Differentiated Teaching Module for Indonesian Language Based on Graphological Analysis of Letter I, R, G

*Hamdani¹, F Hartati¹, N Setyaningrum²
¹Departement of Indonesian Language and Literature, Faculty of Teacher Training and Education, Universitas Islam Nusantara, Indonesia
²SMA IT Mentari Ilmu, Indonesia

Article Info

Article history:
Received June 18, 2023
Revised August 28, 2023
Accepted August 28, 2023
Available Online August 31, 2023

Keywords:
Curriculum;
Differentiated learning;
Graphology;
Heutagogy;
Independent;
Teaching module;

ABSTRACT

There are many ways that can be done to find out the individual characteristics of each student. The purpose of this study was to determine the internal potential of 10th Grade “Halimah” Students by using graphological analysis based on general characteristics, which is the slope of the writing direction, the slope of the writing lines, the spacing between words, and the spacing between lines, and based on the general characteristics, which are the letters “I”, “R”, and “G”. This study uses a qualitative descriptive research method. This method is used to describe the general description of the research, which are the characteristics of handwriting with the internal potential of students and to interpret graphology in several aspects. Then, this type of descriptive research is also capable of solving practical problems in the development of science, especially for graphological research. The stages of this research are handwriting analysis, triangulation through interviews, grouping results. The results of the analysis show that the internal potential of students is variative, so that appropriate learning methods or approaches are needed in order to achieve individual student learning goals.

INTRODUCTION

As is well known, the results of research from the Ministry of Education and Research and Technology show that education in Indonesia is currently experiencing a loss of learning as a result of the Covid-19 pandemic. Therefore, the Ministry of Education and Culture created an effort to improve the quality of education, namely Merdeka Learning. Merdeka Learning frees teachers in preparing learning systems and freedom for students to choose their preferred way of learning in order to achieve learning goals. One of the efforts to improve the quality of education is by having an assessment, the assessment functions to obtain information about students which can be used as a benchmark in determining the learning process. How to get student information can also be done by handwriting analysis or commonly called graphology.

Merdeka Belajar is a concept that allows educators and students to freely determine the learning system (Sherly et al., 2020). The purpose of independent learning is to create an interesting education for both students and educators, because education in Indonesia has so far emphasized knowledge rather than skills (Bahri, 2023). Independent learning also emphasizes aspects of character building that are in line with Indonesian national values (Sibagariang et al., 2021). Ki Hajar Dewantara views education as a driving force for student development, specifically, education is taught to bring change and benefit to the surrounding environment (Ainia, 2020). Merdeka Belajar is the embodiment of the values that shape the character of the nation, starting with reforming the education system and learning methods (Hendri, 2017). It is
Differentiated Teaching Module for Indonesian Language Based on Graphological Analysis of Letter I, R, G

Hoped that independent learning will bring changes in a better direction and good benefit for the environment.

In implementing Ki Hajar Dewantara's thoughts with this kurikulum merdeka, educators are required to be open-minded and keep keeping up with the times (Tarigan et al., 2022). Indonesia also has cultural potential that can be used as a source of learning. Ki Hajar Dewantara explained that the foundation of children's education is related to the nature and nature of the times (Suparlan, 2016). Nature is related to the characteristic and form of the child's environment, while age is related to content and rhythm. This means that each child has their own internal characteristics or potential, so as educators we cannot eliminate these basic characteristics, what can be done is to show and guide them so that their strengths emerge and thus cover their weaknesses (Mudana, 2019).

To find out students' characteristics are varies in different levels of readiness, interests, talents, and learning styles (Arifin, 2020). Therefore, they need teaching services that are different from one another in order to understand the abilities and learning materials according to the characteristics and uniqueness of each individual, so they can develop optimally (Rohmah et al., 2021). Therefore, a learning process that beholds the characteristics and individual differences of students which refers to learning differentiation is needed. With the emergence of various kinds of internal potential that can be found inside and outside the classroom, then one way to find out the internal potential of students can be done through an analysis of the characteristics of their handwriting or it known as graphology.

