



The Implementation of the Notion Application as a Differentiated Instruction Tool on Students' Learning Progress

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Article Info	Abstract
Received: 2026-05-11 Revised: 2026-09-10 Accepted: 2026-09-14 Keywords: <i>Notion application; differentiated instruction; English learning; classroom action research; students' learning progress</i> DOI: 10.24256/ideas.v14i2.10526 Corresponding Author: Dedy Kurniawan Kadir dedy513kurniawan@gmail.com English Language Education Study Program, Postgraduate Program, Universitas Negeri Makassar	<i>This study investigated the implementation of the Notion application as a differentiated instruction tool to improve students' learning progress in English. The research was conducted with Grade X Fashion Design students at SMK Negeri 1 Tutar, Polewali Mandar, West Sulawesi. The study was motivated by students' low English achievement, limited motivation, monotonous classroom instruction, and the underuse of digital learning media despite the availability of internet access. This research employed classroom action research supported by mixed-method data collection. The action research followed the Kemmis and McTaggart model consisting of planning, action, observation, and reflection. The data were collected through observation, learning achievement tests, questionnaires, and interviews. The intervention involved the use of Notion to provide differentiated content, process, and product activities through text, images, audio, video, tasks, worksheets, and collaborative learning spaces. The findings showed that students' English learning outcomes improved across the cycles. In the pre-cycle stage, the students' mean score was 49.37, with only 25% of students achieving the minimum mastery criterion. After Cycle I, the mean score increased to 57.81, with 37.5% mastery. After Cycle II, the mean score rose significantly to 81.56, with 75% of students achieving mastery. Students also showed positive responses toward the use of Notion, with an average response percentage of 70%, categorized as high. These findings indicate that Notion can support differentiated instruction by making English learning more flexible, organized, engaging, and responsive to students' needs. The study concludes that Notion is an effective digital learning tool for improving students' learning progress in English.</i>

1. Introduction

English language learning plays an important role in preparing students to participate in academic, professional, and global communication. In the Indonesian education system, English is taught as a compulsory subject at the secondary level because it supports

students' communicative competence, critical thinking, creativity, and readiness to face global challenges. Canale and Swain (1980) explain that language learning should not only focus on grammatical knowledge but also on communicative competence, including the ability to use language appropriately in different social contexts. In vocational schools, English has an even more practical function because students are expected to use language not only for academic purposes but also for future workplace communication. Therefore, English learning should be designed in ways that are meaningful, contextual, and relevant to students' needs.

However, English learning in many school contexts still faces several challenges. Students often perceive English as a difficult subject because it involves unfamiliar vocabulary, different sentence structures, pronunciation challenges, and limited opportunities for real communication. In some classrooms, English is still taught through teacher-centered approaches where the teacher explains the material while students listen, copy notes, and complete uniform tasks. Brown (2001) argues that language learning becomes more effective when students are actively involved in meaningful interaction rather than only receiving information from the teacher. Similarly, Nunan (2015) emphasizes that learner-centered and task-based learning can create more authentic opportunities for students to use English. Such perspectives suggest that English learning should move from passive instruction to more active and student-centered learning.

This problem was also found at SMK Negeri 1 Tutar. Based on the preliminary observation in the thesis data, many students experienced difficulties in English learning and demonstrated low motivation toward the subject. English was considered difficult and less attractive by many students. One reason for this condition was the monotonous presentation of learning materials. The learning process tended to use a uniform method and did not sufficiently consider students' individual needs and characteristics. Consequently, students felt bored and were less interested in exploring English learning materials.

Another important issue was the limited use of instructional technology. Although SMK Negeri 1 Tutar had internet access supported by Starlink satellite internet service, the integration of technology in the English learning process remained limited. Teaching media were not sufficiently varied, and students did not receive many opportunities to experience interactive digital learning. This situation created a gap between the availability of technology and its pedagogical use in the classroom. In the digital era, this gap needs to be addressed because technology can support flexible, interactive, and independent learning when it is used appropriately (Mayer, 2009). Learning media can also help teachers deliver materials more clearly and help students understand concepts through different forms of representation (Arsyad, 2017).

