



Integrating the SAVI Approach with YouTube Videos in Teaching Speaking: A Case Study at Senior High School

Intan Auria Pratiwi¹, Desi Puspitasari²

^{1,2}English Education Department, State Islamic University of Kiai Ageng Muhammad
Besari, Ponorogo, East Java

Corresponding E-Mail: intanauria5@gmail.com

Received: 2025-06-24 Accepted: 2025-10-13

DOI: 10.24256/ideas. V13i2.7224

Abstract

In the era of rapid technological advancement, integrating technology into education has been essential to enhance students' learning experiences, particularly in developing speaking skills. This study aims to describe how the SAVI (Somatic, Auditory, Visual, Intellectual) approach is integrated with YouTube videos in teaching speaking. It also explores students' perceptions of this implementation. This study employed a qualitative approach and a case study design. The data were gathered through classroom observations, questionnaires, and semi-structured interviews involving 27 eleventh-grade students and a teacher at SMAN 1 Slahung. The data were analyzed using Miles and Huberman's model, which involves data reduction, presentation, and verification. The results revealed that integrating SAVI with YouTube videos makes the learning process more interactive, student-centered, and supportive of comprehension speaking practice. Students perceived this approach as engaging and beneficial. They reported increased motivation, active participation, vocabulary mastery, pronunciation, and confidence. Among the four SAVI elements, auditory and visual aspects were perceived as the most supportive, while the somatic encourages active involvement, and the intellectual aspect strengthened students' analytical thinking. Overall, integrating the SAVI with YouTube videos created more engaging, student-centered, and contextually meaningful speaking lessons. However, this study was limited to a small group. Therefore, future research involves broader samples to explore the applicability and the impact of the SAVI approach in diverse learning contexts.

Keywords: SAVI; speaking skill; YouTube video; English language teaching

Introduction

Speaking plays a vital role in English learning, especially in Teaching English as a Foreign Language (TEFL) at senior high school, as it indicates students' ability to communicate and interact effectively in real-life contexts. Speaking is the most complex skill because it simultaneously involves linguistic, psychological, and social aspects (Lander & Brown, 2001). In high school, mastering speaking skills enables students to express their thoughts, opinions, and feelings using appropriate language forms and communicative strategies. However, many Indonesian school students still face challenges developing their speaking ability. These challenges include limited vocabulary, inability to construct proper sentences, fear of making mistakes, and low confidence to speak in public (Harmer, 2007). This condition causes students to be less able to use English in the context of real communication, even though they have received language learning since primary education (Wisrance & Kristanti, 2024). To overcome these problems, English teaching in schools needs to apply approaches that are more interactive, engaging, and aligned with students' interests and learning styles. Using digital platforms, videos, and interactive media can create more authentic communication experiences and increase students' learning motivation (Maisyaroh & Nadiah, 2024). One medium used in speaking is YouTube videos, a learning resource and teaching support media.

YouTube provides authentic video content featuring English conversations in various communication situations, such as everyday conversations, interviews, presentations, and discussions (Yusuf & Agung, 2021). Through YouTube, students can recognize pronunciation, intonation, expressions, and vocabulary usage in real contexts (Sulistiyansih, 2024). In addition, using YouTube can increase student motivation and engagement, as they can learn through media that is interesting and relevant to their interests (Iqhfhar Fajar & Kamaruddin, 2024). Audiovisual media such as videos can improve language comprehension by presenting the context of real situations and enriching meaning through visual and audio elements (Jane Sherman, 2003). In addition, learning is more effective when delivered through a combination of words and images, as it helps to reduce cognitive load and strengthen working memory (Mayer, 2020). On the other hand, teachers can utilize YouTube videos for various speaking activities such as imitating conversations, making oral summaries, discussing, and giving video-based assignments. Thus, integrating YouTube becomes more helpful when linked to the Somatic, Auditory, Visual, Intellectual (SAVI) approach.

