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Exploring Fashion Vocational Practice Process for Students with Multiple Disabilities in Special School

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Abstract

Indonesian special schools face difficulties in discovering comprehensive references on methods and procedures for developing and implementing their curriculum. Subsequently, the purpose is to explore the learning processes of vocational practice in the fashion field at a special school. A qualitative approach and case study method were employed in fashion vocational practice at a special school in Indonesia. The research was conducted on students with multiple disabilities from their first registration to graduation. Interviews and observations were held for three years. The data were then analyzed in a thematic framework. The findings showed that the school carried out diagnostic assessment and identification, curriculum modifications, learning outcomes, and devised annual learning plans for new students. The learning plans were formulated based on the results of reflections, monitoring, and periodic evaluations to assess their development. The learning processes yielded more favorable results with the support of teachers, students' parents, therapists, and other stakeholders. In conclusion, these findings provide an example to develop and implement a special school curriculum to recognize the talents of those students with special needs, to prepare them for the future.

Keywords

Curriculum, fashion education, learning process, special school, assessment, vocational practice

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Explorando El Proceso De Práctica Vocacional En Moda Para Estudiantes Con Discapacidades Múltiples En Escuelas Especiales

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Resumen

Las escuelas especiales de Indonesia enfrentan dificultades para descubrir referencias completas sobre métodos y procedimientos para desarrollar e implementar su currículo. El objetivo es explorar los procesos de aprendizaje de la práctica vocacional en el ámbito de la moda en una escuela especial. Se empleó un enfoque cualitativo y un estudio de caso en la práctica vocacional de la moda en una escuela especial de Indonesia. La investigación se realizó en estudiantes con discapacidades múltiples desde su primera inscripción hasta su graduación. Se realizaron entrevistas y observaciones durante tres años. Los datos se analizaron posteriormente en un marco temático. Los resultados mostraron que la escuela realizó evaluaciones diagnósticas e identificación, modificaciones curriculares, resultados de aprendizaje y elaboró planes anuales de aprendizaje para los nuevos estudiantes. Los planes de aprendizaje se formularon con base en los resultados de la reflexión, el seguimiento y las evaluaciones periódicas para evaluar su desarrollo. Los procesos de aprendizaje obtuvieron resultados más favorables con el apoyo de docentes, padres de familia, terapeutas y otras partes interesadas. En conclusión, estos hallazgos constituyen un ejemplo para desarrollar e implementar un currículo escolar especial que reconozca el talento de los estudiantes con necesidades especiales y los prepare para el futuro.

Palabras clave

Currículo, educación en moda, proceso de aprendizaje, escuela especial, evaluación, práctica vocacional

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Vocational education at the level of senior high schools, also known in Indonesia as vocational high school, is a kind of education which provides skilled workers (Yasdin & Muksins, 2024). This means that their graduates are typically ready to be employed by industries (Nurjanah et al., 2022). They possess special qualifications, knowledge, skills, and attitudes, required by industries (Modi, 2023). They are also equipped with adaptability to workplace conditions (Monteiro & Almeida, 2015).

On the contrary, the majority of vocational high school graduates in Indonesia have not met industry standards (Yoana et al., 2024), especially the graduates of special schools (Rokhim, 2023). It is because they do not have normal conditions or disability (Mårtensson et al., 2024). Some of them suffer from hearing and speech impairments, physical disabilities, and other conditions associated with congenital anomalies and other severe conditions sustained in an accident (Ye et al., 2020).

Moreover, some students have below-average mild intellectual disabilities, some are with mild mental disorders, and some others are with moderate mental disorders with mild intellectual disabilities (IQ score: 60-80). This poses a challenge for vocational high schools in their efforts to accomplish their learning outcomes. Many students with special needs want to continue their study at vocational high schools but the schools are not ready to accommodate them (Björk-Åman & Ström, 2023). The government has actually formulated the curriculum of vocational high schools specially designed for students with special needs (Paramita, 2023), but most special schools have difficulty tailoring their operational curriculum to real-world contexts because they are not able to recognize the talents of students with special needs and do not have tried-and-true methods to develop them.

Special schools which focus on practical learning than on theoretical discussions are more appropriate for those students with special needs (Phuthi & Mazarire, 2022). The schools will provide those students with life skills with which they can have economically independent life in the future (Owen et al., 2023). Nevertheless, special schools in Indonesia have much in common: they lack professional teachers to mentor students with special needs. Besides, comprehensive references on methods and procedures for deriving and implementing a curriculum of special schools tailored to the characteristics of students with special needs are still hard to find. In general, the available references only explain the curriculum for vocational high schools and special schools. There are not explain how to implement vocational practice process for students with a disability or multiple disabilities in a special school for their future career.

Vocational practice plays a crucial role in equipping disable students with the real skills needed in the workplace (Higashida, 2019), thus increasing their opportunities for independence and competitiveness (Almalky & Alwadei, 2024). Based on experiential learning, such as vocational practice, enables students with disabilities to concretely understand the work context and develop relevant functional competencies (Liu et al., 2024). Alnahdi et al. (2023) emphasized that engaging students with disabilities in practice-based vocational training has been shown to improve their future job readiness, self-confidence, and social participation. Furthermore, inclusively designed vocational practice also contributes to the transformation of the education system toward one that is more equitable and adaptive to the needs of all learners (Assanbayev & Makoelle, 2024). Therefore, the implementation of

planned and responsive vocational practice is a vital component in supporting the transition of students with disabilities to productive and meaningful adult lives.

Based on the aforementioned explanation, the understanding of mechanisms for planning and implementing vocational practice for students with multiple disabilities based on the characteristics of the learning programs at special schools is highly in need. Therefore, this research aimed to explore fashion vocational practice processes at a special school for the students of which have hearing and speech impairments and mild intellectual disabilities. The research focused on the fashion field because fashion is a favorite vocational field whose graduates are required by many industries in Indonesia.