The initial learning data also showed that students' English achievement was still low. The preliminary examination results indicated that no students achieved the minimum mastery criterion of 75 in the earlier school document. This condition reflected a serious need for instructional improvement. The low achievement was related not only to students' language ability but also to their low reading interest, limited motivation, and lack of active involvement in learning. Hattie (2009) states that teacher instructional strategy, feedback, and classroom interaction are among the important factors that influence students' learning achievement. Therefore, an instructional strategy that combines engaging digital media and learner-centered pedagogy is needed to improve students' learning progress.

One relevant approach to overcome this problem is differentiated instruction. Differentiated instruction is a teaching approach that recognizes that students have different readiness levels, interests, learning styles, and learning needs. Tomlinson (2014)

defines differentiated instruction as a teacher's proactive response to learner differences through the modification of content, process, product, and learning environment. Instead of giving the same instruction to all students in exactly the same way, differentiated instruction allows teachers to modify content, process, and product based on students' characteristics. Content differentiation refers to the way teachers adjust learning materials. Process differentiation refers to the way students engage with and understand the materials. Product differentiation refers to the way students demonstrate their understanding through various forms of output.

In English learning, differentiated instruction is highly relevant because students usually have different levels of vocabulary mastery, confidence, comprehension, speaking ability, and writing skills. Some students learn better through visual materials, while others understand better through audio, video, discussion, or practice. Some students are ready to work independently, while others need guidance and scaffolding. Vygotsky's (1978) theory of the Zone of Proximal Development supports this idea by emphasizing that students can achieve higher levels of learning when they receive appropriate guidance from teachers or more capable peers. By applying differentiated instruction, teachers can create more inclusive learning experiences and help students participate according to their own learning needs.

Nevertheless, differentiated instruction requires suitable learning media. Without flexible media, teachers may find it difficult to prepare different materials, tasks, and activities for different groups of students. This is where digital applications can play an important role. Technology can help teachers organize materials, provide multiple modes of content, distribute tasks, monitor student progress, and create collaborative learning spaces. According to Anderson and Krathwohl (2001), effective learning activities should support students in developing cognitive processes from remembering and understanding to applying, analyzing, evaluating, and creating. Digital platforms can support this process when they provide varied materials and meaningful tasks.

In this study, the digital application used to support differentiated instruction was Notion. Notion is a web-based productivity and workspace application that allows users to organize information in a flexible digital environment. It can integrate text, images, audio, video, links, tables, tasks, documents, and other learning resources into one platform. In educational contexts, Notion can be used by teachers to design learning pages, organize materials by topic, provide worksheets, share learning resources, and guide students through structured activities. The application also supports collaboration because students can access shared pages, complete tasks, and interact with learning content.

The use of Notion in English learning is particularly useful because it can support multimodal learning. English materials can be presented not only in written form but also through audio pronunciation, video examples, visual vocabulary, interactive tasks, and external links. Mayer (2009) explains that students can learn more effectively from words and pictures than from words alone when multimedia learning is designed properly. This multimodal presentation helps students with different learning preferences. For example, visual learners may benefit from images and organized page layouts, auditory learners may benefit from audio and video materials, and kinesthetic learners may benefit from tasks, role-play activities, and project-based outputs.

The integration of Notion with differentiated instruction can also support students' learning autonomy. Students can access materials flexibly, review lessons outside class, and complete tasks in a more organized way. The teacher can provide different levels of tasks or different types of activities based on students' needs. This is important in vocational school contexts where students often require practical and contextual learning. Through

Notion, English learning can be linked to students' field of study, such as self-introduction, workplace communication, and vocational identity.

This study focuses on the implementation of Notion as a differentiated instruction tool in English learning for Grade X Fashion Design students at SMK Negeri 1 Tutar. The main concern is students' learning progress, especially their improvement in English learning outcomes and their responses to the use of Notion. The study attempts to answer three research questions: how the Notion application is implemented as a differentiated instruction tool, whether the use of Notion improves students' English learning outcomes, and how students respond to the use of Notion in English learning.

