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Student Problems in Self-Directed Learning: A Survey of Vocational High School Student in Islamic Religious Education

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This study analyzes the perceptions of vocational high school students regarding the application of SDL in Islamic religious education learning. The research method used is an exploratory sequential mixed methods design. Data were collected by distributing open-closed questionnaires to 42 volunteers as respondents. The results showed that there were 5 problem themes with an average score of 2.40 - 2.84, which is classified as high. This indicates that students still experience problems related to their learning independence due to their learning habits. This study has implications for the importance of teachers in innovating learning that can motivate students to direct their abilities to achieve the expected results. Therefore, this study shows that implementing SDL in Islamic religious education learning in vocational high schools is not easy, because students' high ability to access information from various digital media platforms and their learning habits that require practical activities, making them feel dissatisfied if learning only focuses on understanding the text .

Keywords: Islamic religious education, self-directed learning, vocational high school students, student problems.

In Indonesia, the policy of implementing an independent curriculum has shifted the direction of student-centered learning by prioritizing student independence to express themselves in developing their own knowledge and skills (Cahayani & Suastra, 2024; Nora et al., 2025). Therefore, the application of self-directed learning (SDL) in Islamic religious education in vocational high schools has become a concern in the world of education, as a hope. Which can support the improvement of student learning independence, SDL as a 21st-century learning approach, which encourages students to take the initiative to think critically in digital literacy by implementing effective strategies according to student abilities, so that they can be developed in real life (Brandt, 2020). Student learning independence in Islamic religious education learning is believed to provide students with a passion for learning in understanding material flexibly and critically in the use of digital media through designs that integrate Islamic values into students through the process of understanding, experiencing and practicing, by motivating students to continue learning and developing their cognitive, affective and psychomotor aspects (Setiadi et al., 2022; Ali et al, 2022).

So far, research results have shown a positive relationship between SDL and various conditions and disciplines, improving self-control, motivation, performance, self-efficacy, and support, as well as improving student academic achievement (Siswanto, 2024). In Islamic religious education learning, In vocational high schools, learning success is based on the achievement of all learning elements. Which is based on the fields of faith, morals, fiqh, hadith, memorization and history of Islamic culture. It is hoped that these learning elements will support the development of soft skills for students who are ready to work. This is because student success is not only achieved through hard skills but also through on soft skills (Wulaningrum & Hadi, 2019). Therefore, the implementation of SDL begins with understanding the material itself and progressing to real-life practice. Given the high level of ability of vocational high school students to access information from various digital media platforms, and their habits in exploring information and expressing their work results with creativity and innovation in learning activities, laboratory practicums and workshops. Therefore, Islamic religious education learning is relevant to the existence of vocational high schools as

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formal educational institutions for the younger generation (aged 15-19 years) that provide skills training as technicians with personalities that can meet the needs of the world of work and the demands of life in society.

Researchers agree that SDL is a process in which individuals take the initiative to diagnose their learning needs, formulate learning objectives, identify human and material resources for learning, select and implement learning strategies, and assess learning outcomes, with or without the help of others (Mentz&Oosthuizen,2016; Fajrah, 2023). In SDL, being a self-directed learner requires having a positive attitude in directing their ability to understand and be responsible for their learning, taking the initiative to find the desired results through communication and collaboration and the use of media they consider effective, directing themselves to be more independent in learning and assessing their own learning progress (Auliana & Hadijah; 2022).

However, the implementation of SDL consistently faces challenges with conventional learning, which often leads students to become dependent on teachers, resulting in a lack of student engagement and a failure to think critically about digital use. Students lose focus and tend to memorize concepts without understanding the information in depth (Wasyilah, 2021; Dahal & Bhat, 2023; Zubaidi & Amanah, 2024). These challenges can also occur in Islamic religious education (Putra et al., 2024).

