Left-Handed-Friendly Education in Indonesia
(Perceptions, Barriers, and Efforts to Overcome Problems Experienced by Teachers)

Mardianto*, Makmur Syukri, Irwan S.
Universitas Islam Negeri Sumatera Utara Medan
*Corresponding Author. Email: mardianto@uinsu.ac.id

Abstract: This study aims to analyze perceptions, barriers and efforts to overcome the problems of left-handed-friendly education in Indonesia. The study focuses on the policy on left-handed-friendly education in Indonesia. This study used a qualitative approach with descriptive analytical study method. The informants of this study were teachers from 4 different provinces. Collecting data using in-depth interviews, participant observation and documentation studies. Furthermore, data analysis used data reduction techniques, data presentation, and verification to draw a conclusion. The results of this study concluded that there was no specific policy in education that regulates left-handed-friendly education. This can be seen from (1) there is no consideration of left-handed friendly facilities at the primary, secondary, and higher education levels, (2) educational institution facilities are not friendly to left-handed students, and (3) there is no anticipation of the obstacles that arise. So far, efforts to implement left-handed-friendly education are still providing relatively longer time than other students. Through this research an implication can be obtained that education in Indonesia has not prepared special learning facilities (infrastructure) for left-handed children, because there is no official policy from the government or internal education providers.

Article History
Received: 09-10-2022
Revised: 10-11-2022
Accepted: 27-11-2022
Published: 16-12-2022

Key Words:
Education Policy; Learning Facilities; Left-Handed Friendly; Children with Special Needs.


Introduction
Education in a broad sense is interpreted as a continuous effort to humanize humans (Arfani, 2018). This is reflected in affection (tarbiyah), teaching (ta'lim), and adab (ta'dib) which are prioritized in education. Various national education policies are a concrete form of efforts to reflect the high attitude of maintaining human dignity (Nabila, 2021; Sukri, et.al., 2018). As stated in Law Number 20 of 2003 Article 45 paragraph 1 that "every formal and non-formal education unit provides facilities and infrastructure that meet educational needs in accordance with the growth and development of the physical potential, intellectual, social, emotional, and psychological potential of students". It shows that the provision of learning facilities is inclusive for all students.

The provision of learning facilities in Indonesia has attempted to adapt to the needs of students, ranging from public facilities to special facilities such as the realization of adiwiyata (environmentally friendly) educational institutions (Sillahudin, 2020), inclusive education (friendly for Children with Special Needs/ABK) and child-friendly schools or madrasas (Yosada & Kurniati, 2019). Of course, these efforts have the same goal: namely to elevate human dignity and preserve nature (the surrounding environment). Likewise, observers of education policy seem to forget a problem that is often considered trivial, namely the concentration on left-handed-friendly education (Bisri, 2015).
Referring to the reality in Indonesia, existing universities and schools do not yet provide adequate and friendly learning facilities for left-handers. It is as if left-handed students are "forced" to get used to following right-handed students usually. This is increasingly reflected in the absence of a national education policy that is friendly to left-handed students, even at the internal school/madrasah/university level, people have yet to concentrate on paying attention to the needs of left-handed students. Of course, this violates the concept of the policy on the national education system, which requires the organizers of educational institutions to meet the learning needs of students following the level of development of the child's physical potential (Idris & Tabrani, 2017; Alfiansyah, et.al., 2020).

In general, this reality is seen as normal, because left-handed students can adapt to non-handed equipment. For example, public facilities in the form of transportation (cars or motorbikes) can be driven by left-handed riders (Taufikurrahman, 2019), even if the vehicle is designed to be right-handed (non-left-handed). In addition, in the world of education, learning facilities (integral desk-chair) are also found with the right-hand position, of course it is difficult for left-handed students (Abdulqodir, et.al., 2014).

In essence, all humans are equal or equal, of course it becomes a big question if the implementation of education in Indonesia has yet to give equal treatment to left-handed students. Likewise, it should be understood that according to Abdulqodir, et.al. (2014) the activity of left-handed students is not a mirror or a reflection of the non-handed (right). For this reason, the provision of learning facilities must consider the needs of the left-handed, not focusing on providing facilities for the opposite of the non-handed. Thus, the available learning facilities can be a form of support for the development of students' self-potential.