Graphology is a branch of psychology (Wasktio et al., 2021). This knowledge is very useful to interpret a person's character through analysis and observation of their handwriting. Handwriting comes from the human brain, so what is written in the writing is the idea of the mind. The idea of this human thought can give a picture or reflect human personality (Fadhilla et al., 2017). Although this writing activity appears to be an activity controlled by the conscious mind, in fact it is heavily influenced by the human subconscious mind. Therefore the form, style of writing, and the characters in each person's writings are not the same (Prasetyo, 2016).

Writing is a person's highest ability to be said that they are skilled in language and writing can be said as a skill with a very complex level of difficulty (Puspitasari, 2017). Writing is an activity to create thoughts and feelings in a form of writing so that writing activities require perseverance and creativity and students are required to find ideas and compose words to produce good writing (Supirman, 2020). Through writing, students can communicate their ideas, appreciation, and experiences in written form. It can be defined that writing is placing graphic symbols that describe a language that can be understood by someone, then other people can read it to understand the language and its graphic symbols (Oktavia et al., 2016).

The “Backward” Teaching Design module is a teaching method or approach that starts a lesson plan from the final goal or result to be achieved, and then designs a learning experience that will help students achieve that goal (As’ari, 2016). In “Backward” teaching design module, educators must start by identifying the learning outcomes that wanted to achieved by students. Then, educators must design learning experiences that will help students achieve these outcomes. These learning experiences include activities, assignments, and projects that are relevant to the learning objectives. Furthermore, educators determine indicators of success that will be used to evaluate whether students have achieved learning objectives (Mulyani et al., 2023).

In the context of differentiated learning, one approach that can be used is the heutagogical approach. Teaching modules with a heutagogic approach can help students develop the skills and independent abilities needed to manage their own learning (Febry et al., 2022). Learners can have more control over their learning process, including choosing learning topics and resources that suit their learning needs and preferences (Hiryanto, 2017).

This graphological analysis is usually used by companies in the reconnaissance process to determine the characteristics of applicants. In this case it tries to be applied in education with the same goal of knowing the character of students. The results of the analysis of students' handwriting can be used as an initial stage of knowing the character of students to be used as
material for consideration of what teaching modules are suitable for application in the learning process. Teaching modules that can be proposed are teaching modules with a backward design approach and a heutagogic approach. Therefore, it is hoped that this will result in the achievement of learning objectives in order to improve the quality of education in Indonesia.

RESEARCH METHOD
In this study, the research method used is qualitative with a descriptive approach. Qualitative methods are often called naturalistic research methods because the research is carried out in natural conditions (Sugiyono, 2019). This method is used to describe the general description of the research, which is the characteristics of handwriting with the internal potential of students and to interpret graphology in several aspects (Wahidmurni, 2017). Then this type of descriptive research is also capable of solving practical problems in the development of science, especially for graphological research (Yuliani, 2020).

The data taken is the handwriting of class 10 Halimah students. This study uses data analysis made by describing characteristics and character content. The data source for this research was all of Halimah’s 10th grade students, totaling 21 in one class, all female.

The steps of the data collection method are as follows in Figure 1.

![Data collection method flow](image)

**Figure 1.** Data collection method flow

1. Analysis, handwriting analysis of the retrieved data.
2. Triangulation through interviews with homeroom teachers and related students.
3. Grouping, the data that has been collected and analyzed is then grouped based on their characteristic.

In addition to discuss the characteristics of handwriting in line with the objectives of this study, it produces a description of the subject’s character through handwriting. The characteristic form of handwriting varies greatly, so this variation forms the character of the subject. One characteristic handwriting may contain several characters. In one handwriting characteristic not only own one meaning.

RESULTS AND DISCUSSION
Results
This study produced the characteristics of handwriting and descriptions of the internal potential of 10th grade “Halimah” students which are varied. Characteristics of handwriting and descriptions of graphology’s internal potential are generated by analyzing the subject of student
Differentiated Teaching Module for Indonesian Language Based on Graphological Analysis of Letter I, R, G

handwriting. The results of the analysis are grouped based on graphological analysis in general and specifically.

