**SELF-DIRECTED LEARNING WITH VIDEO PROMPTING ON AUTISM SPECTRUM DISORDER STUDENT’S WRITING SKILL**

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This research aimed to uncover the implementation of self-directed learning with video prompting on autism spectrum disorder student’s writing skill. This research was conducted on student of SLB Samudra Terra Athena in academic year of 2023-2024. The school located at Masaran village, Tragah, Bangkalan, East Java. The subjects of this research that will be observed by researcher is a student in SMPLB grade at SLB Samudra Terra Athena. The researcher took only 1 student as the subject. A qualitative research approach was employed in this study to describe the current settings in which video prompting is applied to writing skills. The instruments used were field noted observation, interview, and documentation. To draw a conclusion, the data is next examined. The results, self-directed learning with video prompting demonstrates that video prompting can be a useful teaching tool and aid in the practice of writing abilities for students with ASD.

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# *INTRODUCTION*

 Self-directed learning is definitely a multifaceted context that should not be approached through a single perspective. As per Arndt in Arizatul Humaira' and Ajeng Hurriyah (2018), independent learning is established on learning independence, or "the ability to deal with their way of learning". Self-directed learning requires students to take the initiative and responsibility for their own study. Self-directed learning is an attempt taken by a student to enhance knowledge, skills, achievements related to self-development orientation in which students use various ways in multiple circumstances and also time done in a relatively independent manner (Maisyarah, 2021). Self-directed learning can take place inside and outside formal educational institutions (Loeng, 2020). In a formal learning environment, this should be viewed as a collaborative process between teachers and students. Viewed from a critical perspective, It is not exhaustive to minimize self-direction to a matter of external control.

Teachers should be able to use appropriate learning media to teach their students. Many technologies are used in the field of special education to improve overall learning outcomes for students. One of the popular and outstanding learning technologies is video-based intruction (Yakubova & Chen, 2021). Video Based Instruction (VBI) is a kind of multimedia instruction that uses words, images, and actions to enhance learning. The type of VBI that is most frequently utilized in special education is video prompting. Video prompting involves showing students a video that walks them through a sequence of actions. In between each step, the researcher encourages the students to do what they see in the video, and if necessary, the researcher offers feedback (Ozdowska et al., 2021). Additionally, video prompting have the advantage of providing instruction in fewer steps, which helps students with autism spectrum disorder (ASD) to focus on each step instead of the whole task or activity. (Almalki, 2020).

Many individuals with developmental disorders, including ASD, present a deficit in daily living skills necessary for independence (Gillespie-Lynch et al., 2020). In SLB Samudra Terra Athena there is a student with autism spectrum disorder (ASD) who has an interest in writing skills. She likes to write down what she sees even though she is stiff and her handwriting is not neat. In other words, she has a high motivation to learn something even though she has fine motor limitations. And from (Ibrahem et al., 2022) autistic children experience obstacles in fine motor skills, especially in writing. Nevertheless, she never give up and still tries to write something better with the help of video prompting which is the learning media at her school. During learning, she is always excited when asked to write something based on the instructions in the video prompting. She followed all the instructions in the video seriously and carefully. In addition, the school also supports her by collaborating between the teacher and the autism spectrum disorder (ASD) student by using the self-directed learning method. The teacher gives her a prompting video, then the student analyzes the instructions in the video by herself. This method aims to make this autism spectrum disorder (ASD) student have her own initiative with or without the help of others to analyze her own learning needs when using prompting videos. And from this, it has a positive impact on this student because it is developing day by day. From being able to write one word, now she can write sentences.

There are several studies investigating self-directed learning with video prompting on autism spectrum disorder students. (Kaya & Yucesoy-Ozkan, 2022) this study examined the efficacy and efficiency of teaching children with autism spectrum disorder (ASD) daily life skills through self-directed video prompting with and without voice-over narration. A modified alternating treatments strategy was used to investigate video prompting (VP) with and without voice narration. For the purpose of teaching, retaining and verbalizing the two skills of making fresh apple juice and popcorn, self-directed video instructions proved useful with and without voice narration. Additionally, in order to investigate the social validity, they looked at the opinions of both students and special education teachers who assist students with ASD. Every participant said they loved learning everyday living skills and using a tablet for instruction.