Furthermore, it is necessary to ask decision makers in the form of education policies and national education providers regarding the provision of left-handed-friendly learning facilities. Because, if the provision of physical facilities is not fulfilled, it is feared that it will also impact on non-physical students. This is based on the phenomenon of bullying, which is partly based on right-handed domination who mocks left-handed friends. Of course, this physical matter needs to be rushed as part of an effort to socialize equality and equal rights among students, including left-handed ones (Laela, 2017).

One of the discriminatory behavior that often occurs between students is also caused by bullying towards left-handed students. In fact, left-handed students are considered to be able to use non-handed learning facilities without any difficulties. In fact, this is something that must be addressed together, so that it can be recommended nationally to create left-handed-friendly education (Oktaviani, 2019; Riskhaturahma, 2020). Thus, left-handed students get the same rights to develop their potential.

Indeed, research on left-handed-friendly education has been previously studied by Mardianto, et.al. (2021) focusing on policy analysis at UIN North Sumatra Medan. Other studies discuss the aspects of e-module development for left-handed students (Setiawan, 2022), the effect of providing textbook facilities on the literacy skills of left-handed students (Dita, et.al., 2022; Artini, 2022), inclusive education (Erawati, et.al., 2016), parental perceptions of left-handed children (Nurhayati, 2019), foreign culture and student learning styles (Hayat, 2018), developing children's motor skills (Mutoharoh, 2020), and studies on students with physical disabilities (Ulfa, et.al., 2020).

Based on the literature review above, it can be understood that friendly education for left-handed students has not been comprehensively studied by previous researchers. Then, leaving an "empty space" for study or gap analysis, namely the analysis of left-handed-friendly education policies in terms of regulations and implementation. It is needed to
recommend results about the urgency of left-handed friendly education. The research aims to analyze perceptions, obstacles, and efforts to overcome the problems of left-handed-friendly education in Indonesia.

**Research Method**

This study used a qualitative approach with a descriptive-analytical study method. Data collecting techniques include in-depth interviews, participant observation, and documentation studies (Sugiyono, 2010; Assingkily, 2021). The informants of this study were teachers from 4 different provinces, namely MIS Bambel Aceh Tenggara teachers, Head of MTsN 1 Aceh Tenggara, teachers at SDN 13 Pulau Punjung, Dharmasraya Regency, West Sumatra, teachers at MIN 1 Gunungkidul Yogyakarta, and teachers at SMAN 2 Lubuk Pakam Deli Serdang. Furthermore, data analysis uses data reduction techniques, data presentation, and verification to draw a conclusion. Finally, the validity of the data was obtained after the data triangulation test, namely the persistence of the researcher's observations on the suitability between methods and data sources (Creswell, 2009; Moleong, 2018).

**Results and Discussion**

**Left-handed Students**

Left-handed is a term for students who dominantly use their left hand (or also left foot) in various activities, such as eating, writing, holding something, playing guitar, or playing football (Ihsan & Aditya, 2022). In early parenting, every parent teaches and familiarizes children with activities using the right hand because using the left-hand is considered for other purposes (Jati & Diana, 2022). This is an affirmation of the classification of parents against children in carrying out an activity with the right hand.

Left-handed learners are influenced by various factors, such as genetic, environmental, or left-handedness as a spectrum (Mulyaningsih, 2015). Likewise, absolute or complex factors have not been found that cause students to dominantly use their left hand in daily activities (Andika, et.al., 2022). Because, when compared to the quantity of right-handed students more than left-handed students.

Biologically, the tendency of individuals to use their left hand (left-handed) more proficiently than left-handed is caused by the brain’s motor cortex which sends signals to the spinal cord, and determines the dominance of hand and foot movement (Andini, 2021). In addition, the biological aspect also agrees with the occurrence of genetic and environmental factors in influencing the dominance of individual movements from infancy.

Referring to the biological aspect, true parents from the beginning warn their children to take something with their right hand, view things using their left hand as disrespectful, and some even rebuke their children to eat with their left hand. It is undoubtedly related to the psychological aspects needed by children (Nurwulan & Kristiani, 2020). Because of the percentage of children with the same ability between left and right hands, the dominance remains on right-handed children, so left-handed children are seen as minority individuals in carrying out activities.