The SAVI concept developed by Meier (2003) within the framework of Accelerated Learning has been widely applied in previous studies that show its effectiveness in improving learning outcomes, including speaking skills. This approach aims to create learning experiences that are fun, active, and can represent all aspects of students' physical and mental movements. SAVI consists of four main elements: (1) Somatic - involves the body and physical movement; (2) Auditory - involves hearing and sound; (3) Visual - involves vision, such as colors, pictures, and visual impressions; and (4) Intellectual - involves critical

thinking and problem solving. This approach aligns with constructivist learning theory, which states that knowledge is not just given, but also actively built by learners through meaningful learning experiences (Piaget, 2021). Some studies support implementing the SAVI approach in English language learning. For example, research by Septiana et al. (2024) shows that using the SAVI approach increased student activity and learning outcomes in speaking skills with the help of vlog media that emphasized direct experience involvement. In addition, Sophian et al., (2025), with the SAVI approach, encourage students to become an active part of the learning process, which increases their involvement, motivation, and understanding. Seeing these gaps, further research is needed. Therefore, this study aims to describe how the SAVI approach is integrated with YouTube videos in teaching speaking and the students' perception of this implementation at SMAN 1 Slahung. This research is vital as it provides a deeper understanding of how SAVI is integrated with YouTube videos, helping to teach speaking in high school-level classrooms.

Method

This study employed a qualitative approach and a case study design. A case study is an empirical inquiry investigating a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident (Yin, Robert K, 2018). The aim is to describe the process of applying the SAVI approach integrated with YouTube, the audiovisual media. This approach was chosen because it can provide an in-depth understanding of the learning situation naturally and thoroughly, especially related to teacher and student interactions in the classroom (Creswell & Poth, 2018). This research focuses mainly on the meaning and interpretation of the learning experience, not statistical measurement.

In collecting data, the researcher used some instruments, which include observation, interviews, and questionnaires. Observation was conducted during speaking learning activities to record directly how the SAVI approach was applied, especially in the aspects of somatic (physical movement), auditory (hearing), visual (vision), and intellectual (thinking). Semi-structured interviews were conducted with the teacher and students. It consists of 10 questions related to the implementation of SAVI integrated with YouTube videos. The questionnaire was distributed to the 27 eleventh-graders to explore their views, experiences, and perceptions towards learning experiences that involve these four aspects. It gathered the perceptions more broadly regarding their involvement in learning that simultaneously stimulates the body, senses, and mind.

The data obtained was analyzed using a qualitative descriptive analysis approach, which includes the stages of data reduction, presentation, and conclusion drawing/verification (Matthew B. Miles, A. Michael Huberman, 2014). The analysis consisted of three main stages. Data Reduction was done by selecting, focusing, and simplifying the data obtained from observations,

interviews, and questionnaires, which were then categorized according to the four aspects of the SAVI approach. Irrelevant information was removed to emphasize data that reflected students' speaking learning experiences. Data presentation involved organizing the reduced data into descriptive forms such as tables, thematic summaries, and narrative explanations to illustrate patterns of teacher-student interactions, learning engagement, and responses to the use of audiovisual media. Finally, conclusion drawing and verification were conducted by interpreting the presented data to conclude how the SAVI approach is integrated with YouTube as the audiovisual media supported students' speaking ability, with continuous verification to ensure the accuracy and validity of the findings.

Results

The Implementation of SAVI (Somatic, Auditory, Visual, Intellectual) Approach Integrated with YouTube Videos in Teaching Speaking at SMAN 1 Slahung

This study describes applying the SAVI (Somatic, Auditory, Visual, Intellectual) approach integrated with YouTube videos in speaking instruction at SMAN 1 Slahung. Data were obtained through two classroom observations and semi-structured interviews with English teachers and students. The observations aimed to capture the real classroom situation during the teaching and learning process, while the interviews were conducted to explore the perceptions, experiences, and reflections of both the teacher and the students regarding the implementation of SAVI integrated with YouTube videos as an audiovisual medium in speaking lessons.