Another researcher that hightlights about self-directed learning with video prompting on autism spectrum disorder students is (Akmanoğlu & Pektaş-Karabekir, 2020). According to Akmanoglu & Pektas-Karabekir (2020), this study looked at the preservation and generalization of the six-part person drawing skill in children with autism, as well as the efficacy of using an iPad to teach children this skill through video prompting. The study employed a single subject approach called multiple trial design, varying the number of days for each participant. The study's findings showed that all participants picked up the ability to sketch a six-part human using the iPad's video prompting method, and they were able to generalize the skill to other situations, objects, and people. The social validity results indicated that the parents of the children had favorable thoughts about the study.

Previous studies have revealed the advantages of self-directed learning with video prompting on autism spectrum disorder students. However, there are no studies that address the use of video prompting on autism spectrum disorder students to help students increase their writing ability. These researchers only applied the many advantages of using self-directed learning with video prompting in a general context, while in our current research is in a specific context in English skills such as writing skill.

Based on the above background to answer these issues, the research questions related to self-directed learning with video prompting for student with autism spectrum disorder (ASD) have been formulated: how does autism spectrum disorder student implement self-directed learning with video prompting on the writing skill at SLB Samudra Terra Athena?.

# *research method*

In order to investigate the case study that takes place at SLB Samudra Terra Athena, the researcher used qualitative research methodology. There is a student with autism spectrum disorder (ASD) in this school who is interested in writing. She likes to write down what she sees even though she has fine motor limitations, and that cause her handwriting to be untidy. Interestingly, she never gives up and keeps trying to write something better with the help of video prompting which is a learning media in her school. And to develop it, she collaborated with her teacher using self-directed learning method. The teacher provides video instructions, then the student analyzes the instructions in the video by herself. This method aims for Autism Spectrum Disorder (ASD) students to have own initiative with or without the assistance of someone else to analyze their own learning needs when using video prompting. And from that, the researcher chose qualitative research with Kaya & Yucesoy-Ozkan's (2022) research as a case study.

This research was conducted on student of SLB Samudra Terra Athena in academic year of 2023-2024. The school located at Masaran village, Tragah, Bangkalan, East Java. The subjects of this research that will be observed by researcher is a student in SMPLB grade at SLB Samudra Terra Athena. The researcher took only 1 student as the subject of this study, so the total of students taken by the researcher is 1 student.

In this study, the researcher employed three instruments, there are field note observation, in-depth interviews, and documentation. The first instrument is field note observation which is utilized to measure places, participants, and activities. This involves student performance for the use of video prompting media with self-directed learning on writing skill such as a) plans what she is going to write acccording to the instructions in the video prompting, b) choosing topics, goals, brainstorming, and organizing information on her own, c) writes her ideas in sentences step by step according in the video, d) revise the writing that has been written previously, e) she double-check their writing before submitting it, and f) she presents her writing to an audiences in front of the class.

The second instrument is the interview. The researcher utilized semi-structured interviews as one of the categories of in-depth interviews, which are conducted more freely than structured interviews, such as a) what teaching materials do teachers use in writing lessons with video prompting?, b) are the steps in the videos you viewed easily visible?, c) what difficulties do students have while using video prompts to write?, d) what is the student do when find a difficult to write?, e) how long the students to finish their writing using video prompting?, f) Is video prompting interesting for students ?, and g) what is the student get after learn writing using video prompting ?. And the final instrument is documentation. This instrument is more than just the researcher's photos, but also includes documents such as class plans and student attendance records.

For data analysis techniques, researchers used the theory of Kaya & Yucesoy-Ozkan (2022) with the technique is observation. For observation, the data used includes following two-step instructions, watching video prompting for five minutes, students view the cartoon and observe whether the students view the video with easy questions, imitating motor skills, modeling five behaviors, such as making patterns with toy blocks or clapping, and demonstrating skills. The researchers also used the theory of Akmanoglu & Pektas-Karabekir (2020) with the techniques used is interview. For interview, the data used includes the several questions like ask about students’ profile and continued with more specific questions such as clearly visible skill steps, appropriate sequence of skill steps for skill analysis, and clarity of voice of skill instruction in the video. And from the two data analysis techniques above, researchers found an interpretation that allowed researchers to draw conclusions that the use of video prompting with self-directed learning on autism spectrum disorder student's can train students' writing skill.

