peserta Didik Di MTS Negeri 4 Mandailing Natal." *ASPIRASI: Publikasi Hasil Pengabdian Dan Kegiatan Masyarakat* 2, no. 3 (2024): 77–83.
- Laksana, Dek Ngurah Laba, Eko Prastyo, and Everhard Markiano Solissa. *Desain Sistem Pembelajaran*. Mafy Media Literasi Indonesia, 2024.
- Lestari, Dwi Indah, and Heri Kurnia. "Implementasi Model Pembelajaran Inovatif Untuk Meningkatkan Kompetensi Profesional Guru Di Era Digital." *JPG: Jurnal Pendidikan Guru* 4, no. 3 (2023): 205–22.
- Lestari, Endang Titik. *Cara Praktis Meningkatkan Motivasi Siswa Sekolah Dasar*. Deepublish, 2020.
- Lovin, Lou, Maggie Kyger, and David Allsopp. "Differentiation for Special Needs Learners." *Teaching Children Mathematics* 11, no. 3 (2004): 158–67. <https://doi.org/https://doi.org/10.5951/TCM.11.3.0158>.
- Magdalena, Ina, Elsa Rizqina Agustin, and Syahniah Maulida Fitria. "Konsep Model Pembelajaran." *Sindoro: Cendikia Pendidikan* 3, no. 1 (2024): 1–10.

- Magdalena, Ina, Akhmad Syaifulloh, and Annisa Salsabila. "ASUMSI DASAR DAN DESAIN PEMBELAJARAN." *Sindoro: Cendikia Pendidikan* 2, no. 5 (2024): 41–50.
- Masgumelar, Ndaru Kukuh, and Pinton Setya Mustafa. "Teori Belajar Konstruktivisme Dan Implikasinya Dalam Pendidikan Dan Pembelajaran." *GHAITSA: Islamic Education Journal* 2, no. 1 (2021): 49–57.
- Mulyawati, Yuli, M S Zulela, and Edwita Edwita. "Differentiation Learning to Improve Students Potential in Elementary School." *Pedagonal: Jurnal Ilmiah Pendidikan* 6, no. 1 (2022): 68–78. <https://doi.org/10.55215/pedagonal.v6i1.4485>.
- Nasution, Fauziah, Rahayu Wulandari, Laila Anum, and Achmad Ridwan. "Variasi Individual Dalam Pendidikan." *Jurnal Edukasi Nonformal* 4, no. 1 (2023): 146–56.
- Nerita, Siska, Jamaris Jamna, and Solfema Solfema. "Perbedaan Individu Dalam Proses Pembelajaran Dan Faktor-Faktor Yang Mempengaruhinya." *Bioscientist: Jurnal Ilmiah Biologi* 10, no. 2 (2022): 1077–84.
- Ningrum, Lestari Nugraha, and Ina Magdalena. "KONSEP MODEL DESAIN PEMBELAJARAN SEKOLAH DASAR." *Sindoro: Cendikia Pendidikan* 3, no. 6 (2024): 12–22.
- Nurdeni, Nurdeni, Yoga Budi Bhakti, Edward Alfin, Giri Marhento, and Popi Purwanti. "Kemampuan Siswa Sekolah Menengah Pertama Dengan Pembelajaran Etnosains." *Jurnal Pendidikan Dan Konseling (JPDK)* 4, no. 6 (2022): 9799–9807.
- Nuskin, Gita Safirah. "Pengaruh Program Brain-Breaks Terhadap Memori Jangka Pendek Dan Atensi Pada Siswa Kelas V SD Di Kota Makassar= The Effect of Brain-Breaks Program on Short-Term Memory and Attention in Fifth Grade Elementary School Students in Makassar City." Universitas Hasanuddin, 2022.
- Palungan, Glori Debora, and Dewita Karema Sarajar. "Harmoni Budaya: Dukungan Keluarga Dalam Membangun Prestasi Mahasiswa Melalui Tradisi Rambu Solo." *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia* 10, no. 1 (2024): 144–52.