Furthermore, the research questions are how to apply fashion vocational practice processes in the first, second, and third year for students who have hearing and speech impairments and mild intellectual disabilities at a special school. Hopefully, special schools will help students with special needs to have vocational skills equivalent to those practiced in vocational high schools.

Research Methods

The research employed the qualitative method of research to explore the three-year vocational learning process for students with hearing and speech impairments. It was begun from the first time those students registered at the school to their graduation, when they were supposed to be ready for work. This is a case study on fashion vocational practice at a special school in Lumajang Regency, East Java, Indonesia, whose students have with hearing and speech impairments and mild intellectual disabilities. Those students' conditions are called as multiple disabilities.

The participants of this research consisted of the school principal, two practical teachers, two theoretical teachers, four vocational education practitioners, and four students with multiple disabilities. Those participants were selected because they were involved in the whole learning process, including selecting the learning curriculum, drawing up learning plans, performing learning activities, and evaluating learning outcomes. Meanwhile, four students were selected with reason the same conditions and understood what they were feeling during the learning programs (see Table 1).

Table 1

Students' Participant Characteristics

Participant	Gender	Chronological Age	Cognitive Profile	Disabled Type
Student 1	Female	23	15	Hearing and speech impairments and mild intellectual disabilities
Student 2	Female	19		
Student 3	Female	17		
Student 4	Male	17		

The interview guidelines were formulated following research purposes to obtain comprehensive data. The interview questions related to the curriculum model, learning plan,

implementation, and evaluation for fashion vocational practice in the special school to prepare students' vocational skills. The interviews were begun with simple questions to create a pleasant atmosphere. The interviews and observations were conducted periodically throughout the three-year research process. Meanwhile, some documents were used to support the results of the interviews and observation: learning plans, curriculum, syllabus, and student initial test results.

Subsequently, the data collected were then analyzed based on thematic categories: (1) lesson process in the first year, (2) lesson plan in the second year, and (3) lesson plan in the third year. Initially, the researcher conducted data coding to ease the process of analyzing the data obtained from interviews, observations, and documents. The coding process was begun by researchers on the first time data was collected, so all the data has codes telling data collection dates, months, and years. For instance, the code OBS_20102023 means the data was obtained through observation (OBS) on October 20th, 2023. This was next followed by identifying, classifying, and analyzing themes emerging from the interview and observation data results of this research. In the last analysis, the data was displayed with clear captions.

Research Results

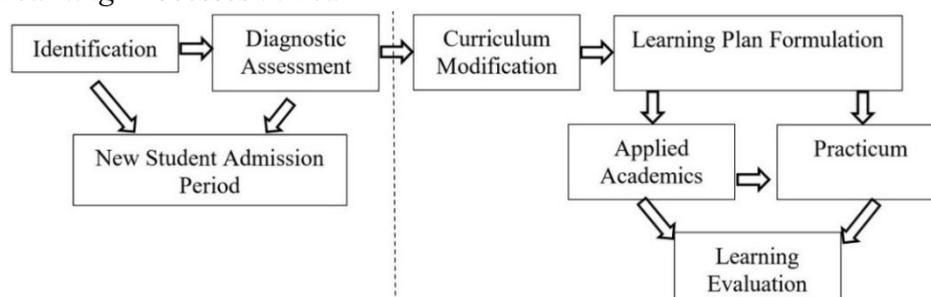
The research findings identified themes aimed at understanding three-year processes of fashion vocational practice in special schools. Accordingly, the themes were classified into three stages of the learning process, the learning plan in the second year and the learning plan in the third year. The following are detailed explanations.

Stage 1: Learning Process

At this stage, the school principal occupied a role in preparing learning programs for students with multiple disabilities. Some of the vocational specialization programs at this school are fashion, culinary arts, painting, and graphic design. Students' specialization groups are based on the results of their talent identification. In the first year, this school had 10 new students with disabilities. Then, four students chose the fashion vocational program, and six students chose other vocational programs. In this study, the school used the fashion vocational curriculum for these four students. The process of learning program preparation conducted by the school principal can be seen in detail in Figure 1.

Figure 1

Stages of Learning Processes in Year 1



Based on Figure 1, the stages in year 1 began with the school principals and teachers identifying newly registered students of the special school. The identification intended for all new students, was made through interviews, physical tests, and sewing machine operation proficiency tests. The interviews were given to both students and their parents. The interviews with students were aimed at recognizing their talents and interests in the fashion field, and the ones with students' parents were aimed at knowing parents' hope and support for their children and special conditions. The physical tests involved health workers to know whether or not students had congenital defects, height abnormalities, and weight disorders. Meanwhile, sewing machine operation proficiency tests were aimed at knowing whether students had ever operated sewing machines or not. The identification process provided the school principal with information about the overall conditions of the students.

If students were indicated to have hearing and speech impairments, they had to undergo a diagnostic assessment at the next stage. The diagnostic assessment was performed by a specialist in hearing and speech impairments to know the levels of students' impairments: low, moderate, or high. The assessment was carried out at regional general hospitals managed by the government. In addition, an IQ test was held by a clinical psychologist invited to the school.

Like the identification process, the diagnostic assessment made available more detailed information concerning students' conditions, on which the school principal based the learning curriculum. As for the curriculum modification, the school principal chose to adopt the tailored curriculum model developed following students' conditions. This curriculum model shares some aspects with the standard curriculum but differs in others – several aspects of the standard curriculum are omitted to match the characteristics and competencies of students with special needs. Moreover, the tailored curriculum model makes it possible for teachers to develop a curriculum on an individual basis following the results of the identification and the diagnostic assessment. In this model, the school principal and teachers excluded some academic learning materials that have nothing to do with national examination (mathematics, Indonesian language and English language) and focused more on practical learning.