# *RESULT*

This study investigated the implementation of self-directed learning with video prompting on autism spectrum disorder student’s writing skill. By guiding the field note observation and interview, the researcher would clarify the reply by providing the results of the research and also the discussion.

**Table 1**. Observation of the Implement Video Prompting on Writing Skill

| **Steps** | **Statements** | **Yes** | **No** | **Evidence** |
| --- | --- | --- | --- | --- |
| Prewriting | Student plans what she is going to write according to the instructions in the video prompting.  | ✔ |  | Students begin to think and search for topics that she will write according to the discussion in the video prompting. |
| Student choose their own topics, goals, brainstorm, and organize information. | ✔ |  | Students find a topic and decide which topic to use. |
| Drafting | Student writes her ideas in sentences step by step according in the video. | ✔ |  | Students organize words based on the topic they choose. |
| Revising | Student revise the writing that has been written previously. | ✔ |  | Students proofread their writing and change it if there are mistakes or it does not match the content of the video. |
| Proofreading | Student double-check their writing before submitting it. |  | ✔ | The student feels confident in his writing so she does not re-examine it. In addition, the student's hand feels stiff because basically ASD students have fine motoric limitations. |
| Publishing | Student presents her writing to audiences in front of the class. | ✔ |  | The student displays the writing that has been made and explains the content of the writing in front of the class. |

For observation, the researchers used writing process in ASD to create the instrument. This process consists of five stages, namely prewriting, drafting, revising, proofreading, and publishing. The video prompting used was how to make apple juice with a duration of 3 minutes. And from the observation, it was found that students could follow the writing process well using video prompting.

The first step is prewriting. The student has been able to plan what they will write according to the instructions in the video. The evidence is that students began to understand the discussion in the video about making apple juice. The student was able to mention the context in the video, but when asked to explain in detail, this student always answered "how to make apple juice". This is because ASD children have difficulty in concentrating in lessons and interacting with others (Permatasari, 2021).

The second step is drafting. The student has been able to write down their ideas in step-by-step sentences according to the video. It is evident that this student has started to string sentences about how to make apple juice according to the video. The student was able to write down steps such as preparing apples, cutting apples, putting apples into a blender, and pouring apple juice into a glass. However, this student has difficulty in it into writing. This student needs teacher assistance to help remember each step in the video, because ASD students have limitations in remembering things. And this requires the right media for learning ASD children in writing, such as using video prompting. And this is relevant to (Still, 2022) about video prompting is effective instructional technology for learning ASD student.

The third step is revising. The student also revised the writing that had been written previously. By playing back the video and matching with the results of her writing. And when there are shortcomings or mistakes, the student immediately corrects them, such as when the student forgot to write down the steps to add sugar and water to the apple juice in the blender. And this is relevant to (Wertalik et al., 2017) about the video prompting is one of the popular and outstanding learning technologies to improve overall learning outcomes for ASD students.

The fourth step is proofreading. In here, the student does not do proofreading. The student did not double check writing result before sending it because this student felt confident with the student’s writing. In addition, the student's hand felt stiff because ASD students have fine motor limitations. The teacher who knew this was not a problem and instead appreciated the student for doing the task well. And this is relevant to (Leach, 2020) about the importance of collaboration between teachers and ASD students in learning using video prompting.

And the final step is publishing. After finishing writing, the teacher asks the student to present her writing to her friends in class. The student was able to display the writing they had written about how to make apple juice. Such as preparing apples, cutting apples, putting apples in a blender, add sugar and water to the apple juice in the blender, turn on the blender, wait until all the ingredients are mixed, turn off the blender, pouring apple juice into a glass, and apple juice is ready to be served. And this result accordance with theory of (Aljehany et al., 2023) about observation with video prompting on writing skill. This is consistent with our research because autistic children can follow each step in the observation as well as other normal children. However, the difference is that autistic children tend to get tired when writing and find it difficult to concentrate when observations are made.