The significance of this study can be seen from theoretical and practical perspectives. Theoretically, this study contributes to the discussion of digital learning media and differentiated instruction in English language teaching. It provides evidence that digital tools can support the implementation of learner-centered instruction when they are used with clear pedagogical purposes. Practically, the study offers an alternative strategy for English teachers who want to improve students' motivation, participation, and achievement through technology-based learning. It also provides useful insight for schools seeking to maximize the use of available internet access and digital resources.

In short, the study was conducted because there was a real classroom problem: students' English learning outcomes were low, their motivation was limited, and the use of technology in learning was not optimal. The Notion application was selected because it provides a flexible digital space that can accommodate differentiated content, learning activities, and student products. Through classroom action research, the study examined how the application could be implemented and how it affected students' learning progress. The results are expected to support the development of more interactive, inclusive, and effective English learning practices in vocational schools.

2. Method

This study employed classroom action research supported by a mixed-method approach. Classroom action research was used because the study aimed to solve a real instructional problem found in the classroom and to improve the quality of English learning through systematic action. According to Kemmis and McTaggart (1988), classroom action research is conducted through a reflective cycle consisting of planning, action, observation, and reflection. This model is appropriate for educational research because it allows teachers or researchers to identify classroom problems, implement instructional improvement, observe the results, and revise the action based on the findings. In addition, Burns (2010) explains that action research is useful in language teaching because it helps teachers improve classroom practice through direct investigation of their own teaching context.

The mixed-method approach was used because the study collected both quantitative and qualitative data. Quantitative data were obtained from students' pre-test and post-test scores to measure improvement in English learning outcomes. Qualitative data were collected through observation, questionnaire, and interview to describe the implementation process and students' responses toward the use of Notion. Creswell and Plano Clark (2018) state that mixed-method research provides a more comprehensive understanding of a research problem by combining numerical data with descriptive information. Therefore, the use of mixed methods in this study helped the researcher

understand not only whether students' scores improved, but also how the Notion application supported the learning process.

The research was conducted at SMK Negeri 1 Tutar, located in Tubbi Taramanu District, Ambopadang Village, Polewali Mandar Regency, West Sulawesi Province. The subject of the study was Grade X Fashion Design students. There were 16 students involved in the research. This class was selected because the students showed low English learning outcomes and needed more engaging instructional media to support their learning progress. The selection of the research subject was based on the classroom problem identified during the preliminary observation. Arikunto (2015) states that classroom action research should begin from real problems experienced by teachers and students in the classroom.

The intervention used in this study was the implementation of the Notion application as a differentiated instruction tool. In the planning stage, the researcher prepared lesson plans, Notion-based learning pages, learning materials, student worksheets, observation sheets, questionnaires, and achievement tests. The learning materials were organized in Notion by integrating various formats such as text, images, audio, video, links, and practice tasks. The materials and activities were designed to accommodate different learning styles and student readiness levels. This design is in line with Tomlinson's (2014) concept of differentiated instruction, which emphasizes the adaptation of content, process, and product based on students' readiness, interests, and learning profiles.

In the action stage, the teacher implemented English learning using Notion. Students accessed learning materials through the Notion page and participated in differentiated activities. Content differentiation was provided through various types of materials, including written explanations, visual supports, audio, and video. Process differentiation was implemented through independent learning, group discussion, guided practice, and role-play. Product differentiation was conducted by allowing students to complete learning tasks and demonstrate their understanding through worksheets and learning outputs related to the topic. This procedure reflects the principle that differentiated instruction should provide various learning pathways while still guiding students toward the same learning objectives (Tomlinson, 2014).

The observation stage was conducted during the learning process. The researcher observed teacher activities, student participation, student attention, learning enthusiasm, responses during question-and-answer sessions, and the overall implementation of the Notion-based learning process. Observation is important in classroom action research because it provides direct information about what happens during the instructional process (Burns, 2010). The observation data were used to identify strengths and weaknesses in each cycle and to support the interpretation of students' learning progress.