One characteristic of handwriting can contain several internal potentials. In one handwritten character has more than one meaning. Because there are many characters, researchers need to first analyze the characteristics of handwriting so as to get the appropriate internal potential.

<table>
<thead>
<tr>
<th>Class</th>
<th>Sub Class</th>
<th>Amount of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>The slant of writing direction</td>
<td>Slant to The Right</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Slant to The Left</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Straight</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Variative Slant</td>
<td>2</td>
</tr>
<tr>
<td>The slant of writing line</td>
<td>Flat</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Ascending Up</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Descending Down</td>
<td>8</td>
</tr>
<tr>
<td>Word spacing</td>
<td>Narrow</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Wide</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>4</td>
</tr>
<tr>
<td>Line spacing</td>
<td>Narrow</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Wide</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>11</td>
</tr>
</tbody>
</table>

The shape of the letter “I” expresses a person's ego, which is their self-image and understanding of how valuable they are and hopes for how others see them. The clarity of their thoughts and the amount of interaction they want with their environment. The shape of the letter “R” interprets the creative side of the author. The shape of the letter “G” interprets the subconscious activity, material, sexual, and physical values of the writer (Prasetyo, 2016). The 10 grade Halimah students on average write the letter “I” with a stem that varies between slanted to the left and to the right, but on average they place they dot close to the stem, the rest place the dot far from the stem. Whereas in writing the letter “R”, the average students write the letter “R” in a general form, only 2 people write differently. The last, writing the letter “G”,
on average, 10 grade Halimah students write the letter “G” according to the general form, while the others differ in writing the shape in the lower area.

1. The slant of writing direction

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Saya rumpunya di karaba</td>
</tr>
<tr>
<td>b.</td>
<td>saya adalah menyanyi dan mendengarkan Musik</td>
</tr>
<tr>
<td>c.</td>
<td>Saya dari kelas halimah, kelas yang aih</td>
</tr>
<tr>
<td>d.</td>
<td>Saya anak kce - 2 dari tiga bersaudara.</td>
</tr>
</tbody>
</table>

**Figure 2.** The slant of writing direction

Based on the results of reading in one of the graphology books, from Figure 2 can be explained that:

a. Students with a slant to the left describe their internal potential trying to appear attractive in social situations but they are still emotionally lonely, preoccupied with themselves, dependent on the ideals and values of the dominant mother figure to shape their social personality, refusing to accept progress or change.

b. Students with a slant to the right describe their internal potential as tending to be impulsive, emotional, more sympathetic to others and more sensitive.

c. Students with a straight writing describe their internal emotional potential as well-controlled, highly influenced by their thoughts rather than their feelings.

d. Students with varied writing slants describe internal potentials showing instability and consistency. Clings to their moods and thoughts, is emotionally erratic, often switches from a state of stress, to being expressive by being unguarded, anxious, undisciplined, unpredictable, passionate, capricious, incapable of good judgment, low self-esteem and far from the center of attention.

2. The slant of writing line

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Saya suka menangis, suka jalan-jalan</td>
</tr>
<tr>
<td>b.</td>
<td>Saya suka ceng, suka jalan-jalan</td>
</tr>
<tr>
<td>c.</td>
<td>Saya suka ceng, suka jalan-jalan</td>
</tr>
<tr>
<td>d.</td>
<td>Saya suka ceng, suka jalan-jalan</td>
</tr>
</tbody>
</table>

**Figure 3.** The slant of writing line

Based on the results of reading in one of the graphology books, from Figure 3 can be explained that:

a. Students with a descending down writing lines describe internal potential to be easily depressed, lack of courage, lack of enthusiasm, pessimistic, and too hard trying.

b. Students with an ascending up writing lines describe their internal potential as optimism, spirit for work, have lots of ideas, less reliable, easily agitated, easily tense, and less stable.

c. Students with flat writing lines describe their internal potential as balanced, steadfast, disciplined, hesitant, boring, and less flexible.
d. Students with variety slants of writing lines describe their internal potential to feel chaotic and having no fixed principles, moods that often change due to the circumstances around them.