In Islamic religious education learning in vocational high schools, the challenges faced in students' independent behavior in learning, the less than optimal between students' ability to access information from digital media and their efforts to understand the information. In completing assignments, students use digital media as entertainment and not as a means of supporting learning, there are still students working on projects from other subjects while Islamic religious education learning is taking place, low student involvement in class discussions to develop their understanding, and student indifference to their learning success. Therefore, the need for strategic interventions that depart from vocational high school students' perceptions of the application of SDL in Islamic religious education learning, which can improve students' independent learning attitudes.

This research was conducted not only to contribute to the literature on integrating vocational education and religious pedagogy, but also to combine the application of SDL that is oriented towards responding to students' problems to provide practical insights in formulating strategic interventions on the application of SDL in Islamic religious education learning in vocational high schools that can increase students' learning independence.

Method

In applying the research methodology, the study was conducted using an exploratory sequential mixed methods design, by collecting qualitative data first to explore a phenomenon, then collecting quantitative data to explain the relationships found in qualitative data (Creswell, 2014: 543). In the first phase, the researcher collected and analyzed qualitative data to delve deeper into students' perceptions of problems regarding the application of SDL in Islamic religious education learning in vocational high schools. Next, in the second phase, the researcher conducted quantitative data analysis to measure the average and consistency of students' perceptions of these problems. The research questions are: What are the problems in SDL in Islamic Religious Education learning? And how can these problems be overcome?

Participant

The respondents of this study were determined based on the respondents' willingness to participate in the study, which amounted to 42 students from class XI spread across the departments of audio video engineering, industrial electronics engineering, mechatronics engineering and computer network and telecommunications engineering, in 2 schools in Padang city, Indonesia, namely vocational high schools 1 West Sumatra and vocational high schools 6 Padang.

Data Collection and Analysis

Data collection was conducted by distributing open-ended and closed-ended questionnaire surveys. The open-ended questionnaire aimed to explore students' perceptions of the problems they face and their solutions. The data from the open-ended questionnaire were analyzed based on the research objectives and the depth of the responses provided. Next, the data were analyzed using thematic analysis to identify patterns and categories of respondents' responses (Imran &Yusoff, 2015; Velasco et al., 2022). This inductive approach presents themes that are naturally constructed based on the facts and experiences of respondents, carried out systematically, as proposed by Braun and Clarke (2006). These steps include: (1) Familiarization with data: The researcher read and reread the transcripts many times to gain a deep understanding of the content; (2) Generating initial codes: The data was systematically coded to identify meaningful features; (3)Searching for themes: Codes were grouped into broader themes representing significant patterns; (4) Reviewing themes: Themes were refined to ensure coherence and relevance; (5) Defining and naming themes: Themes were clearly defined, capturing the essence of the data; and (6) Writing the report: A narrative was developed, using data extracts to support the themes (Dinh, 2025).

The second stage, developing a closed questionnaire instrument using a four-point Likert scale (“strongly agree”, “agree”, “less agree”, and “disagree”) which was given to respondents. Previously, the statement items were validated on 25 respondents (Daud et al., 2018) by correlating the data item scores with the total item scores, the significance test used the criteria from rtable of 0.396 for df = 25 -2 = 23 with a significance level of 0.05 and two-tailed. If the value obtained is positive and the number of r counts ÿ rtable, then the item being tested is declared valid. Conversely, if the r count value ÿ rtable then the item is declared invalid. Meanwhile, the reliability analysis used Cronbach Alpha, namely if the calculated Cronbach value is > 0.6 then it can be said that the research variable is reliable. The quantitative data obtained were then analyzed using descriptive statistics such as averages and data consistency analysis, not seeking or explaining interrelationships or testing hypotheses related to respondents' answers. This stage provides

Table1

Interpretation of Student Responses

Classification	Score
Very High	3,26 – 4,00
High	2,51 – 3,25
Low	1,76 – 2,50
Very Low	1,00 – 1,75

Results

The results of the open-ended questionnaire survey yielded 42 students who were willing to respond. Based on the research objectives, 18 perceptions were obtained from the 42 responses, consisting of 15 perceptions of problems and 3 perceptions of efforts to address them. Next, a thematic analysis was conducted based on the research objectives and the depth of the responses.

