Studies in Learning and Teaching (SiLeT)
Homepage: https://scie-journal.com/index.php/SiLeT
Email: silet@scie-journal.com

p-ISSN: 2722-399X; e-ISSN: 2722-1857
SiLeT, Vol. 4, No. 3, December 2023
Page 608-621
©2023 SiLeT

Graphological Construction of Students' Writing as a Consideration for Differentiated Learning of Indonesian Language

Wachyudin[1], Hamdani[1], *F Putri[1], Y Meldia[2]
[1]Indonesian Language and Literature Education, Faculty of Teacher Training and Educational Sciences, Universitas Islam Nusantara, Indonesia
[2]SMA Mutiara Islami Plus, Bekasi, Indonesia

Article Info

Article history:

Received August 21, 2023
Revised December 26, 2023
Accepted December 28, 2023
Available Online December 31, 2023

Keywords:

Graphology;
Differentiated learning;
Alphabetically;

ABSTRACT

Teachers must attempt to learn about students' learning styles, psychological conditions, emotions, and personal conditions through non-cognitive diagnostic assessments. No one can learn purely visual, auditory, or kinesthetic since they are all prejudiced. Therefore, another non-cognitive approach is needed, specifically graphology. The study aims to determine changes in learning model methodology application that are appropriate to the students' conditions. The research method used by the researcher was a qualitative descriptive method. This study describes the results of analyzing students' handwriting in X-1 class of SMA Mutiara Islami Plus Bekasi. Several categories were analyzed, including the writing slant, writing line slant, writing size, word, and line spacing in writing, as well as the letter analysis (a, t, and j). The analysis results were organized in differentiated learning using a method of Inquiry Training Learning. This handwriting analysis can assist educators in discovering and determining students' interests and talents further.

https://doi.org/10.46627/silet

INTRODUCTION

Great learning is a planned and implemented learning process that assists the learning process aligned with the student's needs and aspirations. It is required to develop a learning model to achieve the students' target learning since the current learning model is still limited due to the incompatibility of the teaching model created by educators with the students who receiving it. A planned learning specific goal is to provide learning that meets needs and wishes of students from the teachers while following the current curriculum.

المادة مهمة ولكن الطريقة اهم من المادة الطريقة مهمة ولكن المدرس اهم من الطريقة المدرس مهم ولكن روح المدرس اهم من المدرس
(Alm. KH. Zarkasih)

"Learning materials are essential, but Methodology At-Thariqah is way more important. Teachers are important, but bringing the essence of a teacher in learning is much more important". The late KH. Zarkasih delivered the following quote. Educators may not be entirely present in teaching and learning, so having a tariqah, materials, and learning methodologies is necessary. This study focuses on students' characteristics and environments that they live in, such as the strength, potential, or self-state that each learner inherits naturally. Ki Hadjar Dewantara stated that the basis of child education is related to the nature of the times and the nature of nature, which is then applied in an Independent Curriculum.

The curriculum, which is interpreted in a narrow sense as a plan for students' learning experience in an educational institution, is very useful in developing the curriculum (Oktapiani,

https://doi.org/10.46627/silet.v4i3.331

2019). The use of technology and competency needs in the current era are one of the foundations for the development of the Merdeka Curriculum (Marisa, 2021). The Merdeka Curriculum as a learning recovery option launched by the Ministry of Education, Culture, Research and Technology issued a policy regarding the development of the Curriculum (Nugraha, 2022). According to Sibagariang et al. (2021), the driving teacher must have a role that can be used as a role model or example, namely by having the ability to organize learning as effectively as possible and must also be able to bring significant changes (Sibagariang et al., 2021). The curriculum as a program or plan becomes meaningless if it is not implemented into learning and vice versa (Rahayu et al., 2022). The curriculum functions as an adjustment, integrator, differentiator, preparation, selection and diagnostic. This makes the curriculum one of the main and very important components in the educational process (Angga et al., 2022). My main requirement for independent learning is to give teachers the confidence to feel independent when learning (Marisa, 2021). The independent curriculum provides opportunities for students to learn in a more active and challenging way by elaborating various technological media and 21st century skills (Hasim, 2020).

Several studies agree that the curriculum is in an important position in building civilization and the development of the nation's generation (Sutjipto, 2016). Free learning encourages the formation of an independent soul character where educators and students can freely and pleasantly explore knowledge, attitudes, and skills from the environment (Daga, 2021). To achieve ideal education and in accordance with the values of the Indonesian nation is a shared responsibility and awareness (Ainia, 2020). The concept of active, innovative and comfortable learning must be able to realize students according to the needs of the times, especially in this era (Ariga, 2022). The concept of an independent learning policy is that teachers as educators are able to create a comfortable learning atmosphere and are able to generate enthusiasm for learning so that students do not feel burdened by the material delivered by the teacher (Yusuf & Arfiansyah, 2021). This Independent Curriculum, the Pancasila Student Profile, acts as a reference that guides all policies and reforms in the Indonesian education system, including learning and assessment (Kemdikbudristek, 2021). Various problems arise from various factors not only from the students themselves, but also from teachers who use learning techniques that are not in accordance with the conditions or circumstances, lack of utilization of learning media, and monotonous teaching (Nurulaeni & Rahma, 2022). Learning also needs to be carried out outside the classroom to increase the activeness of students and innovate themselves (Jannah et al., 2022). Learning supervisors carry out supervision and mentoring activities in the implementation of the Merdeka Curriculum. currently (Syafi'i, 2021). The curriculum is a structured educational plan hosted by schools and educational institutions, which is not focused on the teaching and learning process, but rather on shaping the personality and improving the standard of living of students in the community (Bahri, 2017). The independent curriculum adheres to differentiated learning, teachers must know the ability standards of each student (Wahyuningsari, 2022).