The reflection stage was conducted after each cycle. The researcher analyzed the results of observation, test scores, and student responses. The reflection from Cycle I was used to revise the learning strategy in Cycle II. Several improvements were made, including re-explaining how to use Notion, providing clearer guidance, giving more meaningful assignments, creating a more motivating classroom atmosphere, and encouraging students to participate more actively. Reflection is a central element of action research because it helps researchers evaluate the effectiveness of an action and plan further improvement (Kemmis & McTaggart, 1988).

The instruments used in this study consisted of tests, observation sheets, questionnaires, and interviews. The test was used to measure students' English learning outcomes. It consisted of multiple-choice questions related to the learning indicators. A pre-test was administered before the implementation, while post-tests were administered after

the action cycles. The minimum mastery criterion was 75. Students were considered individually successful when they achieved a score of at least 75. Classical mastery was calculated based on the percentage of students who reached the minimum criterion. According to Arikunto (2015), tests are commonly used in educational research to measure students' achievement after a learning intervention.

The questionnaire was used to identify students' responses toward the use of Notion in English learning. It consisted of 24 Likert-scale items. The questionnaire measured students' interest, motivation, ease of use, engagement, collaboration, and satisfaction. Likert-scale questionnaires are useful for measuring attitudes, perceptions, and responses because they allow respondents to indicate the level of their agreement with a set of statements (Cohen, Manion, & Morrison, 2018). The responses were categorized based on percentage interpretation to determine students' overall perception of Notion-based differentiated instruction.

Interviews were also used to obtain additional qualitative information about teacher and student experiences in using Notion. The interviews explored students' learning experiences, difficulties, motivation, and perceptions of Notion as a learning medium. Interview data helped explain the quantitative findings and provided deeper information about the implementation process. Creswell (2014) explains that interviews are useful in qualitative research because they allow researchers to collect detailed information from participants' perspectives.

The quantitative data were analyzed using descriptive statistics, including total score, mean score, number of students achieving mastery, and percentage of mastery. Descriptive statistics were used to summarize students' learning achievement before and after the intervention. The qualitative data from observation and interviews were analyzed descriptively by identifying patterns in students' participation, motivation, and learning behavior. The combination of quantitative and qualitative data provided a more complete understanding of how Notion supported differentiated English learning.

3. Result

The findings of the study show that the implementation of the Notion application as a differentiated instruction tool improved students' English learning progress. The improvement can be seen from three main aspects: the implementation process, students' learning outcomes, and students' responses toward the use of Notion.

Before the intervention, a pre-cycle stage was conducted to identify the initial classroom condition. The observation showed that the English learning process had several strengths and weaknesses. The teacher had prepared the lesson based on the lesson plan, and the material delivered was relevant to the learning objectives. However, the learning process was still mostly teacher-centered. The use of instructional media was limited, and the teacher faced difficulties in explaining abstract concepts. Students were not actively involved in learning, showed low enthusiasm in responding to the teacher's questions, and demonstrated low learning motivation.

The pre-test was administered to measure students' initial English ability. The result showed that students' learning outcomes were still low. The total number of students was 16. The lowest score was 20, the highest score was 96, and the mean score was 49.37. Only 4 students achieved the minimum mastery criterion, while 12 students did not achieve mastery. The percentage of mastery was 25%. This result confirmed that students' English

learning outcomes needed improvement through a more engaging and differentiated learning strategy.

In Cycle I, the Notion application was introduced as a learning medium. The teacher used Notion to organize English materials and provide learning activities. Students were guided to access materials, read explanations, watch or listen to supporting content, and complete learning tasks. The learning topic focused on introduction material, especially understanding text structures and language features in self-introduction. The implementation of Notion helped make the learning process more organized and gave students access to learning materials in various formats.

The result of Cycle I showed improvement compared to the pre-cycle stage. The total score increased from 790 in the pre-cycle to 925 in Cycle I. The mean score increased from 49.37 to 57.81. The number of students achieving mastery increased from 4 students to 6 students. The percentage of mastery increased from 25% to 37.5%. This means that there was an improvement of 12.5% in learning mastery after the first implementation of Notion.