After undertaking the curriculum modification, the school principal and teachers designed learning plans and made learning evaluations based on the results of the identification and diagnostic assessment. The learning plans for students with hearing and speech impairments and mild intellectual disabilities employed applied academics in such academic subjects as mathematics, Indonesian language, and English Language. Applied academics were considered to be effective in helping those students with mild intellectual disabilities to understand academic subjects.

One of the methods employed was to utilize calculation processes in garment pattern making because they were accustomed to counting by applying addition, subtraction, division, and multiplication formulas. English language lessons were taught by introducing fashion terms in practical training sessions. Meanwhile, the subject of Indonesian language was taught by training students in sign language and lip reading and developing intonation skills of students with hearing and speech impairments for classroom communication.

The next step was learning evaluation. In this case, the evaluation was conducted through two methods, namely practical exercises and self-reflection. During the practical exercise, students were assigned to produce a fashion work within the specified time. They were then

given a chance to present their work during the self-reflection session, in which teachers offered constructive feedback on the students' work.

Concisely, the fashion learning processes that the school principals and teachers had to facilitate for the students with hearing and speech impairments with mild intellectual disabilities until they managed to produce their work comprised five stages: (1) modifying learning outcomes, (2) establishing learning objectives, (3) developing learning objective framework, (4) formulating learning plans, and (5) making learning evaluation (see Figure 2).

Figure 2

Stages of Curriculum Modification

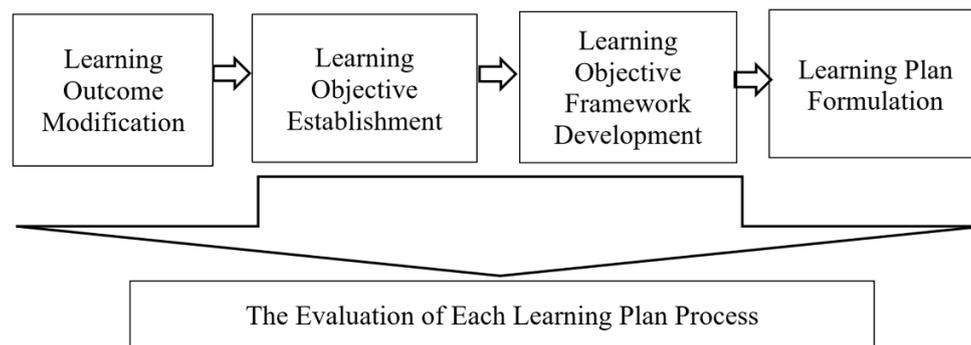


Figure 2 illustrates stages in the curriculum modification process which yielded learning objectives based on which learning plans for students with hearing and speech impairments and mild intellectual disabilities (IQ score: 60-80) were designed. The Indonesian government has issued a curriculum for students with special needs, but it fails to consider students with intellectual disabilities. This is why the modification of the government's curriculum for special schools is necessary – to accommodate students with intellectual disabilities. The curriculum modification process, as found in this research, went through some stages. First, the school principals along with teachers analyzed the curriculum issued by the government. Second, they chose academic subjects and practicum courses appropriate for students' conditions. Third, they determined learning outcomes based on students' competencies. Going through these stages, the curriculum modification helped produce learning outcome modification, learning objectives, and the framework of learning objectives which they needed in designing learning plans. Furthermore, Table 2 presents a practical example of curriculum modification for the practicum course of basic sewing techniques for first-year students with multiple disabilities.

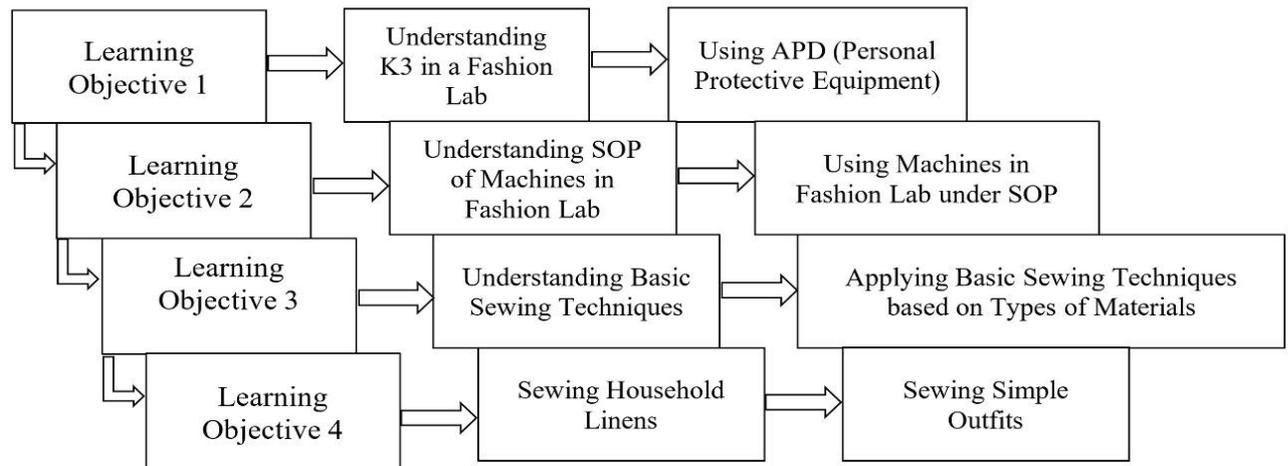
Table 2*The Curriculum of Basic Sewing Techniques for Students with Multiple Disabilities*