From the results of the theme analysis, development was carried out using a closed questionnaire to 42 respondents. Respondents who have provided responses based on a Likert scale with 4 answer choices, namely: "strongly agree," "agree," "somewhat agree," and "disagree." Previously, a validity test was conducted on 25 respondents for the statement items, with the following results:

Table 2

Results of the Statement Validation Test for Difficulties in Critical Thinking

Statement	r_{value}	Sig.	r_{tabel}	Criteria
Item 1	0.913	0.000	0.396	Valid
Item 2	0.931	0.000	0.396	Valid
Item 3	0.932	0.000	0.396	Valid
Item 4	0.930	0.000	0.396	Valid
Item 5	0.952	0.000	0.396	Valid

Item 6	0.649	0.000	0.396	Valid
Item 7	0.627	0.000	0.396	Valid
Item 8	0.963	0.000	0.396	Valid
Item 9	0.983	0.000	0.396	Valid
Item 10	0.975	0.000	0.396	Valid
Item 11	0.986	0.000	0.396	Valid
Item 12	0.972	0.000	0.396	Valid
Item 13	0.978	0.000	0.396	Valid
Item 14	0.980	0.000	0.396	Valid
Item 15	0.965	0.000	0.396	Valid
Item 16	0.973	0.000	0.396	Valid
Item 17	0.649	0.000	0.396	Valid
Item 18	0.972	0.000	0.396	Valid

Table 2 shows that all items for the 5 perception themes are valid, with the calculated $r_{value} > r_{table}$ of 0.396.This is also shown in the summary of respondent data from the reliability test results conducted using the SPSS program, the results of which are as follows:

Table 3
Respondent Data Summary

Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excluded[a]	0	.0
	Total	25	100.0

a. Listwise deletion based on all variables in the procedure.

Table 3 is an explanation of the number of valid data processed in percentage categories. Where the percentage of valid data is 100%, and nothing is excluded. The results of the reliability test are as follows:

Table 4
Reliability Test Results

Theme	Cronbach's Alpha	N of Items
Difficulties in critical thinking	0.963	4
Difficulties in determining the desired results	0.967	3
Difficulties in students motivating themselves to learn independently	0.920	4
Difficulties in optimizing the use of media and time	0.991	4
Students' ability to solve their problems.	0.885	3

Table 4 shows that the results of the reliability analysis using the Cornbach Alpha technique, the resulting value exceeds 0.6, so it is concluded that the items are declared reliable and consistent.

After conducting validity and reliability tests, a closed-ended questionnaire was distributed to 42 respondents to measure the average student perception of each theme. The results of this measurement are as follows:

Table 5
Average Results of Respondents' Answers

Theme	Mean	Median	Std. Deviation
Difficulties in critical thinking	2.60	3.25	1.053
Difficulties in determining the desired results	2.80	3.33	1.171
Difficulties in students motivating themselves to learn independently	2.69	3.25	1.056
Difficulties in optimizing the use of media and time	2.67	3.00	1.097
Students' ability to solve their problems.	2.84	3.33	1.152

Table 5 presents the results of the descriptive analysis which shows that the average overall score of the theme, the average range is 2.60–2.84. This average range indicates that all student problem themes are classified as high, indicating that the majority of respondents "agree" with the statement. This is further supported by the respondent's tendency level, which ranges from 3.00 – 3.33 and the variation in respondents' answers also varied with a standard deviation of more than 1 (range 1.053 – 1.171).

Discussion

Student problems that arise in the implementation of SDL represent a form of student dissatisfaction with the independent learning process they face (Nash, 2020), as is the case in Islamic religious education learning in vocational high schools. Therefore, each problem theme in this research finding will be narrated by describing the phenomenon based on the learning styles and actual learning situations that vocational high school students typically experience. This discussion will also provide strategic interventions to improve student independent learning in the application of SDL in Islamic religious education learning in vocational high schools.

