Social-Emotional Integrated Differentiated Learning in Vocational Schools: A Study of Educational Development

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A B S T R A K

Pembelajaran diferensiasi yang terintegrasi dengan pengembangan sosial-emosional di Sekolah Menengah Kejuruan (SMK) merupakan pendekatan yang relevan untuk menghadapi tantangan pendidikan abad ke-21. Namun, penerapan strategi ini seringkali menghadapi berbagai kendala, seperti kurangnya pemahaman guru tentang konsep diferensiasi, keterbatasan sumber daya, dan kesulitan mengintegrasikan aspek sosial-emosional ke dalam pembelajaran berbasis kompetensi. Penelitian ini bertujuan untuk mendeskripsikan pengembangan modul ajar dengan pendekatan diferensiasi dan sosio-emosional dalam pembelajaran di SMK. Penelitian ini terdiri dari tahap analisis, desain, pengembangan, implementasi, dan evaluasi melalui metode pengembangan ADDIE dengan pendekatan mixed-method. Partisipan penelitiannya adalah satu guru dan 27 siswa kelas XI di salah satu SMK di Jawa Tengah. Instrumen penelitiannya berupa tes gaya belajar, angket, dan lembar observasi. Pengumpulan data melalui wawancara, tes, observasi, dan survei. Data hasil wawancara dianalisis dengan menggunakan analisis tema, sedangkan analisis deskriptif kuantitatif digunakan data gaya belajar siswa, validasi ahli, dan evaluasi pengguna. Hasil dari penelitian ini menemukan bahwa keberhasilan implementasi ini sangat dipengaruhi oleh dukungan manajemen sekolah, ketersediaan sumber daya, dan waktu yang cukup untuk perencanaan pembelajaran. Hasil ini menyimpulkan bahwa pembelajaran diferensiasi terintegrasi sosial-emosional memiliki potensi besar untuk diterapkan di SMK, tetapi memerlukan kerangka kerja yang jelas, pelatihan berkelanjutan, dan kolaborasi antar pemangku kepentingan pendidikan untuk mencapai hasil yang optimal.

A B S T R A C T

Differentiated learning that is integrated with social-emotional development in Vocational High Schools (SMK) is a relevant approach to facing the challenges of 21st century education. However, implementing this strategy often faces various obstacles, such as teachers' lack of understanding of the concept of differentiation, limited resources, and difficulty integrating social-emotional aspects into competency-based learning. This research aims to describe the development of teaching modules with a differentiation and socio-emotional approach in learning at vocational schools. This research consists of analysis, design, development, implementation and evaluation stages using the ADDIE development method with a mixed-method approach. The research participants were one teacher and 27 class XI students at a vocational school in Central Java. The research instruments are learning style tests, questionnaires and observation sheets. Data collection through interviews, tests, observations and surveys. Interview data were analyzed using theme analysis, while quantitative descriptive analysis used student learning style data, expert validation and user evaluation. Results of this research found that the success of this implementation was greatly influenced by school management support, availability of resources, and sufficient time for learning planning. These results conclude that social-emotional integrated differentiated learning has great potential to be implemented in vocational schools, but requires a clear framework, continuous training, and collaboration between educational stakeholders to achieve optimal results.

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1. INTRODUCTION

From time to time, the school education curriculum in Indonesia undergoes changes or improvements, with the Merdeka Curriculum 2021 being the latest curriculum currently underway. Curriculum updates need to be carried out continuously to ensure that educators and students follow global trends so that graduates have sufficient knowledge and skills to take the next level of education or contribute to society (Domitrovich et al., 2020; Kurka, 2019). The background to the emergence of the Independent Curriculum is as a response to the decline in the condition of Indonesian education since the Covid-19 pandemic, it could even be said to be experiencing a crisis and the high learning gap in Indonesia. (Aprima & Sari, 2020; Juniantari et al., 2019). The Merdeka Curriculum is designed as an adaptive curriculum structure and emphasizes core material as well as developing students' character and skills through three main activities, namely intracurricular learning, co-curricular learning and extracurricular learning (Aditomo et al., 2020; Tomlinson, 2020). Intracurricular learning focuses on achieving competencies which are carried out differently so that each student has the same opportunity to develop. Co-curricular learning is oriented towards developing students' character and general competencies through a project to strengthen the Pancasila student profile (in Bahasa: Project for Strengthening the Pancasila Student Profile, P5). Meanwhile, extracurricular learning is carried out to develop students' talents and interests in accordance with the resources of each educational unit (Febianti, 2020; Hwang et al., 2020; Oberle et al., 2022).