Course names	Learning Outcomes from government	The results of student assessment	Tailored Learning Outcomes	Tailored Learning Objectives
Basic Sewing Techniques	At the end of phase E, students are supposed to be able to explain working attitudes about sewing, operating and repairing sewing and finishing machines, mastering sewing techniques based on types of materials, understanding the quality standard and sewing finish, and sewing simple outfits.	<ol style="list-style-type: none"> 1. Students suffer from hearing and speech impairments. 2. Their learning style is auditory. Students are introverts and have social anxiety. 3. Physical condition: normal. 4. IQ: 60-80 5. Hobby: Students like listening to music. They do not employ auditory assistance. 	At the end of phase E, students are supposed to be able to explain working attitudes about sewing, operating and repairing sewing and finishing machines, mastering sewing techniques based on types of materials, understanding the quality standard and sewing finish, and sewing simple outfits.	<ol style="list-style-type: none"> 1. Students can apply occupational health and safety in operating sewing and finishing machines. 2. Students can operate sewing and finishing machines based on the established Standard Operating Procedure (SOP). 3. Students can practice sewing by applying basic sewing techniques based on types of materials. 4. Students can sew simple outfits by employing basic sewing techniques based on the established SOP.

As shown in Table 2, the school compiled a table in their curriculum modification processes. The table consists of 5 columns. Column 1 is for practicum subjects; column 2 is for learning outcomes determined by the government for students with special needs who have no intellectual disabilities; column 3 is for the conditions of students with special needs; column 4 shows tailored learning outcomes; and the last column shows the learning outcomes which students with special needs can achieve.

The next stage is to develop a learning objective framework, which is necessary for determining the order of subject materials based on the learning objectives. For instance, should more challenging materials be taught before similar ones, general concepts before specific ones, and concrete ideas before abstract ones? Such orders will streamline the process of arranging instructional materials. Besides, the learning objective framework for each of the students varies following their different levels of competencies.

The following Figure 3 gives an example of the learning objective framework of the basic sewing techniques course. It is essential to consider that a single learning objective can be relevant to multiple meetings; likewise, one subject matter can be taught in several meetings, subject to students' competencies in understanding the subject matter.

Figure 3*The Framework for First-Year Learning Objectives*

Based on the information in Figure 3, Table 3 is an example of learning plans for a basic sewing techniques course for students with multiple disabilities. This example is focused on learning objective 4 for the subject matter of sewing household linens.

Table 3*The Example of Learning Plans for Basic Sewing Techniques Course*

Components	Example Explanation
Duration minutes per meetings
Grade	10
Subject	Basic Sewing Techniques
Learning Objective	4
Learning Objectives	Students can sew a simple outfit by applying basic sewing techniques following SOP
Facilities and Infrastructure	Sewing machines, finishing machines, cutting tables, iron, and ironing boards
Students' Characters	<ul style="list-style-type: none"> – Students have hearing and speech impairments. – Their learning style is auditory. They are introverts and have social anxiety. – Physical condition: normal. – IQ: 60-80 – Hobby: Listening to music. – Students do not employ auditory assistance.
Number of Students	4
Learning Activities	Individual
Learning Methods	Teacher-based learning and individual mentoring
Assessment	Individual
General Description of the Activities	Students will conduct a practical exercise in creating household linen in the form of chair pillowcases by using basic sewing techniques suitable for the chosen fabric.
Initial Activities (10 Minutes)	1. Students and teachers pray together

Components	Example Explanation
Main Activities (... Minutes)	<ol style="list-style-type: none"> 2. Teachers greet students by asking about their day (to know their condition) 3. Teachers give students a brief explanation about the lesson in today's meeting which is related to their daily life. 4. Teachers ask probing questions like "Do you have any experience of sewing chair pillowcases or decorative pillow covers?" 1. Teachers explain today's activities related to the process of creating chair pillowcases (teachers employ the lecturing method of learning). 2. Teachers demonstrate methods for designing patterns and sewing and finishing chair pillowcases. 3. Students' activities: <ol style="list-style-type: none"> a. All students listen to teachers' explanation as to how to create chair pillowcases by using sewing and finishing machines. b. Students are allowed to ask anything they do not understand from the explanation. c. Students go through the stages explained by the teachers in creating chair pillowcases. d. Students conduct a practical exercise in creating chair pillowcases step by step under the supervision of their teachers. 4. After the practical exercise, students enter into a classroom discussion with their teachers about the production process that they have undergone and what they were feeling during the process. Teachers involve students' classmates to join in the discussion and stimulate them to conclude the practical exercise.
Closing Activities (10 Minutes)	<ol style="list-style-type: none"> 1. Teachers encourage students to make a reflection on the progress of the chair pillowcases they have created. 2. Teachers give students their feedback about the progress to assess students' understanding of today's material. 3. Teachers close the meeting to motivate students.

Note. The process of creating chair pillowcases was completed within 4 meetings due to students' limited sewing speeds.

Based on Table 3, learning plans in practical exercises can developed flexibly following students' conditions. The learning plans also show that the process of creating chair pillowcases took four meetings to be completed, which also resulted from the fact that those students were 10th graders and the process of creating chair pillowcases was their first experience. Chair pillowcases created by students with multiple disabilities can be seen in Figure 4.

Figure 4*Fashion Products Created by First-Year Students with Multiple Disabilities*

Subsequently, teachers' learning evaluation was carried out by developing an assessment rubric containing the assessment scale and description. An illustrative example of the school's rubric of assessment for students with multiple disabilities is given in Table 4, while the example of the assessment qualification is given in Table 5.