Although Cycle I showed progress, the result had not yet met the expected success indicator. Many students still needed more guidance in using Notion effectively. Some students were able to compare text structures and language features in the introduction material, but they still had difficulty composing a written self-introduction text using their own words. This indicated that students needed more practice, clearer instruction, and stronger teacher guidance.

Based on the reflection from Cycle I, several improvements were made in Cycle II. First, the teacher re-explained the procedures for using the Notion application so that students could follow the learning process more effectively. Second, the teacher provided more meaningful assignments related to students' needs and field of study. Third, the teacher gave more guidance to students who experienced difficulties. Fourth, the classroom atmosphere was improved through motivation, appreciation, and active encouragement. Fifth, the teacher explored students' understanding more frequently and involved them in concluding the lesson.

Cycle II showed a more significant improvement. The total score increased from 925 in Cycle I to 1305 in Cycle II. The mean score increased from 57.81 to 81.56. The number of students achieving mastery increased from 6 students to 12 students. The percentage of mastery increased to 75%. This result indicates that the revised implementation of Notion in Cycle II was more effective than the first cycle. Students became more familiar with the application, more engaged in the learning activities, and more capable of completing English tasks.

The improvement from pre-cycle to Cycle II was substantial. The mean score increased from 49.37 to 81.56, showing an increase of 32.19 points. The percentage of mastery increased from 25% to 75%, showing an improvement of 50 percentage points. This indicates that the use of Notion as a differentiated instruction tool contributed positively to students' learning progress. Although classical mastery had not yet reached 85%, the improvement across cycles showed that the intervention was effective in raising students' achievement from a low category to a high category.

The implementation of differentiated instruction through Notion also influenced classroom interaction. Students who were previously passive became more involved in learning activities. The availability of different learning formats made it easier for students to access materials according to their preferences. Visual materials helped students understand the topic more clearly, audio and video supported pronunciation and contextual understanding, and worksheets helped students practice the material step by

step. Group discussions and role-play activities also encouraged students to communicate and collaborate.

Student responses toward the use of Notion were measured through a questionnaire consisting of 24 items. The questionnaire result showed that students responded positively to Notion-based English learning. The average response score was 70.8, with a percentage of 70%, categorized as high. This means that most students agreed that Notion helped them become more interested, motivated, and organized in learning English. They also perceived Notion as useful for accessing materials and completing tasks.

The positive student response was supported by classroom observation. During the learning process, students showed better attention, more active responses, and greater willingness to participate in learning activities. The use of Notion created a more interactive learning environment because students were not only listening to the teacher but also accessing materials, discussing tasks, and practicing English through varied activities. This condition suggests that digital media can increase student engagement when it is integrated with appropriate instructional strategies.

Overall, the findings show that the implementation of Notion as a differentiated instruction tool had a positive effect on students' learning progress. The application helped the teacher organize learning materials, provide differentiated activities, support student collaboration, and create a more engaging classroom environment. The improvement in test scores and student responses indicates that Notion can be used as an alternative digital learning medium for English teachers, especially in vocational school contexts where students need practical, flexible, and motivating learning experiences.

4. Discussion

The findings of this study indicate that the implementation of the Notion application as a differentiated instruction tool improved students' English learning progress. This improvement can be explained through the relationship between digital learning media, differentiated instruction, student engagement, and learning outcomes. The use of Notion changed the learning process from a mostly teacher-centered model into a more student-centered and interactive model. Students were no longer limited to listening to teacher explanations; they were given access to various learning materials and activities through a digital platform. This finding is in line with Brown's (2001) view that effective language learning should encourage active participation, meaningful interaction, and learner involvement.

The first important finding is that Notion supported the implementation of differentiated instruction. Differentiated instruction requires teachers to adjust learning content, process, and product based on students' needs, interests, readiness, and learning profiles (Tomlinson, 2014). In this study, Notion made this process more manageable. The teacher could organize different types of materials in one digital space, including text, images, audio, video, and practice tasks. This allowed students to learn through different modes and helped them understand the material more easily. Therefore, Notion functioned not only as a digital note-taking tool but also as a structured learning environment that supported differentiated teaching.