Based on the results of observations conducted during the implementation of the SAVI approach integrated with YouTube videos in speaking lessons in the classroom, some important findings were obtained regarding how teachers manage learning activities and student responses to the learning process. At the beginning of the activity, the teacher opened the lesson by showing a short YouTube video related to everyday communication, such as greetings and how to express opinions. The students seemed to pay attention enthusiastically, listening to the conversations in the video, then imitating the pronunciation and intonation they heard. After that, the teacher asked the students to pair up and do role plays using expressions from the video. This activity demonstrates the application of auditory and somatic aspects in the SAVI approach, where students learn through listening and performing physical activities directly. The students were active, enthusiastic, and highly motivated when practicing speaking with their partners during the activity.

In the next activity, the teacher developed the application of visual and intellectual aspects by showing a YouTube video featuring interviews with native English speakers. After watching, students discussed the content of the video in small groups, found new vocabulary, and paid attention to the use of language and body language of the speakers in the video. Then, each group was asked to present their discussion results or opinions to the class briefly. Through this activity, all elements of SAVI (movement, observation, listening, and

thinking) were well integrated so that the learning process became more active and meaningful. The teacher observed that students were more confident when speaking because they understood the context of the conversation in real terms through authentic and engaging video footage.

In addition, using YouTube videos also makes learning more enjoyable and less monotonous. Students appear to be more focused and actively participate during the learning process. Listening, imitating, discussing, and practicing conversations directly make the classroom atmosphere more lively and communicative. Teachers also utilize these activities to foster students' critical thinking skills by asking reflective questions about the video content and using expressions appropriate to the communication situation. Thus, it can be concluded that applying the SAVI approach integrated with YouTube media can optimize various aspects of English speaking, from listening, seeing, moving, to thinking.

The interview data were described narratively to provide a detailed picture of how this approach affected student participation, motivation, and speaking skills. Ten questions were addressed to the English teacher about implementing the SAVI approach, integrated with YouTube videos, in teaching speaking. The interview aimed to understand better how the teacher planned, applied, and evaluated the learning process using this approach. The teacher explained that the implementation of SAVI was carried out systematically, beginning with setting clear learning objectives and selecting appropriate YouTube videos that matched the lesson theme and students' language level. She stated that YouTube was chosen because it provided authentic and engaging audiovisual materials that could stimulate students' interest and motivation. She said :

"This approach helped my students understand how to use English expressions in real situations. Combining sound, image, and movement made them more focused and motivated. I noticed that students became more confident when speaking."

Implementing the SAVI approach integrated with YouTube videos in speaking lessons at SMAN 1 Slahung was carried out systematically and focused on the students. All components of SAVI are integrated into learning activities: students watch authentic YouTube videos to obtain visual stimuli, listen to and imitate English pronunciation and intonation as an auditory aspect, carry out role-playing and physical activities (e.g., reading statement cards or giving presentations while standing) as a somatic aspect, and analyze video content through discussion and reflection as an intellectual aspect. This design allows students to gain understanding before practicing speaking skills so that they are not only passive recipients but also active actors in the learning process.

YouTube videos have been proven to provide authentic language and audiovisual context that strengthens students' overall understanding of the material before oral practice. Teachers stated that integrating audiovisual media significantly increased student motivation to learn compared to text-based

methods while accommodating the various learning styles in the classroom. The questionnaire results show that the majority of students consider learning to speak with this approach to be more interesting, less monotonous, and makes them more prepared and confident when speaking. In addition, students also reported an increase in vocabulary due to activities that encouraged them to express their ideas and respond to their classmates. Table 1 shows that among the SAVI components, the auditory aspect had the highest frequency of benefits, followed by the somatic and visual aspects. In contrast, the intellectual aspect played a supporting role in analyzing the video content.

Overall, the results of this study indicate that the implementation of the SAVI approach integrated with YouTube videos is capable of integrating movement, listening, observation, and thinking into a single integrated learning process. This application increases student participation, motivation, and confidence and provides a more meaningful speaking practice experience tailored to diverse learning styles and needs.

Students' Perception of Using the SAVI Approach Integrated with YouTube Videos in Teaching Speaking at SMAN 1 Slahung

Ten interview questions were given to the 27 students about implementing the SAVI approach integrated with YouTube in teaching speaking. They were related to their experiences and perceptions of learning to speak through implementing the SAVI (Somatic, Auditory, Visual, Intellectual) approach combined with YouTube videos. The interview explored how students responded to this learning model, how it influenced their motivation, confidence, vocabulary, and participation, and which aspects of the SAVI approach helped them the most.