Table 4*Assessment Rubric*

Aspects	Indicators	Assessment Scales and Description		
		5 = Developing	3-4 = Intermediate	1-2 = Beginner
Cognitive	Understanding of the definition of household linens	Students can explain the definition of household linens and mention types of household linens	Students can understand the definition of household linens and mention types of household linens	Students cannot explain the definition of household linens nor mention types of household linens
Attitudes	Independence	Students learn independently without teacher instruction	Students learn when instructed by teachers	Students learn only under the supervision of teachers
	Creativity	Students propose their ideas and put them into action	Students are helped by teachers to generate ideas to be used in creating chair pillowcases	Students do not have creative ideas to create chair pillowcases
Psychomotor	Designing a pattern of household linens in the form of chair pillowcases	Students can design a pattern of chair pillowcases following SOP	Students can design a pattern of chair pillowcases not following SOP	Students can design a pattern of chair pillowcases not following SOP with the help of teachers

Aspects	Indicators	Assessment Scales and Description		
		5 = Developing	3-4 = Intermediate	1-2 = Beginner
	Cutting materials according to the designed pattern	Students cut the materials according to the designed pattern and SOP	Students cut the materials according to the designed pattern but did not follow the SOP	Students cut the materials not following the designed pattern
	Sewing following the model of household linens in the form of chair pillowcases	Students sew following the designed model and SOP	Students sew following the designed model but not with the SOP	Students sew not following the designed model and SOP
	Completing the finishing touches on the household linens	Students complete finishing touches on their work following SOP	Students complete finishing touches on their work not following SOP	Students do not put the finishing touches on their work
	Adding details and ornaments to the household lines	Students add details and ornaments to the household lines on their initiative	Students add details and ornaments to the household lines because their classmates do so	Students add details and ornaments to the household lines by order of the teachers

Table 4 shows that the assessment considered three aspects: cognitive, attitude, and psychomotor. The assessment of the three aspects used three-tiered scales: 1-2 for beginners, 3-4 for intermediate, and 5 for developing. The cognitive aspect had one indicator, while the aspect of attitude had two indicators, and the psychomotor aspect had five indicators. The detailed description of each tier of the scales can be seen in Table 4. Meanwhile, the assessment qualification of the three aspects is presented in Table 5.

Table 5
Assessment Qualification

Scores	Assessment Qualification		
	Cognitive	Attitude	Psychomotor
1 – 2	Unable to understand the sequence of processes and to evaluate the result	Below Average	The process they went through and the results they produced do not follow SOP
3 – 4	Able to understand the sequence of processes and to evaluate the result	Average	The process they went through followed SOP, but the results they produced did not follow SOP

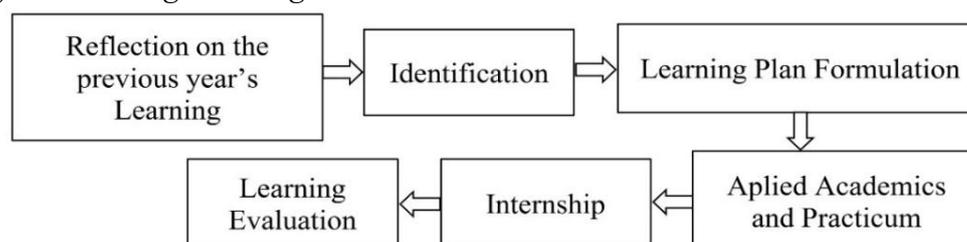
Scores	Assessment Qualification		
	Cognitive	Attitude	Psychomotor
5	Able to understand and even explain the sequence of processes and to evaluate the result	Good	The process they went through and the results they produced followed SOP

Stage 2: Learning Plan in Second Year

In the second year, after a moment of reflection on the learning processes in the previous year, the school underwent the same process of formulating learning plans. Previously, the school identified the four students who participated in the learning process in the first year. The purpose was to ensure their physical and mental readiness to follow the learning process in the second year. This monitoring is carried out daily and periodically. The results are evaluated daily and periodically to track progress in the learning process of making the fashion product. The stages at which the school formulated learning plans in the second year are illustrated in Figure 5.

Figure 5

Stages of Formulating Learning Plans in Second Year



Based on Figure 5, applied academics were taught during the practical exercise session. Consequently, teachers formulated learning plans by combining academic subjects and practicum courses. The practicum courses in the second year were more specific: those students with special needs practiced creating women's fashion during the first semester and creating male fashion in the second semester. In this light, practicum courses in the second year attained a higher level than the ones in the first year. The courses can be combined with subjects of applied academics in the following year. Subjects of applied academics focus on subject matters that can be implemented immediately in practicum courses.

An illustrative example of the learning plans for applied academics, which combine academic subjects (mathematics, natural sciences, Indonesian language, and English language) and practicum courses (creating fashion products), which were designed for students with hearing and speech impairments, is given in Table 6. The example of learning plans focuses on creating male fashion.

Table 6*The Example of Learning Plans for Applied Academics in the Second Year*

Components	Example Explanation
Duration	300 minutes (6 meetings)
Grade	11
Subject	Sewing Fashion Products
Learning Objective	2
Learning Objectives	Students can apply techniques for sewing male fashion in accordance with SOP
Facilities and Infrastructure	Sewing machines, finishing machines, cutting tables, iron, and ironing boards
Students' Characters	<ul style="list-style-type: none"> – Students have hearing and speech impairments. – Their learning style is auditory. They are introverts and have social anxiety. – Physical condition: normal. – IQ: 60-80 – Hobby: Listening to music. – Students do not employ auditory assistance.
Number of Students	4 students
Learning Activities	Individual
Learning Methods	Teacher-based learning and individual mentoring
Assessment	Individual
General Description of the Activities	Students will conduct a practical exercise in creating a men's short sleeved shirt with the sewing techniques suitable for the material in accordance with the SOP.
Initial Activities (10 Minutes)	<ol style="list-style-type: none"> 1. Students and teachers pray together 2. Teachers greet students by asking about their day (to know their condition by using emotive illustration) 3. Teachers give students brief explanation about the lesson in today's meeting which is related to their daily life. 4. Teachers ask probing questions like "Do you have any experience of sewing a men's shirt?"
Main Activities (280 Minutes)	<ol style="list-style-type: none"> 1. Teachers explain today's activities related to the process of creating a men's short-sleeved shirt (teachers employ the lecturing method of learning). 2. Teachers demonstrate step-by step methods for sewing a me's short-sleeved shirt. 3. Students' activities: <ol style="list-style-type: none"> a. All students listen to teachers' explanation as to how to create a men's short-sleeved shirt. b. Students are allowed to ask anything they do not understand from the explanation. c. Students go through the stages explained by the teachers in creating a men's short-sleeved shirt. While students are doing sewing, teachers mentor them by using sign languages or lip reading (related to Indonesian language subject) to explain how to sew men's fashion by using the