The noble goals of the Independent Curriculum have not been followed by the readiness of all educational subsystems to implement it, so there are still many problems in implementing the Independent Curriculum in schools. Reported that there are at least five main problems in implementing the Independent Curriculum, one of which is the lack of teacher understanding in preparing and using independent learning lesson plans. In accordance with the principles of differentiated learning in the Independent Curriculum, in planning learning, teachers must provide sufficient space for students to develop creativity and independence according to their interests, talents and development. Teachers must be innovative and use different teaching approaches to meet the diverse learning needs of students. Differentiated learning adapts teaching to different learning needs to optimize the potential of each learner (Yulianti, 2019; Yuniar, 2020). Have proven that differentiated learning can produce better learning achievements for students with special needs, gifted students and students with special needs. Differentiation in learning includes differentiation of content, processes and products (Mursidah, 2023; Zulaeha & Setiani, 2024). Which adapts to the learning profile, learning readiness, interests and talents of each student. Characteristics of differentiated learning, namely the active involvement of students in every learning activity, starting from recognizing strengths, identifying development needs, to evaluating achievements. Each learner is responsible for his or her own choice of activities and learning products. The teacher's role in differentiated learning is more flexible but requires high creativity to design innovative learning that can accommodate students' diverse needs (Bab, 2013; Siregar et al., 2024).

Differentiated learning requires collaboration between teachers and students to apply knowledge, hone skills, and form students' optimistic attitudes towards social and emotional problems. Honing students' social and emotional awareness is important for the development of individual emotional maturity and positive long-term educational outcomes. Previous research findings suggest that social and emotional learning is critical to achieving success in life and is a core part of every individual's education. Social and emotional learning consists of self-awareness, self-management, social awareness, social skills, and responsible decision making (Ii et al., 2023; Kurniawan & Kasmiati, 2016). Bullying cases show the importance of social emotional learning in schools. The effectiveness of social emotional learning will increase when teachers integrate the development of social emotional competence into the series of learning subject matter in the classroom (Babullah et al., 2024; Unzela, 2022).

To manage learning subject matter that integrates social-emotional learning, teachers need to have the knowledge and skills in preparing lesson plans with a social-emotional approach. Unfortunately, since the training period for prospective teachers and when they become teachers in schools, very few teachers receive socialization or training to manage social emotional learning (Atusholichah et al., 2022; Nurhayati et al., 2020). Observations of curriculum documents, especially in vocational schools, carried out by researchers in several schools in the Central Java region, Indonesia, show that learning tools do not yet follow the integrated socio-emotional differentiation approach as mandated by the Merdeka Curriculum. The teaching module is still focused on one learning model, so it does not pay attention to aspects of a differentiated learning approach that are in line with the demands of the Independent Curriculum. Learning modules only implement one type of assignment without paying attention to the content and teaching media adapted to the abilities, needs and preferences of each student. In addition, based on field observations, it was found that teachers still need to utilize student learning style data from non-cognitive

diagnostic assessments to develop differentiated learning. Teaching and learning activities are still classical, not yet accommodating the needs of every student. Based on the results of a focus group discussion involving Building Modeling and Information Design teachers from eight schools in Central Java in March 2023, it was concluded that teachers still need help to implement an integrated social emotional differentiated learning approach in the Merdeka Curriculum. Teachers must fully understand how to apply differentiation theory and socio-emotional ecology in learning activities and appropriate forms of learning evaluation.

The novelty of this research lies in the integration of the concept of differentiated learning with social-emotional development specifically in the context of Vocational High Schools (SMK). While most previous research tends to focus on one aspect, namely learning differentiation or social-emotional development separately, this research combines the two as a holistic approach to support the unique needs of vocational school students. This research also offers a new perspective by highlighting the importance of strengthening social-emotional skills as an integral part of competency-based learning that vocational school students need to be successful in the world of work. In addition, this research introduces a practical framework that can be adapted by teachers to overcome implementation challenges in the field, making it an innovative reference for the development of more inclusive and sustainable vocational education.