Content differentiation was reflected in the way learning materials were presented in multiple formats. Students who preferred reading could access written explanations, while those who needed visual support could learn through images and structured page layouts. Audio and video materials helped students understand pronunciation and contextual language use. This variety was important because students in one classroom do not learn in exactly the same way. Mayer's (2009) multimedia learning theory supports this finding

by explaining that students can understand information better when verbal and visual materials are combined effectively. By providing different forms of content, the teacher could accommodate students' learning diversity more effectively.

Process differentiation was also supported through Notion-based activities. Students did not only receive information but also engaged in independent learning, group discussion, question-and-answer activities, guided practice, and role-play. These activities helped students process the material according to their ability level. Students who understood the material more quickly could continue working on tasks, while students who needed support could review the materials and receive guidance from the teacher or peers. This reflects Vygotsky's (1978) concept of scaffolding within the Zone of Proximal Development, where students can achieve better learning outcomes when appropriate support is provided.

Product differentiation appeared in the way students completed learning tasks and demonstrated their understanding. Through Notion, students could access worksheets and complete tasks related to the learning topic. They were encouraged to produce self-introduction texts and practice language use. This was important because English learning should not stop at understanding rules or structures; students also need to use language meaningfully. According to Nunan (2015), task-based language learning gives students opportunities to use language for communicative purposes. Product-based tasks in this study helped students connect the material with practical communication.

The second important finding is that Notion improved students' learning outcomes across the cycles. In the pre-cycle stage, the students' mean score was only 49.37, and the mastery percentage was 25%. This result showed that most students had not achieved the minimum mastery criterion. After Cycle I, the mean score increased to 57.81, and the mastery percentage increased to 37.5%. Although this result was still not satisfactory, it showed that the first implementation of Notion had begun to produce improvement. After revision in Cycle II, the mean score increased significantly to 81.56, and the mastery percentage reached 75%. This improvement suggests that students benefited from the more organized, flexible, and interactive learning environment.

The improvement from Cycle I to Cycle II shows that the effectiveness of digital learning media depends not only on the application itself but also on how the teacher designs and guides the learning process. In Cycle I, some students still experienced difficulties in using Notion and composing self-introduction texts. This was understandable because students needed time to adapt to a new learning platform. After reflection, the teacher improved the instruction by explaining the use of Notion more clearly, giving more guidance, providing more meaningful assignments, and motivating students more actively. These improvements made the second cycle more successful. This finding supports Kemmis and McTaggart's (1988) classroom action research model, which emphasizes reflection and revision as essential steps for improving teaching practice.

This finding also supports the idea that technology should be integrated with pedagogy. Digital applications cannot automatically improve learning outcomes if they are used without clear instructional design. Mishra and Koehler (2006) argue that effective technology integration requires the connection between technological knowledge, pedagogical knowledge, and content knowledge. In this study, Notion became effective because it was used as part of a differentiated learning strategy. The teacher did not merely ask students to open an application; the teacher used Notion to organize materials, guide

activities, support collaboration, and monitor student learning. Therefore, the pedagogical use of Notion was more important than the technological tool alone.

The third important finding is that students showed positive responses toward the use of Notion. The questionnaire result showed a response percentage of 70%, which was categorized as high. This positive response indicates that students perceived Notion as useful and interesting for English learning. Students' positive attitudes are important because motivation and engagement influence learning achievement. Hattie (2009) notes that student engagement, feedback, and teacher clarity have strong effects on learning outcomes. When students feel interested in the learning process, they are more likely to pay attention, participate, and complete tasks.

The positive response may be related to several features of Notion. First, Notion provides an organized learning space. Students can see materials, tasks, and instructions in one place. This helps them follow the learning process more clearly. Second, Notion allows flexible access. Students can review the materials outside the classroom, which supports independent learning. Third, Notion supports multimodal learning. The combination of text, image, audio, video, and links makes the learning experience more varied. Fourth, Notion supports collaboration. Students can work with peers and engage in group learning activities. These features are consistent with constructivist learning principles, which view learners as active participants who build understanding through interaction, experience, and reflection (Jonassen, 1991).