- Purnawanto, Ahmad Teguh. "Pembelajaran Berdiferensiasi." *Jurnal Pedagogy* 16, no. 1 (2023): 34–54.
- Putri, Dini Aulia. "Model Pembelajaran: Peningkatan Proses Pembelajaran," 2023.
- Qorib, Muhammad. "Analysis Of Differentiated Instruction As A Learning Solution In Student Diversity In Inclusive And Moderate Education." *International Journal Reglement & Society (IJRS)* 5, no. 1 (2024): 43–55. <https://doi.org/https://doi.org/10.55357/ijrs.v5i1.452>.
- Rahmahtrisilvia, Rahmahtrisilvia, Rudi Setiawan, Asep Ahmad Sopandi, Fatmawati Fatmawati, Zulmiyetri Zulmiyetri, Mega Iswari, Marlina Marlina, and Safaruddin Safaruddin. "Validasi Buku Referensi Asesmen Gaya Belajar Anak Gangguan Spektrum Autism (GSA) Pasca Pengukuran Quantitative Electroencephalography (QEEG)." *JPPI (Jurnal Penelitian Pendidikan Indonesia)* 8, no. 4 (2022): 1281–91.
- Rahmat, Abdul, Muh Arif, Mira Mirnawati, Siti Azizah, Lilla Puji Lestari, Rusi Rusmiati Aliyyah, Eri Sarimanah, Vera Rimbawani Sushanty, and Henny Suharyati. *Desain Pembelajaran Berbasis Kasus*. Ideas Publishing, 2023.
- Rahmawati, Arum Dwi, Ferri Ardianzah, and Pratiwi Novitasari. "Penerapan Teori Beban Kognitif Dalam Pengajaran Matematika Dalam Mengurangi Beban Kognitif Tak Esensial." *Jurnal Jendela Pendidikan* 4, no. 04 (2024): 463–72.
- Rahmawati, Mega, and Edi Suryadi. "Guru Sebagai Fasilitator Dan Efektivitas Belajar Siswa." *Jurnal Pendidikan Manajemen Perkantoran* 4, no. 1 (2019): 49–54.
- Rismayanti, Rena, Muhammad Aththar Rayhan, Q K El Adzim, and Lu'lu Alikadhiya Fatihah. "Pengaruh Motivasi Instrinsik Dan Motivasi Ekstrinsik Terhadap Proses Pembelajaran Mahasiswa Universitas Pendidikan Indonesia." *Jurnal Pendidikan, Sains Dan Teknologi* 2, no. 2 (2023): 251–61.

- Rombe, Risna, Rani Rani, Nurlita Nurlita, and Jenri Fani Parinding. "Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka Belajar Menurut Ki Hajar Dewantara Pada Mata Pelajaran Pendidikan Agama Kristen." *Jurnal Pendidikan Dan Keguruan* 1, no. 6 (2023): 541–54.
- Saksono, Herie, Ahmad Khoiri, S S Dewi Surani, Agnes Remi Rando, Nur Amega Setiawati, S Umalihayati, S KM, Ir Helmi Ali, M E MP, and Abner Adipradipta. *Teori Belajar Dalam Pembelajaran*. Cendikia Mulia Mandiri, 2023.
- Sari, Iska Kurnia Wulan. "Analisis Kemampuan Kognitif Dalam Pembelajaran IPA SMP." *Jurnal Pendidikan Dan Pembelajaran Sains Indonesia (JPPSI)* 3, no. 2 (2020): 145–52.
- Sarnoto, Ahmad Zain. "Model Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka." *Journal on Education* 6, no. 3 (2024): 15928–39.
- Semiawan, Conny R. *Metode Penelitian Kualitatif*. Grasindo, 2010.