Psychologically, boys are more likely to be left-handed than girls, as are twins. Likewise, researchers have not found a complex matter that diagnoses the main factors causing left-handed children, although genetics is one of the causative factors. This is also refuted with left-handed descendants when they have children, not necessarily left-handed children (Sari, 2014). This shows a unique fact, that perspective (view) about the world leads to behavior or forces that are religious and complex.
Based on the description above, it is understood that the causes (factors) of left-handed children include genetics, environment and child development psychology. However, these factors are not absolute or guarantee that a person is most likely left-handed. Further exploration is needed regarding left-handed children’s psychological and biological differences related to individual development, mental health, and educational patterns for children.

**Left-handed-friendly Education Policy in Indonesia**

Inclusive education is a manifestation of manifests awareness about the equality of human dignity. In essence, human rights must be protected and rights as citizens must be fulfilled (Herawati, 2016). On this basis, welfare, unity, a sense of justice, and benefit will be realized in the community. Law Number 8 of 2016 states, "... every citizen has the right to get equal opportunities". For this reason, the state must be present and provide a sense of equality through the provision of learning facilities and the needs of every child with the principle of equal opportunity (Rahim, 2016).

Observing the reality on the ground, there were cases of neglected children with speech delay conditions (Rahayu, 2009), child suicide case (Rokan, 2004), abandoned children in public places or in hospitals with physical disabilities (Humaidi & Fatmawati, 2019). This case of child neglect is carried out directly or indirectly (Sukadi, 2013). This of course has an impact on the inhibition of children's development, even the child's mental readiness.

The above mentioned phenomenon illustrates how children's mental development needs to be considered. In this context, of course the government should issue legal policies that are friendly to every child in the nation, such as children with disabilities (special needs) and also left-handed children (Nikka, 2021). This is because left-handed children are often forced to participate in right-handed children's activities, and must be able to adapt to public facilities and existing learning (Pratiwi, et.al., 2021).

The government has issued regulatory regulations on inclusive education, namely Law Number 39 of 1999 concerning Human Rights, Law Number 20 of 2003 concerning the National Education System, Government Regulation Number 19 of 2005 concerning National Education Standards, and Regulation of the Minister of Education National Number 70 the Year 2009 concerning Inclusive Education for Students With Disabilities and Potential Intelligence and/or Special Talents (Tarmansyah, 2007).

Observing the rules or regulations above, there is no specific policy regarding left-handed-friendly education. According to Irvan & Jauhari (2018), this is considered because left-handed individuals are perceived as capable of activities using public facilities commonly used by right-handed individuals. For example, a motorcycle where the gas steering wheel is on the right, where all left-handed children are also able to slowly get used to using the gas with the right. In fact, there are no internal universities or schools and madrasas that have directed the provision of friendly learning facilities for left-handed students.

Based on the description above, it is understood that there is no specific left-handed-friendly education policy in Indonesia. This is also followed by the lack of focus or attention from education providers on providing friendly learning facilities for left-handed students, both at the basic education level, secondary education, to higher education. Thus, special regulations are needed from the government as well as internal policies of educational institutions in the provision of left-handed-friendly educational facilities in Indonesia.
Educators’ Perceptions and Obstacles in Educating Left-Handed Students

The need for left-handed students is one aspect of the needs of students that have yet to receive attention from the organizers of educational institutions. It is logically based on why organizers of active educational institutions use their right hand, and students use their right hand more (Sakti, 2020). Of course, this action indirectly discriminates against left-handed students.

Student learning interactions in and outside the classroom is certainly in direct contact with educators as leaders of the learning process. In this context, the teacher certainly has a special view in dealing with left-handed children as students or students. As stated by Mrs. Ummi Kalsum (Teacher of MIS Bambel Aceh Tenggara) in the following interview excerpt:

“...if we see left-handed children, of course we are not surprised, it's normal. However, seeing a child who is left-handed is a bit sad for us, sir. How come? If they write verses of the Koran in the Koran Hadith lessons, it is certainly difficult, so they are slow and imperfect. So, if there are tasks to make summaries, he must be slow in the process, sir”.