The classroom observations also showed that students became more active after the implementation of Notion. Their attention, responses, and participation improved during the learning process. This suggests that the use of digital media can reduce classroom passivity when combined with interactive activities. In the previous learning condition, students were less enthusiastic and less involved in responding to teacher questions. After the intervention, they became more willing to engage with the material and learning tasks. This improvement indicates that Notion helped create a more meaningful and student-centered learning atmosphere.

Another important point is that Notion helped bridge the gap between available technology and classroom practice. The school already had internet access, but technology had not been fully used in learning. The use of Notion showed that available digital infrastructure can be transformed into meaningful instructional support when teachers are able to design appropriate learning activities. This is highly relevant in the current educational context, where schools are encouraged to integrate technology into learning but still need practical models for implementation. Arsyad (2017) explains that learning media can increase students' interest and make learning materials easier to understand when selected and used appropriately.

The study also highlights the relevance of differentiated instruction in vocational education. Students in vocational schools have practical learning needs and diverse academic abilities. They need English learning that is connected to their personal and vocational context. Through differentiated activities, students can learn English in a way that is more suitable to their readiness and learning preferences. The topic of self-introduction, for example, can be connected to students' identity, field of study, and future professional communication. This makes the learning process more meaningful and relevant to students' lives.

Despite the positive findings, the study also shows that the implementation of Notion requires preparation. Teachers need to design the Notion page carefully, prepare suitable materials, provide clear instructions, and guide students in using the application. Some students may initially experience difficulty because they are not familiar with the platform.

Therefore, orientation and technical guidance are necessary before students can use Notion independently. Teachers also need to ensure that digital learning does not become confusing or too complicated for students.

The findings further suggest that classroom action research is appropriate for improving instructional practice. Through the cycle of planning, action, observation, and reflection, the teacher was able to identify weaknesses in Cycle I and improve them in Cycle II. This reflective process contributed to better learning outcomes. Without reflection, the same weaknesses might have continued. Therefore, the success of the intervention was not only the result of using Notion but also the result of continuous improvement in teaching practice.

In conclusion, the discussion shows that Notion can be an effective tool for differentiated English instruction because it supports multimodal content, flexible learning processes, student collaboration, and varied learning products. The improvement in students' mean scores and mastery percentage indicates that the application contributed to better learning outcomes. The positive student responses also show that Notion made English learning more interesting and organized. Therefore, Notion has practical potential as a digital learning medium for English teachers, especially when it is integrated with differentiated instruction and reflective classroom practice.

5. Conclusion

This study examined the implementation of the Notion application as a differentiated instruction tool to improve students' learning progress in English. Based on the findings, Notion was implemented by organizing English learning materials and activities in a digital workspace that included text, images, audio, video, links, worksheets, and practice tasks. The learning process applied differentiated instruction through content, process, and product differentiation. Students were given opportunities to access materials in various formats, participate in independent and group activities, and demonstrate their understanding through learning tasks.

The results showed that the use of Notion improved students' English learning outcomes. In the pre-cycle stage, the mean score was 49.37, and only 25% of students achieved mastery. In Cycle I, the mean score increased to 57.81, with 37.5% mastery. After the improvement of instructional procedures in Cycle II, the mean score increased to 81.56, with 75% mastery. This improvement indicates that Notion-based differentiated instruction helped students learn more effectively and achieve better learning progress.

Students also showed positive responses toward the use of Notion. The questionnaire result reached 70%, categorized as high. This indicates that students found Notion useful, interesting, and supportive of their English learning. The use of Notion also encouraged better participation, motivation, and engagement during the learning process.

Based on these findings, it can be concluded that the Notion application is an effective digital learning tool for supporting differentiated instruction in English learning. Teachers are encouraged to use technology-based media such as Notion to create more interactive, organized, and student-centered learning environments. Future researchers may conduct similar studies with larger samples, different English skills, and longer implementation periods to strengthen the evidence of Notion's effectiveness in language learning.

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