Independent curriculum is one that adopts intracurricular learning, where teachers will be better optimized so that students may have enough time to explore concept and advance their abilities that can be developed through differentiated learning. In differentiated learning, teachers are required to be more flexible in carrying out the learning process. One of the values and roles of educators is to create learning that liberates students' thinking and potential (Elisabeth, 2022). Students have a variety of learning that are in accordance with their respective representation. No one can learn purely visual, auditory, or kinesthetic since they are all prejudiced. Therefore, another non-cognitive approach is needed, specifically graphology. Aiming for changes in learning models application that are appropriate for students, educators can also produce new innovations to prevent students from getting bored and to boost their enthusiasm for learning.

Graphology is the study of handwriting patterns for determining and understanding a person's character (Fikri, 2012). Handwriting is a manifestation of someone's subconscious and

conscious mind that shows an image of a person's basic character. Thereby, handwriting is a reliable personality tool that someone cannot falsify (Lestari & Laksono, 2022). We can guess their thoughts with graphology, and by doing so, we can identify their traits, characters, and personalities (Abhicandra, 2017). The handwriting contains information that can identify a person's traits, mental development, and levels of health in more detail, which can determine students' interests and talents based on personal. Therefore, it is necessary to analyze these students' handwriting using graphology, in which the analysis results are presented in the form of a learning model that creates flexible teaching and learning activities while maintaining a focus on essential materials, character development, and teacher who teach following students' needs and characteristics.

The development that a child experiences begins at conception, occurs through biological, cognitive, and social-emotional processes and lasts a lifetime. Biological processes related to the formation of essential traits (Yulianti et al., 2022). We can learn more about students utilizing handwriting analysis, and teachers can better situate students who respond quickly and those who are not in developing a student teaching model based on differentiated learning. It can also help students realize that there is a connection between school and their own desires to learn, show a connection to all of their learnings, use general creativity to students, and can improve their motivation to learn. This field of psychology studies a person's personality and character by analyzing their handwriting. The analyzed letters include the letter a (demonstrates the student's active communication), the letter t (shows the students' passions and optimism), and the letter j (indicates the students' wise attitude), which results in different characteristics in each writing.

Lestari and Laksono (2022) conducted a previous study on graphological analysis. They published an article in a journal titled "Implementation of Handwriting Patterns to Understand the Character of First-Grade Students at SDN Sumberjati 1." The results of the graphological study on the characteristics of first-grade elementary students and the character may be seen in the handwriting showed good and bad character. In contrast to the previous study, this study is conducted to determine the obstacles of differentiated learning with a representation system. Using graphology or analyzing students' handwriting is another approach than non-cognitive that can help educators to discover further students' talents and interests.

RESEARCH METHOD

This research used a descriptive and qualitative method. The descriptive approach is able to solve practical problems in the development of science, especially for graphology research (Yuliani, 2018). This study describes the analysis of students' handwriting from several categories, including the writing slant, writing line slant, writing size, words and line spacing in writing, as well as the letter (a, t, and j) analysis, which will express students' emotional attitudes, students' optimism, students' responsible attitudes, and others. After everything was analyzed, data triangulation was performed by involving the school party, particularly the homeroom teacher and some involved kids.

In accordance with the curriculum, students are required to be active and creative in the learning process and teachers with all their knowledge not only act as teachers but are required to be inspirers (Rindiantika, 2017). Learning optimizes students' thinking and creativity to increase their skills and knowledge, learning to discover through experiments, for example (Ikhsan & Hadi, S, 2018). The effectiveness of these approaches and methods in learning is largely determined by the teacher, namely the teacher who drives independent learning (Mulyasa, 2021).

The data were obtained from 19 students of X-1 class of SMA Mutiara Islami Plus Bekasi. This analysis data was then triangulated by conducting interviews with the school party, including the homeroom teacher and related students. Following that, it generates an analysis of students' characters in learning that can be used as a learning model in the classroom.

https://doi.org/10.46627/silet.v4i3.331

RESULTS AND DISCUSSION

Results

This study results in constructing highly diverse handwriting analysis results of students in X-1 class at SMA Mutiara Islami Plus Bekasi. The graphology analysis construction was developed from direct observations of the research subject, student writing, and confirmation or triangulation results with the school part, including teachers and students. Each student's handwriting has a different style but generally shares similar characters and traits.

The following categories are analyzed: the slant of writing, the slant of writing line, writing size, word and line spacing in writing, and the letters analyses (a, t, and j). The results of this handwriting analysis show every student's distinctive characteristic, and these distinctions form a subject's character. One student's handwriting may have several characters, and each character does not only have one meaning. Table 1 below includes research data that shows the number of writing types from each subject or name.

Table 1. General analysis findings

Handwriting Categories	Handwriting Types	Total	Subjects
The Slant of Writing	Right	4	ABB, EW, MRM, NP
	Left	2	NSM, SP
	Vertical	13	APP, AM, BSR, FSR, HL, IP, MFA, NAZ, NVL, RAN, SAT, YAR, Z
The Slant of Writing Line	Upward	6	ABB, AM, ASR, IP, NAZ, Z
	Downward	4	APP, FSR, NP, RAN
	Straight	7	EW, HL, MFA, MRM, NSM, NVL, YAR
	Varied	2	SPY, SAT
The Writing Sizes	Large	7	ABB, BSR, HL, MRM, NVL, NP, Z
	Small	3	IP, NSM, RAN
	Normal	9	APP, AM, EW, FSR, MFA, NAZ, SPY, SAT, YAR
The Space Between Words	Narrow	4	MRM, MSM, NP, YAR
	Wide	9	ABB, APP, BSR, EW, FSR, HL, NAZ, SPY, SAT
	Normal	6	AM, IP, MFA, NVL, RAN, Z
The Space Between Lines	Narrow	8	AM, FSR, HL, IP, NSM, NVL, RAN, YAR
	Wide	4	ABB, BSR, NAZ, Z
	Normal	7	APP, EW, MFA, MRM, NP, SPY, SAT

According to the table above, five categories of general analysis findings can be seen in the students' handwriting. It describes various writing characteristics, which are dominated by slanted vertical writing. Table 2 below demonstrates specifically the analysis of the letters they wrote, including the letters (a, t, and j).