Difficulties in critical thinking

Students' problems in critical thinking or high-level and deep thinking are influenced by students' self-efficacy, therefore it is important to create a learning environment to improve students' learning readiness (Turan & Koç, 2018). This means that students' problems in critical thinking indicate students' unpreparedness to learn independently. Students' problems in memorizing and understanding the verses of the Qur'an depend on their ability to read the verses of the Qur'an and their weak interest in reading and memorizing. The verses of the Qur'an are presented in Arabic with Tajweed rules for reading them, therefore students' difficulties in memorizing and understanding the Qur'an are influenced by the ability of vocational high school students to read and memorizing verses of the Quran.

In Indonesia, the admission process for vocational high schools is based on the skills desired by prospective students. Consequently, students' skills are sometimes not commensurate with their ability to read and memorize the Quran. This impacts the learning process of Islamic religious education in vocational high schools, leading to students' disinterest in Islamic religious education, which leads to perceptions of difficulty understanding Islamic terminology, weaknesses in analyzing peers' opinions, and limited involvement in providing relevant examples or events.

The researcher's intervention to increase students' confidence in critical thinking is based on the ability of vocational high school students to learn by expressing their work and creativity integrated into Islamic religious education learning materials. Assignments that encourage understanding of the material and facilitate student retention by creating engaging interactive media about the material, video editing about real experiences according to the material, digital preaching content and so on, which can be applied directly in the classroom, either individually or in groups. This is relevant to the learning style of vocational high school students who tend to be visual and kinesthetic, thus providing space for students to develop competitive and cooperative learning (Kamÿÿlÿ & Özonur, 2019). In addition, this strategy emphasizes that SDL is designed not only to convey material, but to create meaningful challenges that encourage students to explore and problem solve (Munawwaroh & Putri, 2024).

Difficulties in determining the desired results

In students' problems in determining the desired results, active communication is required which can clarify the objectives and efforts to understand the material (Van Zyl & Mentz, 2019). Communication is conducted to review student understanding, so students are exposed to the perspectives of other students, as well as between students and teachers. Although SDL seeks to reduce dependence on teachers, it is important to align perceptions about the goals and outcomes to be achieved, including negotiating the timeframe for completing assignments (Hawkins, 2018; Maksoud & AlHadeed, 2024; Keller & Raemy, 2024).

Vocational high school students' independent learning is accustomed to a cooperative work environment; they tend to complete their work collaboratively. Teachers should not ignore students' unclear understanding, which can lead to students assuming that Islamic religious education focuses solely on knowledge and teachers being less transparent about the desired outcomes. Therefore, the researcher's interventions view SDL as inseparable from collaborative learning (Buitrago, 2017; Kemp et al., 2022). Therefore, it is important to provide space for students to share their understanding. Students are also

allowed to question the teacher about the accuracy of these results (Bishara, 2021). This is considering that students' process of becoming self-directed learners is achieved gradually and can occur individually or in groups (Hawkins, 2018).

Difficulties in Students Motivating themselves to learn independently

Students' motivation for independent learning is a major issue in SDL. From a humanistic psychological perspective, every individual possesses a spontaneous drive for self-actualization, under favorable conditions (Lanskih et al., 2020). This spontaneous drive is a form of the human instinct to progress and develop, which can increase students' motivation for independent learning. This means that students' activities in SDL are driven by something meaningful and valuable to themselves and their lives. If this meaningful value is not found, it will weaken students' willingness to learn independently (Nash, 2020). As a result, students who tend to expecting explanations from the teacher and the learning atmosphere feels less interesting.

Fundamentally, the study habits of vocational high school students are closely related to the learning process implemented. The more engaging the learning process, the more likely it is to increase student motivation and engagement. Therefore, SDL begins with presenting topics that are interesting to students (Robinson & Persky, 2020). Digital literacy plays a significant role in developing individual knowledge of learning materials by encouraging creativity and curiosity (Rini et al., 2022). Researchers believe it is important for students to choose their own learning methods or determine projects based on their learning interests, which contribute to the desired outcomes. In psychological motivation theory, the principle of freedom to choose learning methods allows students the freedom to choose different resources, time, and learning pace, through which participants acquire true knowledge (Radovan, 2020).