Components	Example Explanation
Closing Activities (10 Minutes)	<p>technique of seam allowance (related to English language subject) with seam allowance of 2 cm (related to mathematics subject).</p> <p>d. Teachers supervise students in conducting the gradual practical exercise in creating a men's short-sleeved shirt. During the supervision process, teachers remind students to iron the material in each step of sewing. In the ironing process, the fabric material is sprayed with water, emitting hot steam, also called evaporation (rated to natural science subject).</p> <p>4. After the practical exercise, students enter into a classroom discussion with their teachers about the production process that they have undergone and what they were feeling during the process. Teachers involve students' classmates to join in the discussion and stimulate them to draw a conclusion from the practical exercise.</p> <p>1. Teachers encourage students to make a reflection on the progress of the men's short-sleeved shirt they have created.</p> <p>2. Teachers give students their feedback about the progress to assess students' understanding of today's material.</p> <p>3. Teachers close the meeting by providing motivation for students.</p>

In their second year, the students with hearing and speech impairments enrolled in an internship program. The program was conducted for three months, or approximately 400 working hours. The internship program implemented was the internship in the school's teaching factory. The teaching factory, managed as a business unit of the school, gets orders for tote bags made from spoon bun material, a soft lightweight fabric material. Every month, it usually produces more than 15,000 tote bags ordered by shops, department stores, and supermarkets in and out of Lumajang Regency. This internship location was chosen because no fashion industry in Lumajang Regency provides internship opportunities for students with special needs. Besides, in the event that the internship program was conducted outside of Lumajang, students' parents would be worried about their students' safety, given their physical and mental conditions. Needless to say, this only applies to students with special needs.

In the second-year learning processes, learning evaluation was conducted at each of the semesters, in which teachers offered feedback on students' work. In this evaluation process, teachers did not rectify any mistakes in the work, but they invited students to take a close look at their work in case of a need for improvement. This approach was utilized to help students understand some areas of their work requiring improvement from their discussions with teachers. In addition to giving insight into the improvement of their present work, the approach was instrumental in positively encouraging those students to voice their opinions about their work for better results in the future. The fashion work by second-year students with multiple disabilities can be seen in Figure 6.

Figure 6*The Fashion Work of Second-Year Students with Multiple Disabilities***Stage 3: Learning Plan in Third Year**

The school still moved through the same stages in formulating learning plans as in two previous years. What was new was that the school was now required to prepare the students for the national examination. Given the compulsory nature of the national examination, the school had to ensure that those students with multiple disabilities (IQ score: 60-80) received comprehensive preparation for all the academic subjects under examination, including mathematics, natural science, Indonesian language, and English language. The stages of the formulation of learning plans in the third year are illustrated in Figure 7.

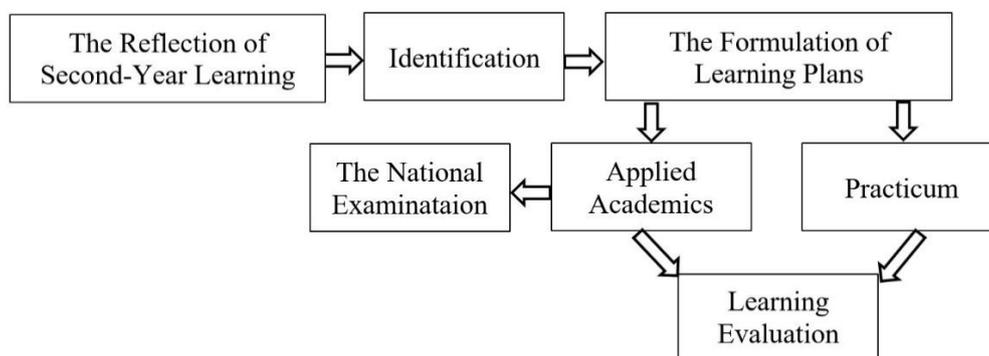
Figure 7*Stages of Learning Plan in Third Year*

Figure 7 indicates that the development and formulation of a third-year learning plan for applied academics and practicum was developed and formulated based on the reflection and identification of students' competencies. In the practicum course this year, students had to do

practical exercises to improve the quality of their fashion work in the second year. Hopefully, they will become more proficient in creating better fashion work. Meanwhile, the curriculum of academic subjects focused on preparing them for the annual national examination conducted and standardized by the Indonesian government. At the end of the learning process, an evaluation was made to assess students' competencies in applied academic and practicum courses.