**Table 2**. Interview of the Implement Video Prompting on Writing Skill

| **Questions** | **Answer** |
| --- | --- |
| What material do teachers use to video prompting on writing skill? | The teacher uses the material of how to make apple juice in the prompting video. |
| What difficulties do student have while using video prompts to write? | The student could only understand the content of the video after a while. This is because these ASD students have difficulty in concentrating and get tired easily when writing. |
| What is the student do when find a difficult to write? | The student ask teacher for help by asking what she doesn't know. |
| How long the student to finish their writing using video prompting? | 20 minutes. |
| Are the steps in the videos you viewed easily visible? | Yes, it is clear.  |
| Is video prompting interesting for student? | Yes, the student is interested in using video prompting. This is evidenced by their enthusiasm in completing the task and always asking for a repeat of the video even though the task has been completed. |
| What is the student get after learn writing using video prompting ?. | Students feel happy because they find a new atmosphere in learning and the student can also practice their writing skills. |

Based on the interview with one student at SLB Samudra Terra Athena, this ASD student responded well during the interview and was interested in rewriting using video prompting. And this is accordance with Akmanoglu & Pektas-Karabekir (2020) theory about techniques used is interview with video prompting on writing skill. This can be seen when this ASD student asked the teacher and researcher when he could rewrite using video prompting. In addition, through the interview, the researcher found that the duration of ASD students' work in writing using video prompting was 20 minutes. This is because ASD children have fine motor limitations that cause their hands to be stiff and easily tired when writing (Wahyudi et al., 2021).

In addition, from the interview, the researcher also found the teacher's collaboration with the student. When this ASD student had difficulties, she dared to ask his teacher about things she did not know. For example, she forgot the word "apple" in English, the teacher immediately helped him remember it in an interesting way. The method used by the teacher is very unique because the teacher applies self-directed learning for this ASD students. In here, the teacher let the students try first to solve the problem. This is so that the student can take the initiative to be responsible for her learning with or without others (Towle & Cottrell, 2020). And it has a good impact, because the student can recall the correct writing of apple, from A-P-P-E-L become A-P-P-L-E. And here the writing result of ASD student with video prompting:





Source youtube.com

**Picture 1. How to Make an Apple Juice**

**Table 3**. The Writing Result with Video Prompting of ASD Student

|  |  |
| --- | --- |
| **Steps** | **Answers** |
| 1 | Preparing the apples |
| 2 | Cut the apples into small pieces |
| 3 | Put the apple pieces into the blender |
| 4 | Add sugar |
| 5 | Add water |
| 6 | Turn on the blender and turn it off when all ingredients are blended |
| 7 | Pour apple juice into glass |
| 8 | Apple juice ready to be served |

Based on the results of observations and interviews, it can be summarized that the implementation of video prompting on writing skills is very effective for ASD students (Park et al., 2019). This is because video prompting can expand students' knowledge and imagination in writing (Wertalik et al., 2017). And this is evidenced by the video containing an instruction "How to make an apple juice", which makes it easier for students to imagine the steps. In addition, the use of video prompting can help students to determine topics quickly so that they can pour their ideas into writing. And this is evidenced by the video containing an instruction "How to make an apple juice", which makes it easier for students to imagine the steps in it. In a previous research, students were able to write and draw easily by using video prompting. However, in this research, students needed teacher collaboration to complete the task. For example, the student can mention every step in the video, but it is difficult for the student to write down what he remembers. So in this case the teacher has an important role to help students in practicing writing skills. And from that, the student have satisfactory writing results such as preparing apples, cutting apples, putting apples in a blender, add sugar and water to the apple juice in the blender, turn on the blender, wait until all the ingredients are mixed, turn off the blender, pouring apple juice into a glass, and apple juice is ready to be served.

# *Conclusion*

Individuals with ASD should be given instruction that suits their power and frailty. One area of particular power for ASD individuals is visual processing such as video-based instruction. Video prompting is part of the video-based instruction that has been utilized for ASD students to learn a variety of skills including skills required for daily living such as writing skills. Findings from the reviewed studies related to self-directed learning with video prompting on writing skills for ASD individuals suggest that video prompts can be an effective instructional device. Most of the research on video prompting is about how practice affects the ability of students with ASD to communicate. However, less consideration has been given to ASD children in writing skills using video prompting. Researchers should gather additional information regarding social reliability and engage students and teachers in the process of the research to inquire about their perceptions regarding the usability, acceptability and effectiveness of video prompts in order to encourage wider use of this tool. Children with ASD can develop their talents by overcoming these challenges. In addition, future research should address the effects of various intervention components on student performance such as model type, video length, video viewing method, shooting perspective, error correction, fast fading, voiceover instructions. Teaching valuable life skills to individuals through technology-supported methods may have a direct positive effect on skill acquisition.

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