One way to socialize teaching programs to teachers is by providing educational product prototypes that can be used as role models in implementing a teaching program. However, until this study was prepared in mid-August 2023, the educational study results document on the Google Scholar site did not show any reports on the development of teaching modules with an integrated social-emotional differentiation approach, especially for vocational schools. school. Therefore, this research aims to develop an educational product in the form of a teaching module with an integrated social-emotional differentiation approach in the framework of technical vocational education in the field of building engineering. Learning modules with an integrated social-emotional differentiation approach are developed through the ADDIE method so that valid and valid modules are obtained. can be used.. The teaching module product developed in this research can be used as a learning guide by teachers who teach similar material. Apart from that, this research can be a reference for teachers in preparing lesson plans for their respective subjects using an integrated socio-emotional differentiation learning approach.

2. METHOD

The design of this research is development research using the ADDIE model which consists of five stages, namely analysis, design, development, implementation and evaluation(Didik et al., 2024; Farida & Ma'ruf, 2022). The analysis stage aims to collect information regarding product development needs. Activities at the design stage are developing a product framework which will be developed further at the development stage Dick et al. (2015). Although the evaluation stage is necessary to ensure the achievement of the objectives of each development stage, the evaluation stage in ADDIE is attached to the other four stages. At the analysis stage, data was collected through field observations and documents, as well as interviews with vocational school teachers and students, as well as non-cognitive diagnostic assessments of students. Non-cognitive diagnostic assessments are carried out using test instruments to map student learning styles. Semi-structured interviews with one teacher and six students were conducted to collect data related to learning that had been implemented regarding differentiation learning and social emotional learning. The interview guide was prepared based on indicators of independent curriculum components, differential learning theory, and socio-emotional theory.

The research respondent was an engineering vocational school teacher with expertise in building engineering, and the students were determined based on their learning style. Each type of learning style was represented by two respondents. At the design stage, learning modules are designed that are adapted to the findings from the analysis stage. At this stage, an outline of the content and framework of the teaching module is prepared. The instruments required to evaluate the feasibility of the product are also prepared at this design stage. At the development stage, after the product prototype has been created, validity testing is carried out by experts. Validation of teaching modules includes aspects of material, media and learning design. Validity testing was carried out using the Delphi method. At the implementation stage, the teaching module products that had undergone expert validity testing were then tested involving 27 students, a teacher and three observers to evaluate the implementation of learning activities based on the teaching module products developed. The final evaluation includes a feasibility test of the teaching module on the aspects of practicality, effectiveness, attractiveness, convenience, and suitability to learning objectives. Each stage in development research using the ADDIE method involves certain data, data sources, data collection techniques, and data analysis. A summary of the development research process using the ADDIE method carried out in this research is presented in Table 1.

Table 1. Components of The Research and Development Process According to ADDIE Stages.

Stage	Analysis	Design	Development	Implementation	Evaluation
Activity	Study of development needs through interviews with one teacher and six students, document observation, and student learning style tests.	Outline the teaching module	Develop a teaching module framework into a teaching module prototype	Testing the use of teaching modules in learning	Evaluate the feasibility of teaching modules
Data	Learning needs. Learning outcomes and flow of learning objectives for the BMID program. Student learning styles		Expert opinion	Implementation of learning plans	Assessment of product practicality and effectiveness
Data source	One teacher, six students, curriculum document		Three members: Subject matter experts (technical vocational education lecturers), learning media experts (educational technology lecturers), and practitioners (experienced technical vocational teachers)	Learning Activities	One teacher, 27 students
Data Collection Techniques	Interview. Document observation. Hands.		Delphi cycle	Observation	Survey
Data validity	Members check interview data		Expert Validity.	Validity of Triangulation Instruments	
Data analysis	Theme analysis for interview data Quantitative descriptive for student learning style data	Content analysis	Quantitative descriptive (%, average)		Quantitative descriptive (%, average)

The interview transcripts at the analysis stage were then analyzed using theme analysis by coding and looking for themes from each research indicator. The results of each student's learning style test are summarized for each category, namely visual, auditory and kinesthetic. The category with the highest score shows the character of the student's learning style. The results of the expert assessment are averaged per indicator, then added up across all indicators. The sum of the values of all indicators divided by the total maximum value multiplied by one hundred percent will produce the validation value percentage. The same analytical method is also applied to observation data on the implementation of the RPP and data on assessing the practicality and effectiveness of the product.