Based on the students' responses, most expressed that learning to speak through YouTube videos was more enjoyable and helpful than conventional methods. The students said:

"Watching videos helps me understand the expressions better. I can see how people speak, facial expressions, and gestures, so it feels more natural."

"The activities make me active. I don't just sit quietly; I move, discuss, and speak. That makes the class more exciting."

"For me, the auditory aspect helps the most because I can hear the correct pronunciation and intonation from the video."

"I like the visual part because I can see the real context, not just imagine it."

The questionnaire and interviews revealed a clear picture of the students' views on applying the SAVI approach combined with YouTube videos in speaking lessons. Most students considered speaking lessons using YouTube videos effective, enjoyable, and more interesting than conventional methods

because they presented real-life contexts for language use. Teachers also emphasized that audiovisual media increased student motivation to learn compared to reading materials alone.

The students stated that learning became more lively and less boring because it encouraged active engagement, individually and in groups, mainly when they analyzed and imitated expressions in the videos. They also believe the SAVI approach provides a more meaningful learning process because it integrates somatic, auditory, visual, and intellectual aspects, catering to various learning styles. Teachers added that the design of these activities allows students not only to sit passively but also to engage in physical activities, discussions, and reflections on the content of the videos.

The questionnaire shows that the auditory and visual aspect is the most helpful component in improving speaking skills, especially in capturing pronunciation and intonation directly from videos. In addition, students find it easier to understand the material with the help of videos that provide a strong visual and audio context before oral practice. Activities requiring students to express ideas and respond to their peers' expressions also expand their vocabulary and increase their confidence due to the understanding phase before speaking practice. The stages of activities, from group work to individual work, are considered to make it easier for students to practice speaking. Most students also admitted to being more motivated. They unanimously recommended that this approach continue to be used because it improves learning outcomes and makes the learning process more interesting and meaningful.

Table 1. SAVI Indicators

SAVI Aspects	Activity Indicators	Activity Indicators
Somatic	Performing physical activities such as role plays, reading statement cards, or presenting while standing	Increases students' physical engagement and focus
Auditory	Listening to dialogues/ videos and imitating pronunciation and intonation	Improves students' pronunciation and intonation
Visual	Observing YouTube videos, pictures, or learning illustrations	Helps students understand the context of language use
Intellectual	Analyzing video content, reflecting, and writing statements before speaking	Develops students' critical thinking and idea organization before speaking