Furthermore, Hidayah (2024) explains that student independence can be increased by giving different assignments to each individual. This encourages students to complete assignments independently by utilizing all learning resources. Therefore, designing SDL in project-based Islamic religious education learning with an inquiry and discovery approach can be the basis for increasing motivation for independent learning. Students are free to explore and analyze information independently to understand Islamic religious education material, thus encouraging student activeness (Caswell & LaBrie, 2017; Al Mamun et al., 2022; Guo et al., 2020; Suradika et al., 2023; Mutanga, 2024). This intervention aligns with the learning styles of vocational high school students who tend to prefer active learning (Agustini & Tegeh, 2019; Baihaqi et al., 2024; Maulida & Sutama, 2024).

Difficulties in optimizing the use of media and time

The problem of suboptimal use of resources and time indicates a lack of self-awareness in students' learning management. One cause is the distraction of non-academic activities, which causes students to lose focus on learning activities and completing assignments (Murniati et al., 2023). This is demonstrated by the perception that the time to search for information is too short, the presentation of Islamic information in online media is difficult to understand, information from the internet distracts students, and difficulty in determining accurate information from the internet.

Vocational high school students tend to study with tools that require physical activity (Sumardi et al., 2025), a condition that makes them fantasize about being lazy, excessively relaxed, so they tend to spend time without a goal or desired result, or procrastination. Researchers see the need for strategic intervention in the application of SDL in Islamic religious education learning, by applying the pomodoro method developed by Francesco Cirillo in the 1980s.

The Pomodoro method is a technique for increasing students' focus and attention by utilizing media and the time allotted. The time allotted is limited by intervals according to predetermined stages of a task or activity. In SDL, teachers can direct students' focus by determining which tasks to choose and asking students to prepare themselves and their learning needs. Next, the activity can begin by establishing agreed-upon time rules, and ensuring that both teachers and students are committed to that time agreement. Teachers

can also provide breaks to relieve tension and strengthen students' learning motivation (Wang et al., 2010; Dizon et al., 2021; Septiani et al., 2022). Implementing the Pomodoro Method in SDL it can also provide reinforcement for students' learning independence.

Students' ability to solve their problems

Students' ability to solve their problems is a primary concern in the implementation of SDL, as it is related to students' concern for evaluating the success of what they have learned and reflecting on themselves and the processes that occur during the learning process (Voskamp et al., 2022).Students can get a broad overview of the stages and activities they are going through, so that prompting him to ask why something could happen.

Vocational high school students typically apply reflective skills to improve their performance. They are accustomed to identifying weaknesses in their work, adjusting theories and project work processes, and developing their creativity skills and creativity, all the work qualities they need to be the basis for them to reflect on(AyuSulistyarini et al., 2018; Oviawe, 2020; Messina Dahlberg & Gustavsson, 2024). Therefore, the implementation of SDL in Islamic religious education learning can be intervened by familiarizing reflection-based learning to vocational high school students, to provide more meaningfulness, experience, and sustainability to their learning.

Conclusion

This study explores students' perceptions of SDL in Islamic religious education learning in vocational high schools, which can improve their learning independence. The findings indicate that students' perceptions of the application of SDL in Islamic religious education learning in vocational high schools are categorized as high, so it is not yet able to support students' learning independence. However, Islamic religious education learning in vocational high schools relevant to preparing students for work by combining vocational skills and Islamic values. This study concludes that the importance of innovative learning skills can motivate students to direct their abilities to achieve the expected results. In addition, this study shows that implementing SDL in Islamic religious education learning in vocational high schools is not easy, because students' high ability to access information from various online media platforms and their learning habits that require practical activities, making them feel dissatisfied if learning only focuses on understanding texts.

The limitations of this research, the need for exploration, analysis and experimentation for future research, so that strategic interventions can be developed and researched in the application of SDL to various similar or different situations that can provide different results.

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