3. RESULT AND DISCUSSION

Result

The educational product developed in this research is a teaching module with an integrated social emotional differentiation approach for vocational schools in the Building Modeling and Information Design (BMID) area of expertise. Based on the results of data analysis through interviews and observations, a number of important findings can be the basis for developing more inclusive and effective educational practices. First, teachers face the main challenge of limited understanding of the concepts of social-emotional differentiation and integration, which is often caused by a lack of training and practical guidance. Second, implementing differentiation strategies that involve modifying learning content, processes and products has proven effective in increasing student engagement, especially when supported by social-emotional approaches such as empathy, communication and emotional management. Third, students show improvements in their social-emotional abilities, including cooperation, self-control, and social awareness, which have a positive impact on their academic achievement and readiness to enter the world of work. However, research also finds that the success of this implementation is greatly influenced by school management support, availability of resources, and sufficient time for learning planning. These results conclude that social-emotional integrated differentiated learning has great potential to be implemented in vocational schools, but requires a clear framework, continuous training, and collaboration between educational stakeholders to achieve optimal results. The transcript of the interview that was conducted was then analyzed using theme analysis. Some results of the theme analysis process are presented in Table 2.

Table 2. Theme Analysis of Interview Transcripts.

Research Indicators	Sub-indicators	Coding	He
Content Differentiation	Teaching materials	Using PPT media make use of the internet Watching YouTube Field observations	It has involved several types of teaching materials, some of which are technology-based, which are applied to all students
Process Differentiation	Learning Media and Methods	Implementing Project-based learning Same product Same process The same media One type of teaching material Prepared H-1 before class Not yet fully aware of students' abilities Not paying attention to students' learning styles	Differences in learning styles and students' initial abilities have not been considered in the learning process.
		Games Activities outside the classroom Watching movies Work in group Discussion Fewer tasks	The learning activities that students like most
		Interesting Youtube PPT plus teacher explanation	Media that students like
Self-awareness	Independence	Close to deadline Behind schedule Only a few students are punctual	The level of student independence still needs to be increased

In the differentiation aspect, learning content needs to be adjusted to learning outcomes and the flow of learning objectives. Differentiating aspects of the process, teaching materials and learning media used need to be adjusted to the needs of each student's learning style preferences and students' initial

abilities. The process differentiation aspect shows that most learning applies the same learning method, namely the project learning method, without paying attention to differences in student learning characteristics. Teachers still have difficulty translating students' sensory preferences into the learning process. In the product differentiation aspect, students need to be given the choice to present their learning products in various representations according to their preferences.

The analysis stage displays the results of the student learning style test. Of the 27 students, 14 students (52%) have a visual learning style, five students (19%) have an auditory learning style, and eight students (29%) have a kinesthetic learning style. The results of the accumulated data on assessing students' initial abilities are divided into three types of learning readiness, namely: fast independent (ten students, 37%), moderate independent or quite independent (seven students, 33%), and slow or dependent (ten students, 37%). Regarding social emotional learning, the results of interviews at the analysis stage show that learning has not specifically identified aspects of social emotional competence that are trained through the learning process. Teachers reported based on observations that the five indicators of social emotional skills were still very limited shown by students during the learning process. On the other hand, teachers also feel that they still lack literacy regarding how to evaluate students' achievement of social emotional skills.