Discussion

Learning programs for students with multiple disabilities were facilitated by approaches based on their individual needs. Belonging to the categories of students' disabilities are children with physical, cognitive, emotional, or social disabilities, and those with a combination of those disabilities. The purpose is to ensure that students receive inclusive, meaningful learning. The employment of the approaches, as was found in this research, should consider four components: (1) the basic principles of learning for student disability, (2) learning strategies, (3) a conducive learning environment, and (4) evaluation and monitoring. The basic principles in learning for students with disability include personalization, inclusion, and collaboration (UNESCO, 2020). The learning strategies are closely related to multisensory approaches, assistive technology support, positive reinforcement, and curriculum modification (Davis et al., 2004). The conducive learning environment is closely related to safe and comfortable classrooms, inclusive classes, and consistency (Bačová, 2024; Florian, 2014; Woodcock & Anderson, 2025). The evaluation is made periodically to monitor students' development and to adjust learning strategies to suit the needs of the students (Westbroek et al., 2020), like an Individualized Education Program (IEP) can serve as a role model for the school to set learning objectives and evaluate learning progress (IDEA, 2004).

Learning programs for students with multiple disabilities involve employing multidisciplinary approaches designed to understand the way the students learn, and the process of adjusting learning strategies to suit the individual needs of each of those students conforms to principles of learning psychology. Indicators of learning psychology for students with multiple disabilities consist of seven things (University of Wolverhampton, 2021). First, characteristics of students with special needs have unique learning patterns, challenges and needs, and as a result, they need the employment of special approaches. Second, learning theories relevant to learning programs include behaviorism, constructivism, humanism, and information processing theory (Leeder, 2022; Pande & Bharathi, 2020). Third, individualized approaches are employed through undertaking an initial assessment to examine the cognitive, emotional, social, and physical aspects of students with special needs by using assessment tools like the Individualized Education Program (Fu et al., 2018; Strogilos et al., 2021). Fourth, as for a conducive learning environment, inclusive learning can integrate students with special needs into regular classes with the program's addition. Of course, this applies only to some particular students with special needs. Safe and comfortable classrooms can involve the use of soft lighting and reduced sound and physical management (Barrett et al., 2015). The involvement of students' parents is necessary for forging a collaboration between teachers and therapists, and to support learning activities at school and home. Fifth, psychological support

is required to develop positive relationships with students and boost their learning motivation. In this case, the techniques usually employed are counselling and play therapy. Sixth, challenges arising in learning for students with special needs and solutions to those challenges become the next indicators of learning psychology for students with special needs (Nugraha et al., 2023). The challenges refer to concentration problems, focus issues, behavioral disorders, and communication barriers, while the solution to those challenges is for the school to implement behavior management strategies through providing positive reinforcement or utilizing augmentative and alternative communication. The last is continuous evaluation and improvement. It is developed by periodically monitoring students' progress and development and revising learning strategies if necessary. By means of a basic understanding of learning psychology and the careful adjustment of implemented strategies, students with special needs can learn more effectively and efficiently according to their talents and potential (Carter et al., 2022).

Conclusion

Students with special needs possess unique talents, and the schools where they study daily must develop curricula and lesson plans tailored to their characteristics and needs. This research significantly contributes to the development and implementation of special school curricula to recognize the talents of students with special needs and prepare them for their future through vocational fashion practice. During the learning process, schools conduct diagnostic and identification assessments, modify the curriculum, and identify learning outcomes. They also develop annual lesson plans based on the results of reflection, monitoring, and periodic evaluation to assess student progress. This learning process will significantly improve outcomes with the support of teachers, parents, therapists, and other stakeholders. Meanwhile, this study is limited to students with hearing and speech impairments and mild intellectual disabilities for vocational fashion practice in special schools. To plan the learning process every year, it depends on the results of monitoring and evaluation conducted by the school regarding their physical and intellectual readiness. It is important to involve teachers, psychologists, therapists, and school leaders.

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Authors' Contributions

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References

- Almalky, H. A., & Alwadei, A. M. (2024). Vocational rehabilitation services and career readiness for individuals with intellectual disability in Saudi Arabia. *Children and Youth Services Review, 166*, 108003. <https://doi.org/10.1016/j.childyouth.2024.108003>
- Alnahdi, G., Schwab, S., & Seifert, S. (2023). Vocational preparation programs and employment outcomes for students with disabilities: A systematic review. *International Journal of Inclusive Education, 27*(3), 301–317. <https://doi.org/10.1080/13603116.2022.2032087>
- Assanbayev, A., & Makoelle, T. M. (2024). Practices promoting the inclusion of adult students with disabilities in the classroom: A case of a technical vocational education and training college in Kazakhstan. *Education Sciences, 14*(5), 529. <https://doi.org/10.3390/educsci14050529>
- Báčová, V. (2024). Developing a safe learning environment in primary-level innovative schools in the Czech Republic. *Education 3-13, 1–11*. <https://doi.org/10.1080/03004279.2024.2410482>
- Barrett, P., Davies, F., Zhang, Y., & Barrett, L. (2015). The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis. *Building and Environment, 89*, 118–133. <https://doi.org/10.1016/j.buildenv.2015.02.013>
- Björk-Åman, C., & Ström, K. (2023). Governing students for work and for life - guidance for students with special educational needs in Finnish VET. *Journal of Vocational Education & Training, 1–19*. <https://doi.org/10.1080/13636820.2023.2255577>
- Carter, M., Webster, A., Stephenson, J., Waddy, N., Stevens, R., Clements, M., & Morris, T. (2022). The nature of adjustments and monitoring for students with special educational needs in mainstream schools. *Australasian Journal of Special and Inclusive Education, 46*(1), 1–18. <https://doi.org/10.1017/jsi.2021.21>
- Davis, P., Florian, L., Ainscow, M., Dyson, A., Farrell, P., & Hick, P. (2004). *Teaching strategies and approaches for pupils with special educational needs: A scoping study*. Department for Education and Skills. <https://dera.ioe.ac.uk/id/eprint/6059/1/RR516.pdf>
- Florian, L. (2014). What counts as evidence of inclusive education? *European Journal of Special Needs Education, 29*(3), 286–294. <https://doi.org/10.1080/08856257.2014.933551>
- Fu, W., Lu, S., Xiao, F., & Wang, M. (2018). A social-cultural analysis of the individual education plan practice in special education schools in China. *International Journal of Developmental Disabilities, 66*(1), 54–66. <https://doi.org/10.1080/20473869.2018.1482853>
- Higashida, M. (2019). Experiences of disabled people making the transition from vocational training to employment in Sri Lanka: an exploratory study. *Asia Pacific Journal of Social Work and Development, 29*(3), 194–208. <https://doi.org/10.1080/02185385.2019.1593234>
- IDEA. (2004). *Individuals with Disabilities Education Act (IDEA)*. U.S. Department of Education. <https://www.ed.gov/laws-and-policy/individuals-disabilities/idea>
- Leeder, T. M. (2022). Behaviorism, skinner, and operant conditioning: Considerations for sport coaching practice. *Strategies, 35*(3), 27–32. <https://doi.org/10.1080/08924562.2022.2052776>