Table 2. Specific analysis findings (Letters)

Handwriting Categories	Writing Types	Total	Subjects
Analyses of Letter (a)	Closed counter	13	APP, AM, BSR, EW, HL, MFA, MRM, NSM, NAZ, NVL, NP, RAN, SPY
	Opened counter	4	FSR, SAT, MFA, Z
	Closed counter + *Self-Deceit*	2	ABB, IP
Analyses of Letter (t)	The stem length 1x of middle *zone*	3	FSR, HL, MRM
	The stem length 2x of middle zone	12	ABB, APP, AM, BSR, EW, IP, MFA, NSM, NVL, NP, RAN, YAR
	The stem length 3x of middle *zone*	4	NAZ, SPY, SAT, Z

https://doi.org/10.46627/silet.v4i3.331

Analyses of Letter (j)	Dot Over + Curved loop at the bottom	12	APP, BSR, EW, FSR, IP, MFA, MRM, NAZ, NVL, SPY, SAT, Z
	No dot over with curved loop at the bottom	7	ABB, AM, HL, NSM, NP, RAN, YAR

Discussions

Handwriting data from the analysis of several letters, especially the letters a, t, and j, are presented in the table above. The table contains 19 subjects/students, which aligns with the total analysis results. Using graphology analysis, intuitive processes, interviews with the research subjects, and the school party/ data triangulation activities of the analysis results are all required to determine each student's character. The analysis results per category are described below (the slant of writing, the slant of writing line, writing size, word and line spacing in writing, and the letters analyses of a, t, and j), along with confirmation or triangulation from the school party, including the homeroom teacher and student representatives.

The Slant of Writing

The writing slant, a combination of the writing slant and the pen pressure, reveals the writers' basic emotions within themselves (Amend & Ruiz, 2014). This analysis category is divided into the following three parts.

Rightward slant

This piece of writing portrays a person who tends to be impulsive (quick to act unexpectedly by impulse), firm in their stance, have greater sympathy for others and is more sensitive. Table 1 shows four students' data with rightward slant handwriting. Figure 1 below is an example of a student's rightward slant handwriting.

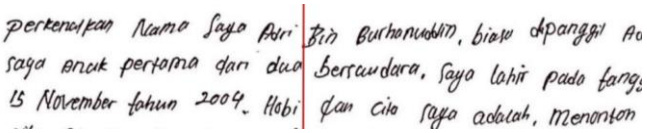


Figure 1. Rightward slant

Leftward Slant

This type of writing indicates a writer who tends to be protective, typically thinks logically, and is not impulsive but is isolated from others. Table 1 shows two students' data with leftward slant handwriting. A student's leftward slant handwriting is seen in the Figure 2.

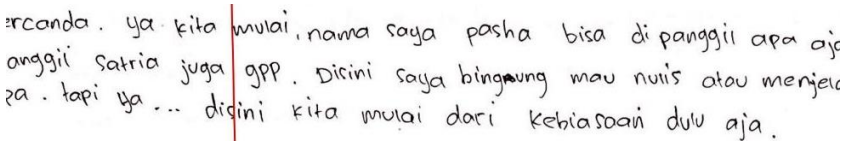


Figure 2. Leftward slant

Upright/Vertical

Writing in a slanted upright or vertical indicates an objective person, who is heavily influenced by thoughts rather than feelings, and these writers have good control over their emotions. Table 1 shows 13 students with upright/vertical handwriting. Figure 3 is an example of a student's slanted vertical handwriting.

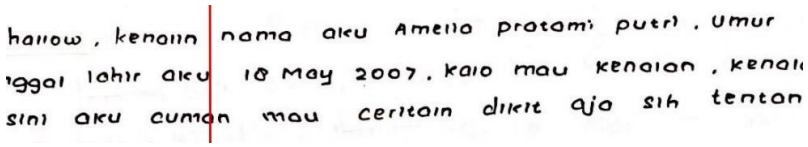


Figure 3. Slanted vertical

https://doi.org/10.46627/silet.v4i3.331

The Slant of Writing Line

The significance of a writing's slant is similar to expressing one's feelings; in this case, the line's slant refers to a person whose emotional state is connected to those around him (Levitt, 2004). This analysis category is divided into the following four parts.

Upward

This type of writing indicates a high spirit, exudes a strong sense of optimism and enthusiasm, tends to be independent, and does not rely on others. Table 1 shows six students' data with slanted upward-line handwriting. Figure 4 below is an example of a student's slanted upward-line handwriting.

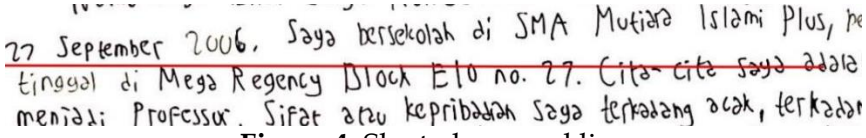


Figure 4. Slanted upward line

Downward

The writer tends to show a sense of pessimism, depression, or sadness and in need of encouragement or motivation from the closest person. Table 1 shows four students' data with slanted downward-line handwriting. Figure 5 is an example of a student's slanted downward line handwriting.