Design Stage, After identifying the components needed in preparing a teaching module product, the next step is to design a teaching module framework. Learning readiness data and learning style data are used to map student diversity which is the basis for developing scenarios and learning media based on a differentiation approach that is integrated with social emotionality. The initial activity at the design stage is to develop a concept or outline of the content of the teaching module, which becomes the basis for the next stage of product development. The teaching module developed focuses on the design elements of building modeling materials, roof frame and ceiling structures. Teaching modules are planned with learning materials and media that are tailored to the needs of each student so that they can develop their potential according to their interests and talents. The next activity is to develop a teaching module framework which includes material explanations, illustrative images and learning videos, as well as assessments to evaluate student understanding. Next, the preparation of teaching materials in the teaching module follows the learning outcomes and the flow of learning objectives that have been determined. At the design stage, instruments are also developed to evaluate the product being developed. The instrument developed was a questionnaire with a Likert scale on a scale of 1 to 4.

Development Stage, The results of the development stage of this teaching module focus on preparing learning activities tailored to the needs of the learning model and objectives through differentiation theory and social emotional theory. The first step is to determine the learning outcomes and objectives of the building modeling design elements. From the curriculum document, the learning objective for building modeling design elements is that students are able to draw 3D & 2D structures and create design animations using Building Information Management (BIM) technology, as well as understand and apply design visualization with this. technology. The second step is to develop teaching materials that are tailored to the learning objectives. The teaching materials developed in this research include roof frame structures, roof frame construction, and ceiling details. Teaching materials are equipped with illustrations and videos to support student understanding. Learning uses a differentiation approach and a social emotional approach which is planned for each learning scenario through group discussion and presentation techniques using the Problem Based Learning (PBL) learning model in the first half of the lesson. Furthermore, in the last semester of learning, students through the Project Based Learning (PjBL) learning model worked on a project in the form of drawing the roof frame structure of a house. The third step is to develop assessments to assess student learning outcomes. The assessment includes attitude and skills domains. The fourth step is finalizing the design of the teaching module display which is presented in E-module format (PDF).

This teaching module is then validated by subject matter experts, learning media experts, and vocational school teachers as practitioners. The material expert is a technical vocational education lecturer. Learning media experts are carried out by lecturers who are competent in the field of vocational education technology. Meanwhile, validators by practitioners are experienced technical vocational school teachers. This activity aims to evaluate the feasibility of learning modules on material that has been developed to obtain input for improvements to the initial product before implementing it with students. Expert validation was carried out using the Delphi method and resulted in two validation cycles. Suggestions from all validators in the first cycle are used as a reference for product improvement. The repaired product is then handed back to all validators. The results of cycle II stated that the product was worthy of being tested with points obtained respectively at 99.6%, 97.71%, and 98.61% from subject matter experts, learning media experts, and vocational teacher practitioners.

Implementation Stage, the RPP product is then tested at the implementation stage. Students were divided into three groups based on learning styles, namely visual, auditory and kinesthetic as shown in Figure 1. The visual group used the YouTube platform as a learning medium. For the auditory group, videos are used accompanied by headsets to make it easier for students to understand the lesson by sharpening their sense of hearing. For the kinesthetic group, a model of a one-story house building at a scale of 1:10 was used. After the problem is defined, each group begins to solve the problem by studying the references independently. Members of each group were divided into three categories of learning readiness according to the results of the cognitive diagnostic test, namely fast independent, moderate independent, and slow or dependent. More talented students can act as peer tutors for less talented students. In this way, problem solving can be resolved, and the target of understanding concepts can be achieved evenly among all group members. Next, each group prepares a presentation of the results of the case resolution with a form of representation according to their respective preferences. For example, the visual learning style group can make presentations in the form of videos or concept trees, the auditory learning style group can make audio videos or podcasts, and the kinesthetic learning style group can make miniature models or structures.

During the implementation process which was carried out in four meetings, there were three observers who observed the implementation of the RPP. The assessment results showed an increase in the percentage of activity implementation from 75.46% in class I sessions to 83.1%, 92.82% and 96.99% in class II to IV sessions. The observation results show that the planned learning stages can be implemented well. The implementation stage process is presented in Figure 1.