- Sigalingging, Ropin. *Pembelajaran Berdiferensiasi Pada Implementasi Kurikulum Merdeka The Differentiated Classroom*. Tata Akbar, 2023.
- Silaban, Ricky Alfredo, Afdhal Ilahi, Effendi Effendi, Mike Nurmalia Sari, Rossanita Truelovin Hadi Putri, Himmatusy Syarifah, Al Ikhlas, Abdul Karim Amrullah, Retno Wahyu Ningsih, and Ika Setyorini Pradjojwaty. "Gaya Belajar Peserta Didik." *Penerbit Mifandi Mandiri Digital* 1, no. 01 (2024).
- Simanjuntak, Sinta Dameria, Romega Tinambunan, Imelda Imelda, Ribka Kairani Sembiring, and Israil Sitepu. "Effectiveness of Differentiation Learning Strategies in Mathematics Learning at Junior High School." *Edunesia: Jurnal Ilmiah Pendidikan* 4, no. 1 (2023): 247–58.
- Sitorus, Parlindungan, Eka Notasya Simanullang, Andriono Manalu, Indah Septa Ayu Laia, Riossally Marselina Tumanggor, and Juliper Nainggolan. "The Effect of Differentiation Learning Strategies on Student Learning Results." *Jurnal Penelitian Pendidikan IPA* 8, no. 6 (2022): 2654–61.
- Stavrou, Theoula Erotocritou, and Mary Koutselini. "Differentiation of Teaching and Learning: The Teachers' Perspective." *Universal Journal of Educational Research* 4, no. 11 (2016): 2581–88.
- Suciono, Wira. *Berpikir Kritis (Tinjauan Melalui Kemandirian Belajar, Kemampuan Akademik Dan Efikasi Diri)*. Penerbit Adab, 2021.
- Suryadi, Ahmad, M Pd Dr Muljono Damopolii, and M Ag Dr Ulfiani Rahman. *Teori Konstruktivisme Dalam Pembelajaran PAI Di Madrasah: Teori Dan Implementasinya*. CV Jejak (Jejak Publisher), 2022.
- Syafi'i, Muhammad Imam. "Analisis Konseptual Dasar Ilmu Pendidikan Dalam Teori Pembelajaran Modern." *JURNAL ILMU PENDIDIKAN & SOSIAL (SINOVA)* 1, no. 3 (2023): 117–22.
- Tulbure, Cristina. "Do Different Learning Styles Require Differentiated Teaching Strategies?" *Procedia-Social and Behavioral Sciences* 11 (2011): 155–59.  
<https://doi.org/doi:10.1016/j.sbspro.2011.01.052>.
- Uno, Hamzah B. *Landasan Pendidikan*. Bumi Aksara, 2022.
- Wahyuni, Molli, and Nini Ariyani. *Teori Belajar Dan Implikasinya Dalam Pembelajaran*. Edu Publisher, 2020.
- Waruwu, Elfin Warnius, and Dyulius Thomas Bilo. "Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka Belajar: Strategi Untuk Meningkatkan Hasil Belajar Siswa Dalam Pendidikan Agama Kristen." *Sinar Kasih: Jurnal Pendidikan Agama Dan Filsafat* 2, no. 2 (2024): 254–68.
- Wibowo, Hari. *Pengantar Teori-Teori Belajar Dan Model-Model Pembelajaran*. Puri cipta media, 2020.
- Widayanti, Febi Dwi. "Pentingnya Mengetahui Gaya Belajar Siswa Dalam Kegiatan Pembelajaran Di Kelas." *Erudio Journal of Educational Innovation* 2, no. 1 (2013).
- Yusuf, M, Abdul Kholiq, and Muhammad Zainul Mahya. "Strategi Peningkatan Kualitas

Pendidikan Kelas Homogen Di MTs Darussalam Krempeyang Tanjunganom Nganjuk.”  
*Salimiya: Jurnal Studi Ilmu Keagamaan Islam* 3, no. 2 (2022): 11–30.