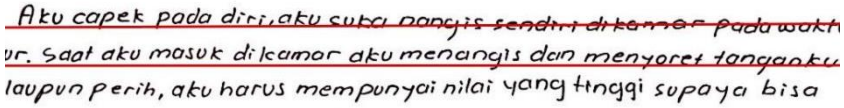


Figure 5. Slanted downward line

Straight

These writers show a consistent, organized, and logical character. Since they tend to be organized, they are way systematic, neat in their work, and have excellent time management skills. Table 1 shows there are seven students' data with slanted straight-line handwriting. Figure 6 is an example of a student's slanted straight-line handwriting.

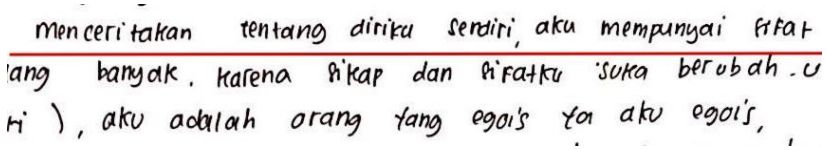


Figure 6. Slanted straight line

Varies

This writer has an inconsistent character and unexpected habits and is unpredictable. Table 1 shows two students' data with slanted varied-line handwriting. Figure 7 is an example of a student's slanted varied-line handwriting.

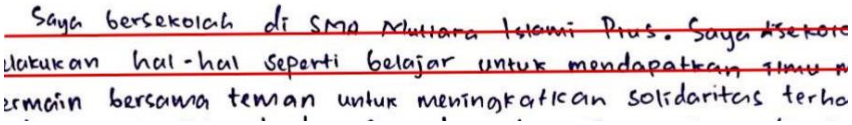


Figure 7. Slanted varied line

Writing Sizes

Letter size shows the writer's subconscious feelings about how they connect with others. The size of the middle zone letters can be used to determine handwriting sizes. The standard letter size is 3 millimeters; if it is smaller, it is considered a small letter size, and if it is bigger, it is included in a large letter size. This analysis category is divided into the following three parts.

https://doi.org/10.46627/silet.v4i3.331

Large

People with large handwriting sizes tend to have a dominant character and risk-taking personality. They also show an expansive character, self-confidence, and hold desire to stand out. Table 1 shows seven students' data with large handwriting sizes. Figure 8 is an example of a student's handwriting in large size.



Figure 8. Large handwriting size

Small

The writer shows more directed, detail-oriented, and perfectionist traits. Thus, people with small handwriting sizes tend to be more meticulous and cautious. Table 1 shows three students 'data with small handwriting sizes. The following is an example of a student's handwriting in small size.

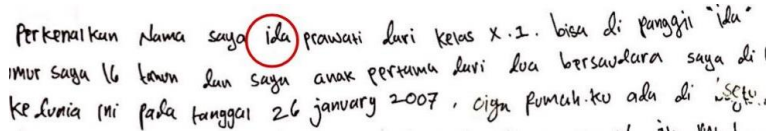


Figure 9. Small handwriting size

Normal

This type of writing shows a balanced, stable, and quite flexible trait. People with medium-sized handwriting tend to adapt to the environments easily, have excellent analytical skills, and have a high level of self-awareness. Table 1 shows nine students' data with normal handwriting sizes. Figure 10 is an example of a student's handwriting in normal sizes.

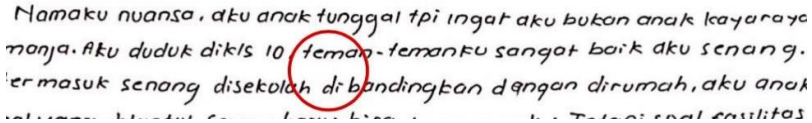


Figure 10. Normal handwriting size

Space Between Words

The space between the written words represents the writer's desired distance between themselves and society. This analysis category is divided into the following three parts.

Narrow

The writer's character tends to be introverted, cautious and prefers to keep a distance from others. Table 1 shows four students' data with narrow word spacing. Figure 11 is an example of a student's handwriting with narrow word spacing.

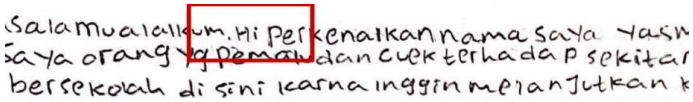


Figure 11. Narrow word spacing

Wide

The writer indicates a more open and extroverted character. People with wide word spacing in writing are typically more at ease in crowds, sociable, and capable of dealing with social pressure. Table 1 shows nine students' data with wide word spacing. Figure 12 is an example of a student's handwriting with wide word spacing.

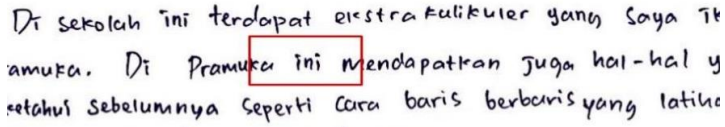


Figure 12. Wide word spacing

https://doi.org/10.46627/silet.v4i3.331

Normal

People with normal writing space can control their emotions while still adapting well to social situations. They tend to show a balanced and stable character. Table 1 shows six students' data with normal word spacing. Figure 13 is an example of a student's handwriting with normal word spacing.

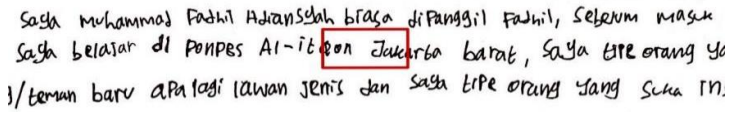


Figure 13. Normal word spacing

Space Between Lines

The written width and narrowness of the spaces by the writer indicate the order and clarity of their thoughts and the extent of interaction they want with their surroundings. This analysis category is divided into the following three parts.