3. Word spacing

Based on the results of reading in one of the graphology books, from Figure 4 can be explained that:

a. Students with wide word spacing describe the internal potential of keeping a distance from social relations either because of their personal needs or the tendency to separate themselves which sometimes triggered by difficulties in communicating with others.

b. Students with narrow word spacing describe the internal potential showing someone who likes to gather to get attention, relate closely and establish closeness, selfish about their needs and does not want to give their time and energy to other people.

c. Students with normal word spacing describe internal potential, showing a balanced and flexible personality when dealing with other people and having the ability to relate closely when the time is right.

4. Line spacing

Based on the results of reading in one of the graphology books, from Figure 5 can be explained that:

a. Students with narrow line spacing describe their internal potential as lively, full of energy, and often creative, but they may experience unclear goals or mixed ideas and poor concentration.

b. Students with wide line spacing describe the internal potential of closing themselves from the environment both socially and psychologically, fear of having relationships or
closeness, having great suspicion and anger that makes them separate and distrustful, wasteful.

c. Students with normal line spacing describe internal potential showing personal harmony and flexibility.

5. **Based on the form of the letter “I”**

![Figure 6](image)

Based on the results of reading in one of the graphology books, from Figure 6 can be explained that:

a. Students with the shape of the letter “I” whose diacritical dot is far above the stem, the stem is tilted to the left described as a sign of curiosity, the ability to make plans and carry out research, have a high imagination, and are not careful.

b. Students with the letter “I” whose diacritical dot is near above the stem, the stem is tilted to the right described as being cautious, realistic, and has a positive way of thinking.

c. Students with the letter “I” whose diacritical dot is near above the stem, the stem is tilted to the left described as a cautious attitude, pays attention to everything in detail, and is practical-minded, but weak in imagination.

d. Students with the letter “I” whose diacritical dot is far above the stem, the stem is tilted to the right described as a quiet nature, careful in speaking, but there is a desire to take action or movement.

6. **Based on the form of the letter “R”**

![Figure 7](image)

Based on the results of reading in one of the graphology books, from Figure 7 can be explained that:

a. Students with the shape of the letter “R” using the Palmer method described as internal potential with negative connotations, which is being stubborn and being selfish.

b. Students with the shape of the letter “R” describe the internal potential of emotions that are well controlled, showing joy, and have consideration before making decisions.
7. Based on the form of the letter “G”

**Figure 8.** Based on the form of the letter “G”

Based on the results of reading in one of the graphology books, from Figure 8 can be explained that:

a. Students with the shape of the letter “G” by forming the number 9 describe the internal potential of mathematical abilities, critical thinking and see things from two sides, and have good judgment.

b. Students with the shape of the letter “G” who have a straight lower zone describe good internal potential in delegating tasks, but are bound to other people, tend to be emotional or weak in feelings.

c. Students with the shape of the letter “G” that have a lower zone like a swing describe internal potential that is very attached to the mother figure or depends on the mother figure.

**Discussion**

Backward Teaching Design modules, educators can ensure that the learning experience of students is in accordance with the expected learning objectives. This approach can also assist educators in evaluating student learning outcomes effectively. By using the backward design approach, it is also hoped that it can realize the goals of Merdeka Belajar.

In the context of classroom learning, educators can implement teaching strategies that involve students actively in the learning process (Siswondo & Agustina, 2021). One of the important strategies that educators must implement is to encourage students to be able to find their own way of learning so they can manage their learning independently (self-regulated learning) (Yulianti et al., 2016). Besides, students can know from the start what they expect from learning a lesson. Therefore, educators need to communicate the assessment that will be given in the beginning of the lesson, how students will be assessed and the criteria, so that students can set appropriate learning strategies to achieve the learning outcomes and targets set (Puteri et al., 2023). Thus, students are in control of their own learning process, and they don’t just follow the teacher's learning design. With this principle, educators become facilitators in the classroom who provide learning resources, monitor student progress, encourage them to solve learning-related problems and provide support and advice when needed (Zamjani et al., 2020).