- Liu, S., Bazzana-Adams, K. D., deBraga, M., & Kamenetsky, S. B. (2024). Factors affecting experiential learning experiences of university students with disabilities. *Disabilities*, 4(4), 801-814. <https://doi.org/10.3390/disabilities4040049>
- Mårtensson, S., Lidström, H., & Ekbladh, E. (2024). Students with difficulties managing vocational education in high school: identifying intervention areas related to self-reported student-environment fit and mental health. *Journal of Occupational Therapy, Schools, & Early Intervention*, 17(3), 829-841. <https://doi.org/10.1080/19411243.2023.2215763>
- Modi, N. (2023). Knowledge, skills, and attitudes: Competencies for sustainable tourism. In *International Handbook of Skill, Education, Learning, and Research Development in Tourism and Hospitality* (pp. 1-20). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-3895-7_48-1
- Monteiro, S., & Almeida, L. S. (2015). The relation of career adaptability to work experience, extracurricular activities, and work transition in Portuguese graduate students. *Journal of Vocational Behavior*, 91, 106-112. <https://doi.org/10.1016/j.jvb.2015.09.006>
- Nugraha, I., Emiliasari, R. N., Soni, M., & Wardana, B. A. (2023). Special needs students, what are the challenges. *English Education and Applied Linguistics Journal*, 6(1), 19-32. <https://doi.org/10.31980/eeal.v6i1.41>
- Nurjanah, I., Ana, A., & Masek, A. (2022). Systematic literature review: Work readiness of vocational high school graduates in facing the industrial 4.0 era. *Jurnal Pendidikan Teknologi dan Kejuruan*, 28(2), 139-153. <https://doi.org/10.21831/jptk.v28i2.48552>
- Owen, K. L., Griffith, G. M., Gillard, D., & Grindle, C. F. (2023). Children will leave school with these life skills, which I think is amazing: An interview study exploring teachers' experiences of implementing a health and wellbeing curriculum. *Pastoral Care in Education*, 42(3), 269-289. <https://doi.org/10.1080/02643944.2023.2244506>
- Pande, M., & Bharathi, S. V. (2020). Theoretical foundations of design thinking—A constructivism learning approach to design thinking. *Thinking Skills and Creativity*, 36, 100637. <https://doi.org/10.1016/j.tsc.2020.100637>
- Paramita, P. P. (2023). Constraints and Strategies for Inclusive Education in Indonesia at the Primary School Level: A Literature Review. *IJIP: Indonesian Journal of Islamic Psychology*, 5(2), 134-147. <https://doi.org/10.18326/ijip.v5i2.71>
- Phuthi, N., & Mazarire, T. (2022). Technical and vocational education provision in Zimbabwe: Leveraging institutional support for learners with special educational needs. *Journal of Vocational Education & Training*, 76(5), 1084-1103. <https://doi.org/10.1080/13636820.2022.2152078>
- Rokhim, F. (2023). Factors influencing unemployment in Indonesia. *Journal of Scientific Research, Education, and Technology (JSRET)*, 2(1), 122-131. <https://doi.org/10.58526/jsret.v2i1.51>
- Strogilos, V., Lim, L., & Binte Mohamed Buhari, N. (2021). Differentiated instruction for students with SEN in mainstream classrooms: contextual features and types of curriculum modifications. *Asia Pacific Journal of Education*, 43(3), 850-866. <https://doi.org/10.1080/02188791.2021.1984873>
- UNESCO. (2020). *Inclusive education: Ensuring no learner is left behind*. UNESCO.
- University of Wolverhampton. (2021). *What you need to know about the psychology of learning*. University of Wolverhampton.

- Westbroek, H. B., van Rens, L., van den Berg, E., & Janssen, F. (2020). A practical approach to assessment for learning and differentiated instruction. *International Journal of Science Education*, 42(6), 955-976. <https://doi.org/10.1080/09500693.2020.1744044>
- Woodcock, S., & Anderson, J. (2025). Conceptions to classrooms: The influence of teacher knowledge on inclusive classroom practice. *International Journal of Educational Research Open*, 8, 100412. <https://doi.org/10.1016/j.ijedro.2024.100412>
- Yasdin, Y., & Muksins, M. (2024). Political paradigms and vocational education policy in Indonesia: a document analysis. *Quality Education for All*, 1(1), 204-221. <https://doi.org/10.1108/QEA-10-2023-0007>
- Ye, X., Zhu, D., Chen, S., & He, P. (2020). The association of hearing impairment and its severity with physical and mental health among Chinese middle-aged and older adults. *Health and Quality of Life Outcomes*, 18(1), 155. <https://doi.org/10.1186/s12955-020-01417-w>
- Yoana, Auwalin, I., & Rumayya. (2024). The role of vocational education on unemployment in Indonesia. *Cogent Education*, 11(1), 2340858. <https://doi.org/10.1080/2331186X.2024.2340858>