In line with the interview result above, Mrs. Ummu Junainah (a high school teacher in Deli Serdang) said that:

“...Our school doesn't encourage students to buy books, sir, so everything is taken from the school library. Now, for my study of religious material, I asked them to summarize at home at the initial meeting. So, this is where I just realized that several times the left-handed students I teach are always late in submitting assignments, especially assignments that contain verses from the Qur'an or hadith, whereas for other activities, left-handed students who teach seem fast, such as memorizing suras or when oral examination”.

The interview excerpt above informs that the experience of teaching teachers at the SD/MI and SMA/equivalent levels found problems in assigning left-handed students. In this context, writing becomes a burden for left-handed students because of the sitting position and writing commonly reserved for right-handed students. In fact, Mrs. Dra. Latifah Hanum, M.Pd. (Teacher of SMAN 2 Lubuk Pakam) explained that his left-handed students often had problems when there was an assignment to write on the blackboard. In this regard, Lidwina (2012) argues that writing activities at school is one of the problems that are complaints of left-handed students, because the sitting position and types of books are commonly reserved for right-handed students.

Furthermore, the teachers and researchers also asked questions regarding perceptions about the fulfillment of learning facilities for left-handed students. As stated by Mr. Adib Prawinata (Teacher of MIN 1 Gunungkidul, Yogyakarta) said that:

“...schools should have started to open up to provide friendly learning facilities for every child, be it children with disabilities or left-handed ones. Because, this is certainly a concrete effort in providing a sense of comfortable learning for students. Of course, the facilities of chairs, tables and others are the main concern for the school/madrasah sir. Wong, my name is a teacher who is able to give this suggestion sir”.

In line with the above, Mr. Muhammad Syafii (Teacher of MIS Bambel, Southeast Aceh) said:

“...That's right, sir, if we are left-handed, we think we can use the existing learning facilities, even though it's actually closer to right-handed children. However, if this is not taken into account, in my opinion, a sense of justice and learning comfort has not
been created for left-handed children. Although, we realize that they don’t have any complaints, but schools/madrasas should take the initiative”.

Furthermore, the findings regarding teacher perceptions of left-handed-friendly education in Indonesia can be observed in table (1) below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Perceptions of Teachers/Madrasah Heads</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Left-handed students have difficulty writing verses from the Koran or hadith, so they are late in submitting assignments</td>
<td>Ummi Kalsum (Teacher of MIS Bambel Southeast Aceh) and Umm Junainah (Deli Serdang High School Teacher)</td>
</tr>
<tr>
<td>2.</td>
<td>Schools/madrasas do not yet provide left-handed-friendly learning facilities in Indonesia</td>
<td>Adib Prawinata (Teacher of MIN 1 Gunungkidul, Yogyakarta) and Muhammad Syafi’i (Teacher of MIS Bambel Southeast Aceh)</td>
</tr>
<tr>
<td>3.</td>
<td>Left-handed students are still &quot;forced&quot; to be able to adapt to learning facilities that are commonly used by other students</td>
<td>Juardi (Head of MTsN 1 Southeast Aceh) and Linda Marni (Teacher of SDN 13 Pulau Punjung, Dharmasraya, West Sumatra)</td>
</tr>
</tbody>
</table>

Based on the description above, it is understood that the educational experience felt by the teacher when dealing with left-handed students does not experience serious difficulties. Because, in various learning activities such as creating creations, memorizing or oral exams, students can follow the series of activities like right-handed students. However, in writing activities, left-handed students need special-attention and special facilities, making it easier for them to follow the learning process, creating a sense of fairness and learning comfort for left-handed students.

**Efforts to Overcome Learning Obstacles for Left-Handed Students**

Every child is special, as is the belief that multiple intelligences exist. This statement is also in line with the belief that every child has the potential to achieve success according to their talents and interests (Yanni, *et.al.*, 2020; Arbarini, *et.al.*, 2021). For this reason, the main task of educators is not to create intellectually intelligent people, but to facilitate students to develop according to their respective potentials. Because, in the same class, each student has various bits of intelligence, potential, and learning needs.