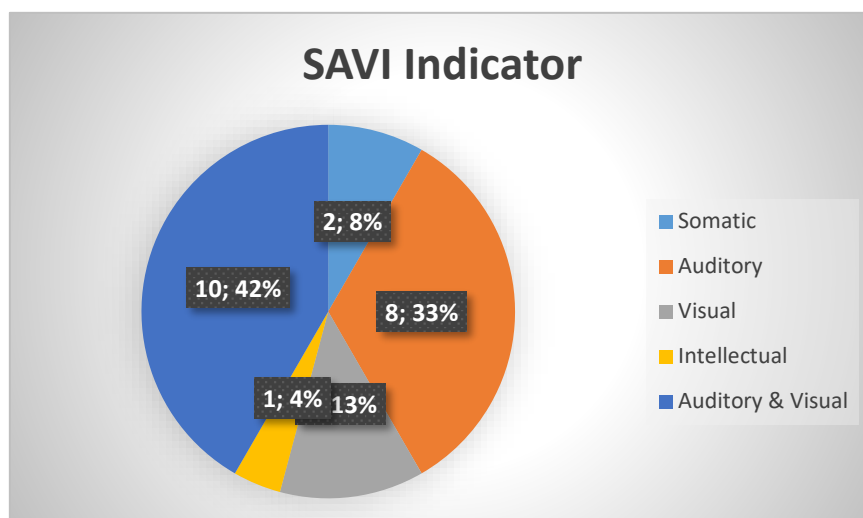


Figure 1. The Influence of the SAVI on the Students' Speaking Skills

This chart shows the influence of each SAVI aspect on student speaking skills at SMAN 1 Slahung. Based on questionnaire data, the auditory and visual aspects appear to be relatively balanced and are the most prominent components because listening and watching videos simultaneously greatly helps students improve their pronunciation, intonation, and understanding of language context. The somatic aspect is in the moderate category, indicating that physical activity still plays an important role in increasing student engagement. Meanwhile, the intellectual aspect was lower because it functioned primarily as a support in analyzing and reflecting on the video content. Overall, this chart confirms that the main strength of the SAVI approach integrated with YouTube lies in the balanced combination of auditory and visual inputs, complemented by somatic elements to create more effective speaking learning. At the same time, the intellectual aspect strengthens students' critical thinking processes.

Overall, students' perceptions of applying the SAVI approach integrated with YouTube videos were positive. This approach increased motivation, confidence, engagement, and speaking learning outcomes while providing a more authentic, contextual learning experience tailored to their needs. It also encouraged students to participate more actively and express their ideas more confidently during speaking activities.

Discussion

The results of this study show that the use of YouTube videos in learning to speak English at SMAN 1 Slahung is considered more effective, fun, and enjoyable than conventional methods. Learners find it easier to understand the material because the videos show real language usage context and authentic communication models that they do not get from textbooks. These findings align with Mayer (2019) and Saed et al. (2021), affirm that audiovisual media can provide an authentic learning context, support comprehension and retention,

and naturally improve students' pronunciation and intonation skills. The findings also show that video media helps teachers visualize material and motivates students to participate more actively in speaking and learning.

Integrating the SAVI approach in speaking learning has also facilitated students' diverse learning styles. The combination of somatic, auditory, visual, and intellectual aspects creates a more meaningful learning process, as each student can absorb the material according to the most dominant sensory pathway in him/her. This is in accordance with the multisensory learning theory (Meier, 2003) and strengthened by the findings that multisensory engagement improves student learning outcomes, motivation, and activeness (Istiqomah et al., 2020). By integrating the four aspects of SAVI, teachers transfer knowledge and create learning experiences that allow students to understand, remember, and practice English more contextually.

Interestingly, the questionnaire data showed that auditory and visual aspects seemed to be balanced as the dominant components in supporting students' speaking skills, especially in improving pronunciation, intonation, and understanding of language context. Students find it easier to capture speech patterns and meanings when they listen while looking at the video's conversation models. This aligns with (Gilakjani & Sabouri, 2016), which states that listening and observing simultaneously are the basis for mastering speaking skills. Somatic activities such as role play, statement card reading, and standing presentations also increase students' physical engagement. These findings support the view of Dogani (2023) on the importance of hands-on experience and physical activity in language learning, which can motivate and reduce student boredom in the classroom.

In addition, the gradual arrangement of activities from group work to individuals has been proven to help learners be more prepared and confident to speak (Cadiz & Alona, 2021). With the comprehension phase before speaking practice, students have time to process the material and feel more comfortable when asked to perform orally. These findings are consistent with the scaffolding concept of Boonmoh & Jumpakate (2019), which states that providing training stages systematically increases students' readiness and courage in language practice. Combining the SAVI approach with YouTube videos enriches students' vocabulary, increases learning motivation, and creates an inclusive and fun classroom atmosphere. These results support the research of Ramadhani & Samsi (2023) and Daeli (2024), who found that authentic digital media can significantly improve English learning engagement and outcomes because it provides a learning experience relevant to students' real worlds. Moreover, Bhusaery et al. (2024) also found that using YouTube as a medium for vocabulary learning increases students' motivation, activeness, and confidence in speaking English. It also makes the learning process more enjoyable and reduces boredom. The study showed that YouTube videos significantly improve students' vocabulary acquisition and retention, as the visual and auditory stimuli help them remember new words more effectively.