Narrow

Someone tends to feel confused, anxious, secretive, and less interested in humor. Table 1 shows eight students' data with narrow line spacing. Figure 14 is an example of a student's handwriting with narrow lines spacing.

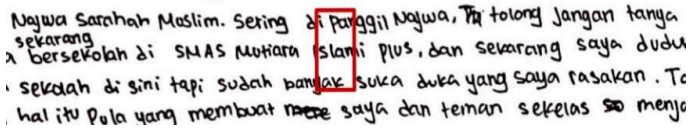


Figure 14. Narrow lines spacing

Wide

A character of someone who tends to be cautious and act formally with others. Table 1 shows four students' data with wide line spacing. Figure 15 is an example of a student's handwriting with wide lines spacing.

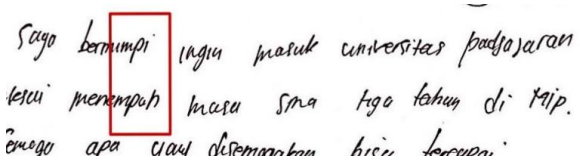


Figure 15. Wide lines spacing

Normal

This writing indicates a person who has a mature mentality and is able to think clearly. Table 1 shows seven students' data with normal line spacing. Figure 16 is an example of a student's handwriting with normal lines spacing.

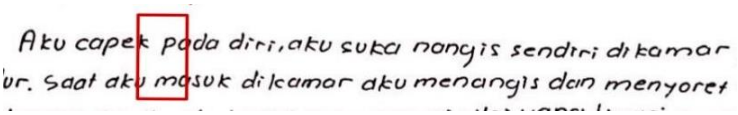


Figure 16. Normal lines spacing

Analysis of Letters

The letter (a)

Closed counter

The writer tends to be less communicative, prefer writing, and like to sort word out before speaking. Table 2 shows 13 students' data with a closed counter letter (a). Figure 17 is an example of a student's handwriting with a closed counter letter (a).

https://doi.org/10.46627/silet.v4i3.331

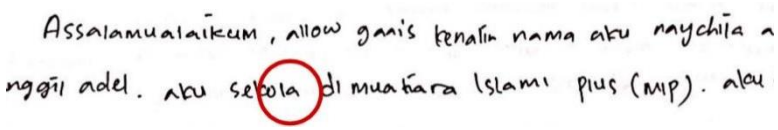


Figure 17. The analysis of letter (a)

Open counter

The writer often likes to talk, has great verbal skills, and can easily convey their thoughts, ideas, and opinions. Table 2 shows four students' data with an open counter letter (a). Figure 18 is an example of a student's handwriting with an open counter letter (a).

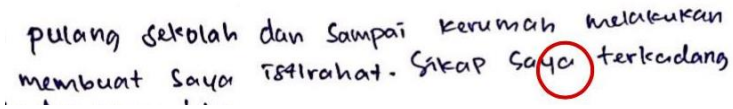


Figure 18. Analysis of letter (a)

Closed counter + Self-deceit

The writer tends to be reasonable, is not particularly good at communicating, prefers to write and likes to sort words out before speaking, and avoids negative issues within themselves. Table 2 shows two students' data with closed counter + self-deceit letter (a). Figure 19 is an example of a student's handwriting with a closed counter + self-deceit letter (a).

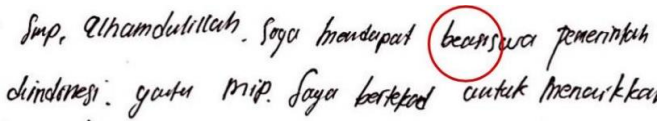


Figure 19. Analysis of letter (a)

Letter (t)

Stem length 1x of the middle zone

The writer shows independent thinking with their beliefs. Table 2 shows three students' data with a letter (t) stem length 1x of the middle zone. Figure 20 is an example of a student's handwriting with a letter (t) stem length 1x of the middle zone.



Figure 20. Analysis of letter (t)

Stem length 2x of the middle zone

Their thoughts are stable and normal. Table 2 shows 12 students' data with a letter (t) stem length 2x of the middle zone. Figure 21 is an example of a student's handwriting with a letter (t) stem length 2x of the middle zone.

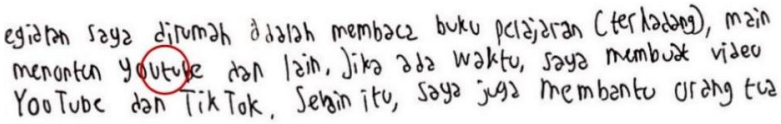


Figure 21. Analysis of letter (t)

Stem length 3x of the middle zone

The writer is easily swayed by others and is relatively proportional. Table 2 shows four students' data with a letter (t) stem length 3x of the middle zone. Figure 22 is an example of a student's handwriting with a letter (t) stem length 3x of the middle zone.

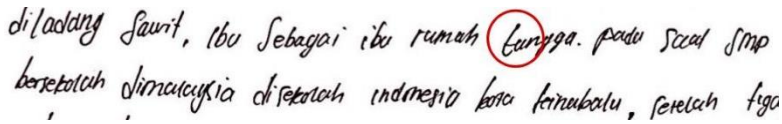


Figure 22. Analysis of letter (t)

https://doi.org/10.46627/silet.v4i3.331

Letter (j)

A Dot Over + A Curved loop at the bottom

Someone more likely to think out of the box has an assertive attitude and has a lot of fresh ideas. Table 2 shows 12 students' data with a letter (j) with a dote over and a curved loop at the bottom. Figure 23 is an example of a student's handwriting with a letter (j) with a dot and a curved loop at the bottom.