From the results of graphological analysis, it can be used as a benchmark in determining the appropriate teaching module, according to the diversity of students’ internal potential. The teaching modules in the Independent Curriculum are intended to help educators to teach in a more flexible and contextual way, instead of using textbooks. Teaching modules can be another choice or an alternative learning strategy (Hamdani et al., 2023).

The learning strategy is designed as a guide for educators in carrying out daily learning in order to achieve a learning goal (Mirdad, 2020). Thus, the lesson plan is prepared based on the flow of learning objectives used by educators so that the form is more detailed than the flow of learning objectives. The flow of learning objectives is not determined by the government so that between educators may use different flow of learning objectives even though teaching students are in the same phase (Riswakhyuningsih, 2022). Therefore, the lesson plans made by each educator may vary, especially since these lesson plans are designed taking in seeing various other factors, including the different factors of the students, the school environment, the...
availability of learning facilities and infrastructure, and so on (Simbolon, 2013). Every educator needs to have a lesson plan to help direct the learning process to reach learning achievement. This lesson plan can be in the form of teaching modules (Maulinda, 2022).

The components of the teaching module include learning objectives, steps or learning activities, assessment plans for early learning along with the instruments and methods of assessment, assessment plans at the end of learning to ensure the achievement of learning objectives along with instruments and methods of assessment, learning media used, for example reading materials used, activity sheets, videos, or website links that students need to learn (Badan Standar, Kurikulum, dan Asesmen Pendidikan, 2022).

To find out whether students have succeeded in achieving learning objectives, educators need to establish criteria or indicators of achievement of learning objectives. This criterion was developed when educators are planning assessments, which were carried out when educators prepared teaching module plans. This achievement criterion becomes one of the considerations in choosing/making an assessment instrument, because it is not certain that an assessment is in accordance with the objectives and criteria for achieving learning objectives (Trisnawati et al., 2022).

The Independent Curriculum emphasizes the importance of integrating learning with assessment, especially formative assessment, as a learning cycle. This learning is done by providing learning materials that vary according to the understanding of students. The purpose of this differentiation is to see that every child can achieve the expected learning goals. Thus, competency-oriented learning requires varied and periodic assessments. This kind of learning approach is greatly strengthened in the Independent Curriculum (Faiz et al., 2022).

CONCLUSION

Based on the results of graphological analysis in 10th grade “Halimah” shows that the handwriting of students in the class has different characteristics. The diversity of these characteristics shows the internal potential of students with different learning need. Therefore, it is necessary to have the right teaching method or approach starting from learning planning from the final goal or the result to be achieved, and then designing a learning experience that will help students achieve that goal.

In this study there are still deficiencies, there are several things that are not in accordance with the results of the analysis when conducting triangulation with educators and students. This can be influenced by the subject's interpretation of the graphologist's analysis which is only based on books, which is prone to manipulation, the condition of students when writing, and the condition of respondents when triangulating. It is hoped that this research can be developed by looking at others variables from handwriting analysis or graphology.

REFERENCES


*Author (s):*

*Hamdani (Corresponding Author)*
Departement of Indonesian Language and Literarute, Faculty of Teacher Training and Education,
Universitas Islam Nusantara,
Jl. Soekarno Hatta No. 530, Bandung 40286, Indonesia
Email: hamdani@uninus.ac.id

Fitri Hartati
Departement of Indonesian Language and Literarute, Faculty of Teacher Training and Education,
Universitas Islam Nusantara,
Jl. Soekarno Hatta No. 530, Bandung 40286, Indonesia
Email: fitrihartati@uninus.ac.id

Novalina Setyaningrum
SMA IT Mentari Ilmu
Jl. Perum Karaba Indah I, Karawang, Indonesia
Email: novalina@mentariilmu.sch.id