Figure 1. Differentiation and Social-Emotional Learning Activities

Evaluation Stage, The teaching module feasibility test is carried out through an evaluation stage by teachers and students using a questionnaire. The assessment includes aspects of practicality, effectiveness, attractiveness, convenience, and suitability to learning objectives. Students rated the suitability of the teaching module with an average percentage of 86.50% (decent), while teachers rated it with a percentage of 92.71% (very feasible). This condition is supported by the use of different approaches to content, processes and learning products that have been adapted to the interests and learning styles of each student. Apart from that, through a social emotional approach students can also recognize themselves and can develop their emotions through a learning process that has been adapted to the learning objectives.

Discussion

This educational development research was carried out by following general learning design procedures in the ADDIE model (Domitrovich et al., 2020; Putri & Prafitasari, 2023). Which consists of analysis, design, development, implementation and evaluation stages. The analysis stage resulted in findings regarding the need for developing learning designs with an integrated social-emotional differentiation approach, namely various characteristics of student learning styles, student learning readiness, and learning objectives according to curriculum needs. The analysis stage is generally considered the "goal setting stage". The findings on the distribution of learning styles and initial abilities of students from this analysis stage are important information in packaging differentiated learning strategies at the design stage. The analysis stage is an important starting point in educational development research to identify existing conditions related to product development objectives, which will later be adapted to the educational product being developed (Aprima & Sari, 2020; Juniantari et al., 2019).

Current developmental research produces products in the form of teaching modules with an integrated social-emotional differentiation approach for technical vocational education. The teaching module in the Merdeka Curriculum is a form of holistic learning design that functions as a guide for teachers in implementing learning to achieve learning outcomes. The teaching module contains at least three main components, namely subject identity, core parts, and appendices (Febianti, 2020; Kurka, 2019).. The implementation of integrated socio-emotional differentiated learning is presented in the core part, namely in the description of learning activities, assessment and reflection of students and educators. Learning activities with a differentiation approach are planned by optimizing the potential of each student.

Information on students' initial abilities becomes the basis for selecting enrichment activities for students with a high level of independence or intensive mentoring activities for students with a high level of dependence. Activities that have been adapted to students' abilities, and supported by learning media in representations that suit style preferences. individual learning, encouraging students to be actively involved during the learning process. This condition is in accordance with one of the criteria for the Independent Curriculum teaching module, namely being interesting, meaningful and challenging. This criterion requires that the teaching module can foster interest in learning, involve students actively in the learning process, and relate to previous knowledge and experience so that it is not too complicated, but also not too easy for their age stage (Tomlinson, 2020; Zulaeha & Setiani, 2024).

The application of differentiated learning in learning design in this teaching module includes content differentiation, process differentiation and product differentiation. Content differentiation involves a diversity of learning sources and learning media. The material provided is graded from simple to complex to accommodate the needs of students who have different levels of initial understanding. Apart from that, each material in the teaching module is equipped with illustrative images, videos and learning audio. Students can access learning resources or use learning media according to their learning style. Facilitating the learning needs of each student is the teacher's duty to ensure that each student has the same opportunity to achieve the expected learning outcomes (Bab, 2013; Yuniar, 2020).

Groups of students in the learning process are formed based on preferences for similar learning styles. The differences in the ability levels of students in each group provide opportunities for students with high abilities to act as peer tutors. The existence of peer tutors can provide skyfolding or learning assistance for students with low abilities. Learning assistance from peer tutors is often more adaptable to students' needs because of their emotional closeness, understanding, and familiarity with each other (Atusholichah et al., 2022; Ii et al., 2023). Learning through peer tutoring has the potential to increase the achievement of equitable learning outcomes among students (Putri & Prafitasari, 2023; Siregar et al., 2024). As a form of product differentiation, each group presents the results of problem solving through material representation according to their respective learning style interests.

The learning activity component in the teaching module also includes the implementation of social emotional learning in five aspects, namely self-awareness, self-management, social awareness, relationship skills, and responsible decision-making skills (Yulianti, 2019; Zulaeha & Setiani, 2024). These five aspects of social emotional learning appear in the learning flow represented in the learning scenario. Assessment tools to measure the achievement of social emotional competencies are included in the module and developed by considering the diversity and culture that exists in the school context. to support student development and an effective learning environment (Farida & Ma'ruf, 2022; Tomlinson, 2020). The concept of social emotional competence is divided into two parts, namely intrapersonal competence and interpersonal competence. Intrapersonal skills are the main factors that influence individuals holistically, including the ability to design strategies, set realistic goals, use positive thinking patterns, and regulate emotions. On the other hand, interpersonal skills such as communication, taking other people's points of view, negotiation, and social problem solving are factors in individual interactions with other individuals (Nurhayati et al., 2020; Yuniar, 2020).