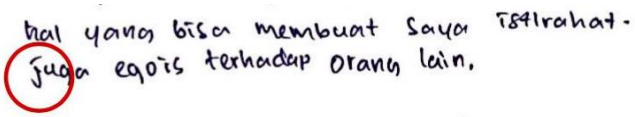


Figure 23. Analysis of letter (j)

A Curved loop at the bottom with no dot over

The writer is creative and always coming up with new ideas. Table 2 shows seven students' data with a letter (j) with a curved loop at the bottom but no dot over. Figure 24 is an example of a student's handwriting that has a letter (j) with a curved loop at the bottom but no dot over.

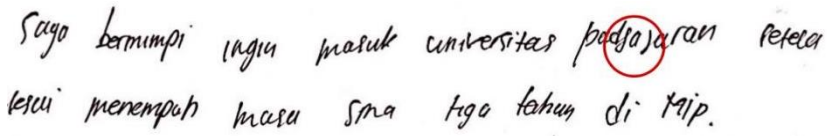


Figure 24. Analysis of letter (j)

The Criteria for Developing a Learning Model Process

According to the findings of the aforementioned research on student characteristics, most students in the class are outlined as those who think objectively while having consistent, high enthusiasm, flexibility, and easy-to-get-along-with characters. On the other hand, the remaining students partly share characteristics such as feeling anxious sometimes, sympathetic to others, and preferring writing over speaking. In curriculum taxonomy of the importance of teaching students, learning by engaging in natural and instinctive processes will be more effective (Marzano et al., 2007). Analyzing students' handwriting aims to develop classroom learning that is aligned between students and educators.

In-class learning shifts the learning model from one that assumes all students in one class are ready to study the same subject to one that emphasizes differentiated learning. Learning outcomes are based on stages organized to correspond with students' developmental stages. This change is based on the importance of flexibility, less demanding learning targets, and the need for designing learning following the stage of students' learning outcomes (teaching at the right level). The students' learning achievement levels vary despite being the same age (Zamjani et al., 2020).

The results of analyzing students' characteristics will be used as a differentiated teaching model that follows the students' learning styles or abilities. According to Bruce and Marsha (2000), a model of teaching is a plan or pattern that can be used to shape curriculum (long-term courses of studies), to design instructional materials, and to guide instruction in the classroom and other settings.

The Inquiry Training model, developed by Richard Suchman, will be used for this differentiated learning. Its goals are to develop students' ability to think/mental processes inductively, improve their ability for academically reasonable thinking and improve their ability to discover theories. It may also be effectively used to improve students' personal and social skills. This model was chosen since the X-1 class students had diverse learner characteristics, allowing a teaching model with different learning styles to be created from the Indonesian language subject. The following is the design of the learning activities plan.

https://doi.org/10.46627/silet.v4i3.331

1. The introduction begins the lesson as it normally would;
2. The main activity (i.e., the learning process) employs the inquiry training learning model with differentiated learning. The lesson to be taught will be poetry in the tenth-grade class's final chapter. The phases of the inquiry training model include problem orientation, problem statements, making of findings, exploration (collecting data or information), testing findings, and making conclusions.

A teaching model with various learning styles may be adjusted to learners' readiness, interests, and learning profile. Based on the graphological analysis's findings above, it can be seen that students can be divided into three groups according to the division of analysis results in an outline manner.

a. Students who have character traits –A writer who shows extroverted or more open character and who is more at ease in crowds, sociable, and capable of dealing with social pressure- according to the graphological analysis results, belong to the kinesthetic learner group.
b. Students who have character traits -The writer who tends to be less communicative, prefer writing and like to sort word out before speaking, and prefers) belong to the auditory learner group.
c. Students who have character traits -The writer who shows a more directed, meticulous, and cautious- belongs to the visual learner group.

Each student has a unique learning style, as well as different levels of understanding. Therefore, the three differentiated learning styles are divided based on the analysis results. A bar graph in Figure 25 below shows the number of divides among the three groups is shown below.

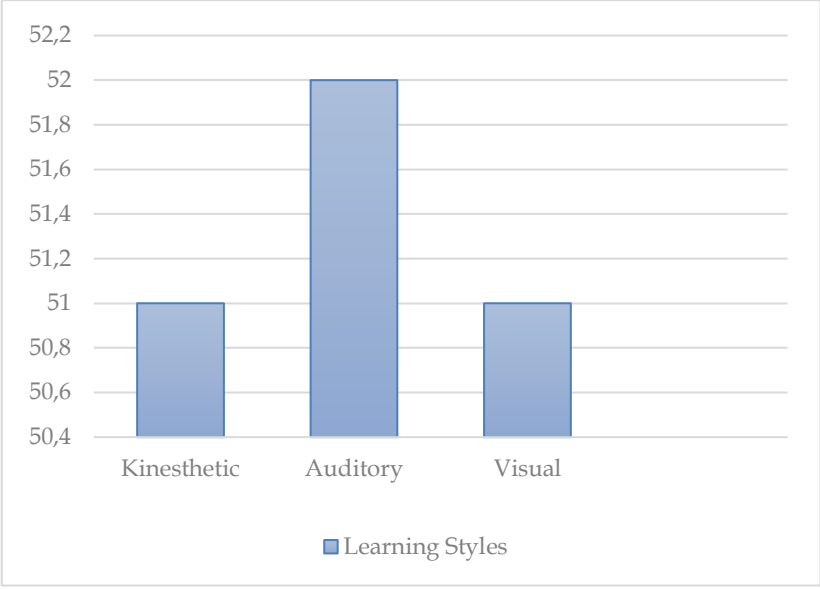


Figure 25. Learning styles

Learning strategies are derived from the division of learning styles, namely content, process, and product differentiations. Due to the fact that differentiated learning refers to the learning outcomes, it will also include process and product differentiation in this inquiry training teaching model. Table 3 is the division of three differentiated learning styles in this Indonesian language lesson on poetry.