The teaching profession is not only required to be an expert in their field, but also to be able to observe the needs of students, including the classification of learning needs of left-handed and right-handed students. However, this case has not caught the attention of the organizers of educational institutions because the number of left-handed students is small, and there have been no complaints from left-handed students during the learning process. As described in the previous sub-finding, left-handed students experience obstacles in the learning process, such as writing and using learning facilities that still need to be more friendly for left-handed students.

According to Mardianto, *et.al.* (2021), the provision of left-handed friendly learning facilities has not received special attention in schools/madrasahs. This can be seen from the classroom doors, study tables, and identical chairs used by right-handed students. Furthermore, B added that at a glance, the problem of facilities does not get criticism from left-handed students, but it can affect the level of comfort and sense of justice for left-handed students. In fact, left-handed students seem forced to be able to use the existing learning facilities.
In particular, the researcher has asked several teachers and school/madrasah principals, such as excerpts from an interview with Juardi, M.Pd. (Head of Madrasah MTsN 1 Aceh Tenggara) said that:

“...So far, sir, we have not prepared any special learning facilities for left-handed students. Because, all the facilities here can be said to be almost all common for right-handed students. We don’t discriminate against left-handed students, it’s just that the facilities that we buy or budget for are all like this, sir, both study chairs, study tables, classroom doors, and so on. So, for now, we provide socialization to teachers not to discriminate against left-handed students, instead we must be able to give tolerance for left-handed students”.

Unlike the case above, Mrs. Linda Marni, S.Pd. (Teacher at SDN 13 Pulau Punjung, Dharmasraya Regency, West Sumatra) who said that:

“...If what I observed, sir, left-handed students if they were given writing assignments would get tired quickly, because the facilities are exclusive for right-handed students. So, their learning outcomes are also less than optimal. In fact, learning must be able to give birth to a sense of comfort. My suggestion is that the school should help provide this, and my personal efforts have always been to give left-handed students relatively longer time when there is an assignment to write verses”.

The interview excerpt above informs that the efforts made for the fulfillment of learning for left-handed students are still focused on providing tolerance for assignment time for left-handed students, in contrast, learning facilities such as chairs, tables and others have not been fulfilled. According to Indah & Rusli (2021), the educational institutions have not fulfilled the learning needs of left-handed students in Indonesia. Nurwulan & Kristiani (2020) added that left-handed-friendly learning facilities have not been fulfilled in line with the absence of special policies from the government or internal schools/madrasahs regarding left-handed-friendly education.

Furthermore, efforts to overcome the problems of left-handed-friendly education in Indonesia can be seen in scheme (1) below:

**Scheme 1. Description of Efforts to Overcome Left-Hand Friendly Education Problems**

Based on the description and scheme (1) above, it can be concluded that efforts to overcome the learning problems experienced by left-handed students in schools/madrasahs are still provide relatively more extended time for assignments than other students. However, learning facilities have not been provided at all, because the policy that regulates left-handed-friendly education does not yet exist. Of course, this is an important concern for the government and organizers of educational institutions, as an effort to optimize the potential of left-handed students and create a sense of learning comfort for left-handed students.
Conclusion
Based on the description of the findings and discussion above, it is concluded that there is no specific policy in education that regulates left-handed-friendly education, it is still a general policy on inclusive education. This can be seen from (1) there is no consideration of left-handed-friendly facilities at the elementary, secondary, and higher education levels, (2) educational institution facilities are not friendly to left-handed students, and (3) there is no anticipation of the obstacles that arise. Arise related to facilities that are not left-handed friendly. Meanwhile, the efforts made by teachers or organizers of educational institutions are still providing relatively longer free time for assignments for left-handed students compared to other students in general.

Recommendation
Based on the findings of this study, researchers recommend policy makers to make special policies (regulations) for teachers in providing special treatment for left-handed students (especially in the allocation of time for completing tasks) and for school or madrasah leaders to establish internal policies regarding the provision of learning facilities for left-handed students. Furthermore, the organizers of the education unit seek to provide left-handed-friendly educational facilities in accordance with the number of left-handed students. Thus, education in Indonesia will be more humane in facilitating the developmental needs of children.

References