The resulting learning module has been declared valid by three experts who assessed the product from three different domains, namely subject matter, media and practicality. The final assessment results after the product has gone through several improvements based on advice from experts show that the product is very suitable for use. Teachers and students as product users also assess the product as easy to use and effective. Teachers and students as product users also assess the product as easy to use and effective. Therefore, the module developed can be implemented in classroom learning according to the learning outcomes in the module, or used as a reference for module development for other learning outcomes.

The results of this research show uniqueness and similarities compared to previous research regarding differentiation learning and social-emotional development. Previous research, such as that conducted by Tomlinson (2014), highlights that differentiated learning is effective for improving the academic outcomes of students with diverse backgrounds and abilities. This research supports these findings by showing that differentiation through modification of content, processes and products is also relevant in the vocational school context. However, this research makes a new contribution by integrating social-emotional elements into differentiated learning, which has not been widely explored in previous research. In addition, this research is in line with the findings of CASEL (Collaborative for Academic, Social, and Emotional Learning) which emphasizes the importance of developing social-emotional to improve students' interpersonal and intrapersonal skills. This research strengthens this argument with evidence that social-emotional skills, such as cooperation and emotional control, can be improved through integrated learning specifically designed in vocational schools. However, this research also revealed several

implementation challenges that were rarely discussed in previous research, such as limited teacher time due to a busy curriculum and lack of supporting resources. This adds a new dimension to the understanding of the gap between theoretical concepts and practice in the field. Therefore, this research not only confirms previous findings but also broadens the scope of discussion by offering a practical framework and recommendations for overcoming implementation barriers in the SMK context.

The implications of this research emphasize the importance of developing educational policies and practices that support the implementation of social-emotional integrated differentiated learning in vocational schools. The research results show that continuous training for teachers is very necessary so that they have a deep understanding of the concept of differentiation and social-emotional integration strategies in learning. In addition, the vocational school curriculum needs to be designed to be more flexible, providing space for teachers to design and implement learning approaches that are responsive to the needs of diverse students. School management support, such as providing sufficient resources, facilities and time allocation for learning planning, is also a key success factor. Furthermore, collaboration with the world of business and industry can strengthen the link between the social-emotional skills developed in school and the demands of the world of work. This research also opens up opportunities for further research, especially in evaluating the long-term impact of this learning on vocational school students' work readiness and career success. By implementing these findings and recommendations, it is hoped that education in vocational schools can become more inclusive and relevant to the needs of the times.

This study has several limitations that need to be noted. First, the research was conducted on a limited sample so the results may not fully represent the condition of vocational schools in general, especially in areas with different geographical and cultural backgrounds. Second, the relatively short duration of the study did not allow for evaluating the long-term impact of social-emotional integrated differentiation learning on student development, both academically and socially. In addition, limited resources, such as learning support tools and training for teachers, are obstacles to the consistent implementation of this strategy. To overcome this limitation, it is recommended that further research be carried out with a wider scope and involve more vocational schools with diverse characteristics. Long-term research is also needed to measure the impact of this learning on students' job readiness and career development. In addition, more intensive and ongoing training for teachers should be prioritized to increase their understanding and ability to apply this approach. Providing adequate learning resources and collaboration with industry are also recommended to ensure implementation that is more effective and relevant to students' future needs.

4. CONCLUSION

The results of the research show that learning can be planned to meet students' different learning needs according to students' differences in character while also meeting the needs for developing students' social emotional character. Through differentiated learning combined with socio-emotional character development, the opportunity to achieve learning goals more evenly among students will be greater, by unleashing the potential of each student. This development research product can be a reference for vocational school teachers to develop teaching modules with a differentiated approach that integrates social and emotional in various other areas of expertise.

5. CONFESSION

6. REFERENCES

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