Table 3. Differentiation of process proses and products based on learning styles

No.	Learning Styles	Process	Products
1.	Kinesthetic	Learn directly about poetry declamation by well-known poets.	Making a mini vlog and declaiming poems.
2.	Auditory	Listen to the teacher's and other media's explanations.	Making a PowerPoint presentation on how to write great poems and recognize other poets' works.
3.	Visual	Provided with modules, observe images or watch learning videos	Making mind mapping (how to read poems and poetry anthology from well-known figures).

From this learning style, an educator does not mean providing individualized services but rather adjusting to the learners' average ability, providing assistance and guidance to learners, allowing them to grow in line with their abilities, and allowing them to do the way of learning that suits them. The benefits of differentiated learning include: learners' happiness in learning because it prioritizes their learning interests. Learners will also be more responsive, understand the material deeper in their own ways, and have greater confidence in their own abilities, as well as educators are also pleased with the outcomes. By fostering mutual respect, the learning environment between educators and students will encourage students to attend school regularly and enjoy learning in the classroom.

CONCLUSION

According to the results of the analysis, it can be concluded that there are results of triangulation/confirmation with homeroom teachers and related students. The interview results with the homeroom instructor were found to be the same as the analysis results. One student, however, differs from the subject EW in the results of triangulation with students, as shown by the meaning of his handwriting and the expression during the interview. The analysis of letter a's handwriting revealed that it has the shape of writing (no gap, and the letter A is dominantly round with tightly closed), indicating a writer tends to be less communicative. At the same time, during an interview with this student, he showed a person who tends to prefer talking, has good verbal skills, and can easily convey thoughts, ideas, and opinions.

It can be seen from the analysis and interview triangulation' results that there are some differences between the analysis and the interview's results since several factors influence them, as follows (1) Graphology can be interpreted differently by the writer. As a result, the results of the graphological analysis may vary depending on the interpretation (2) A person's handwriting habits may change over time or be influenced by other factors such as unhealthy physical conditions or fatigue. It can lead to changing handwriting and different graphological analysis results at different times. However, confirmation is required to verify the truth of handwriting analysis, one of which comes in the form of an interview to obtain more accurate results on a person's character.

The results of this handwriting analysis can be applied to non-cognitive diagnostics of students in differentiated learning with different learning styles through the inquiry training teaching model, which has implications for learning that must be based on the interests, experiences, and development patterns of students' characteristics. In-class teaching is in the hands of students under the guidance of educators or teachers. In this case, the student is seen as a person. Educators' roles are to guide and assist students' emotional development and self-adjustment through learning experiences. Thus, educators must be able to hone their psychology and learning methodology.

REFERENCES

Abhicandra. (2017). *Panduan lengkap grafologi memahami watak, karakter, dan kepribadian orang berdasarkan tulisan tangan*. Araska.

Ainia, D. (2020). Merdeka belajar dalam pandangan Ki Hadjar Dewantara dan relevansinya bagi pengembangan pendidikan karakter. *Jurnal Filsafat Indonesia*, 95-101.

Amend, K. K., & Ruiz, M. S. (2014). *Dasar-dasar lengkap analisis tulisan tangan: Sumber utama bagi pakar grafologi seluruh dunia.* Pustaka Belajar.

Angga, Suryana, C., Nurwahidah, I., Hernawan, A. H., & Prihantini. (2022). Komparasi implementasi kurikulum 2013 dan kurikulum merdeka di Sekolah Dasar Kabupaten Garut. *Jurnal Basicedu*, *6*(4), 5877–5889. https://doi.org/10.31004/basicedu.v6i4.3149

Ariga, S. (2022). Implementasi Kurikulum Merdeka Pasca Pandemi Covid-19. *Edu Society: Jurnal Pendidikan, Ilmu Sosial, dan Pengabdian Kepada Masyarakat*, *2*(2), 662-670. https://doi.org/10.56832/edu.v2i2.225

Bahri, S. (2017). Pengembangan kurikulum dasar dan tujuannya. *Jurnal Ilmiah Islam Futura*, *11*(1), 15. https://doi.org/10.22373/jiif.v11i1.61

Bruce, J., & Marsha, W. W. (2000). *Models of Teaching*. Prentice Hall International.

Daga, A. T. (2021). Makna merdeka belajar dan penguatan peran guru di Sekolah Dasar. *Jurnal Educatio FKIP UNMA*, *7*(3), 1075–1090. https://doi.org/10.31949/educatio.v7i3.1279

Elisabeth, M. (2022). *Pembelajaran berdiferensiasi: Pengertian, tujuan, aspek dan strategi pembelajaran yang berpihak pada murid*. https://ayoguruberbagi.kemdikbud.go.id/artikel/pembelajaran-berdiferensiasi-pengertian-tujuan-aspek-dan-strategi-pembelajaran-yang-berpihak-pada murid/

Fikri, I. (2012). Menggagas grafologi Islam: studi tentang konsep pengembangan kepribadian dengan pendekatan tulisan tangan Arab. *Conference Proceedings: Annual International Conference on Islamic Studies (AICIS) XII.*

Hasim, E. (2020). Penerapan kurikulum merdeka belajar perguruan tinggi di masa pandemi Covid-19. *Prosiding Webinar Magister Universitas Negeri Gorontalo*, 7.

Ikhsan, K. N., & Hadi, S. (2018). Implementasi dan pengembangan Kurikulum 2013. *Jurnal Edukasi: Ekonomi, Pendidikan dan Akuntansi*, *6*(1) 193-202.

Jannah, F., Fathuddin, T. I., & Zahra, P. F. A. (2022). Problematika penerapan kurikulum merdeka belajar 2022. *Al Yazidiy: Jurnal Sosial Humaniora dan Pendidikan*, *4*(2), 55–65. https://doi.org/10.55606/ay.v4i2.36

Kemdikbudristek. (2021). *Panduan pembelajaran dan asesmen jenjang pendidikan dasar dan menengah (SD/MI, SMP/MTs, SMA/SMK/MA)*. Pusat Asesmen dan Pembelajaran. http://repositori.kemdikbud.go.id/id/eprint/24921

Lestari, Y. I., & Laksono, K. (2022). Implementasi pola tulisan tangan untuk memahami karakter siswa kelas 1 SDN Sumberjati. *Bapala, 9*(1), 62-78.

Levitt, I. B. (2004). *Brainwriting! Enrich your life using handwriting analysis*. PT. Bhuana Ilmu Populer.

Marisa, M. (2021). Inovasi kurikulum "merdeka belajar" di era society 5.0. *Santhet : Jurnal Sejarah, Pendidikan, Dan Humaniora*, *5*(1), 66-78.

Marzano, R. J., & Kendall, J. S. (2007). *The new taxonomy of educational objectives.* Crowins Press.

Mulyasa, H. E. (2021). *Menjadi guru penggerak merdeka belajar*. Bumi Aksara.

Nugraha, T. S. (2022). Kurikulum Merdeka untuk pemulihan krisis pembelajaran. *Inovasi Kurikulum, 19*(2), 251-262.

Nurulaeni, F., & Rahma, A. (2022). Analisis Problematika Pelaksanaan Merdeka Belajar Matematika. *Jurnal Pacu Pendidikan Dasar*, *2*(1), 35-45.

Oktapiani, M. (2019). Perencanaan kurikulum tingkat satuan pendidikan di Indonesia. *Tahdzib Al-Akhlaq: Jurnal Pendidikan Islam*, *2*(1), 71-102. https://doi.org/10.34005/tahdzib.v2i1.471

Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini, P. (2022). Implementasi kurikulum merdeka belajar di sekolah penggerak. *Jurnal Basicedu*, *6*(4), 6313–6319. https://doi.org/10.31004/basicedu.v6i4.3237

Rindiantika, Y. (2021). Model pembelajaran paikem: Suatu upaya dalam meningkatkan aktivitas dan kreativitas siswa dalam proses pembelajaran. *Intelegensia: Jurnal Pendidikan Dan Pembelajaran*, *2*(1), 103–116.

Sibagariang, D., Sihotang, H., & Murniarti, E. (2021). Peran guru penggerak dalam pendidikan merdeka belajar di Indonesia. *Dinamika Pendidikan*, *14*(2), 88-99.

Sutjipto. (2016). Pengembangan kurikulum dengan memanfaatkan teknologi informasi dan komunikasi. *Kwangsan: Jurnal Teknologi Pendidikan*, 4(2), 119-137. https://doi.org/10.31800/jtp.kw.v4n2.p119--137

Syafi'i, F. F. (2021). Merdeka belajar: Sekolah penggerak. P*rosiding Seminar Nasional Pendidikan Dasar "Merdeka Belajar Dalam Menyambut Era Masyarakat 5.0"*.

Wahyuningsari, D. (2022). Pembelajaran berdiferensiasi dalam rangka mewujudkan merdeka belajar. *Jurnal Jendela Pendidikan, 2*(4), 529-535.

Yuliani, W. (2018). Metode penelitian deskriptif kualitatif dalam perspektif bimbingan dan konseling. *Quanta: Jurnal Kajian Bimbingan dan Konseling dalam Pendidikan*, *2*(2), 83–91.

Yulianti, R. P., Siregar, E. S., & Hidayat, I. M. (2022). Pengaruh motivasi belajar dan kemampuan kognitif terhadap kinerja siswa. *Jurnal Ilmiah Korpus*, *6*(2).

Yusuf, M., & Arfiansyah, W. (2021). Konsep "merdeka belajar" dalam pandangan filsafat konstruktivisme. *Al-Murabbi: Jurnal Studi Kependidikan dan Keislaman, 7*(2), 120-133. https://doi.org/10.53627/jam.v7i2.3996

Zamjani, I., Aditomo, A., Pratiwi, I., Solihin, L., Hijriani, I., Utama, B., Anggraena, Y., Felicia, N., Simatupang, S. M., Djunaedi, F., Amani, N. Z., & Widiaswati, D. (2020). *Naskah akademik sekolah penggerak.* Pusat Penelitian Kebijakan Badan Penelitian dan Pengembangan dan Perbukuan Kementerian Pendidikan dan Kebudayaan.

Author (s):

Wachyudin
Indonesian Language and Literature Education, Faculty of Teacher Training and Educational Sciences, Universitas Islam Nusantara
Jl. Soekarno Hatta No.530, Sekejati, Kec. Buahbatu, Kota Bandung, Jawa Barat 40286, Indonesia
Email: wachyudin@uninus.ac.id

Hamdani
Indonesian Language and Literature Education, Faculty of Teacher Training and Educational Sciences, Universitas Islam Nusantara
Jl. Soekarno Hatta No.530, Sekejati, Kec. Buahbatu, Kota Bandung, Jawa Barat 40286, Indonesia
Email: hamdani@uninus.ac.id

*Frecelia Putri (Correspponding Author)
Indonesian Language and Literature Education, Faculty of Teacher Training and Educational Sciences, Universitas Islam Nusantara
Jl. Soekarno Hatta No.530, Sekejati, Kec. Buahbatu, Kota Bandung, Jawa Barat 40286, Indonesia
Email: freceliaputri@uninus.ac.id

Yusra Meldia
SMA Mutiara Islami Plus
Jl. Sukaragam, Kec. Serang Baru, Kabupaten Bekasi, Jawa Barat 17330, Indonesia
Email: yusrameldia70@gmail.com