Overall, the findings of this study reinforce that the SAVI approach integrated with YouTube video media improves students' motivation, engagement, confidence, and speaking skills. This approach delivers learning materials and provides a more authentic, contextual, and tailored learning experience to their needs. Integrating the four aspects of SAVI in YouTube video-based learning makes students more active, more confident, and better able to use English in real communication. Thus, the results of this study provide an empirical foundation for English teachers and curriculum developers to develop more innovative and student-centered speaking learning strategies.

Conclusion

This study's results show that the SAVI (Somatic, Auditory, Visual, Intellectual) approach, integrated with YouTube video media, positively impacts learning to speak at SMAN 1 Slahung. When students learn through movement, sound, image, and thought, they fully understand the material and feel more engaged and confident. With their authentic and engaging content, YouTube videos open a new window for students to see how English is used in real life, making learning feel more alive and relevant.

More than just improving speaking skills, this approach also creates a classroom atmosphere that is fun, interactive, and respectful of each student's different learning styles. They feel heard, included, and given space to develop according to their potential. The gradually designed learning process also gives students the courage to speak, practice, and express themselves without fear. In other words, learning becomes more than just material delivery; it becomes a meaningful experience.

This success is a strong signal that innovations in learning, especially those that integrate the SAVI approach with technology familiar to students, can bring significant changes in the language education world. Therefore, this strategy should be further developed and widely applied in language education. Further research is encouraged to examine its impact across language skills and educational settings.

References

- Bhusaery, R., Chaerul, A., & Kamil, A. B. (2024). Investigating Students Response of Using Video Based Learning Method Through Youtube on English Vocabulary Learning. *Infotech Journal*, 10(1), 128-131. <https://doi.org/10.31949/infotech.v10i1.9567>
- Boonmoh, A., & Jumpakate, T. (2019). Using Scaffolded Instructions to Improve Students' Skills. *Reflections*, 26(1), 1-16. <https://doi.org/10.61508/refl.v26i1.199840>
- Cadiz, G., & Alona, M. (2021). International Journal of English Language Studies (IJELS): Enhancing Students' Confidence in an English Language Classroom. *International Journal of English Language Studies (IJELS)*, 3(25), 16-25. <https://doi.org/10.32996/ijels>

- Creswell, J. W., & Poth, C. N. (2018). *Creswell, John W* (pp. 1–459).
- Daeli, R. (2024). effectiveness of language-related Youtube videos on EFL learning motivation. *Working Papers in Language Pedagogy*, 18, 37–55. <https://doi.org/10.61425/wplp.2023.18.37.55>
- Dogani, B. (2023). Active learning and effective teaching strategies. *International Journal of Advanced Natural Sciences and Engineering Researches*, 7(4), 136–142. <https://doi.org/10.59287/ijanser.578>
- Gilakjani, A. P., & Sabouri, N. B. (2016). Learners' Listening Comprehension Difficulties in English Language Learning: A Literature Review. *English Language Teaching*, 9(6), 123. <https://doi.org/10.5539/elt.v9n6p123>
- Harmer, J. (2007). Learning the Language of Practice. 4th edition. *Curriculum Inquiry*, 17(3), 293–318. <https://doi.org/10.1080/03626784.1987.11075294>
- Iqhfhar Fajar, M., & Kamaruddin, A. (2024). IDEAS Journal of Language Teaching and Learning, Linguistics and Literature Students' Perception on The Use of YouTube Video to Improve Learning Motivation at Junior High School. 12(2), 3125–3142. <https://doi.org/10.2456/ideas>.
- Istiqomah, A. N., Kurniawati, I., & Wulandari, A. N. (2020). The implementation of somatic, auditory, visualization, intellectually (SAVI) learning approach to improve students' attention toward mathematics learning. *Journal of Physics: Conference Series*, 1563(1). <https://doi.org/10.1088/1742-6596/1563/1/012033>
- Jane Sherman. (2003). *Using Authentic Video in the Language Classroom*. Cambridge University Press.
- Lander, J. A., & Brown, H. D. (2001). Teaching by Principles: An Interactive Approach to Language Pedagogy. In *Language* (Vol. 71, Issue 4, p. 843). <https://doi.org/10.2307/415773>
- Maisyaroh, R., & Nadiah. (2024). Wawasan dan aksara. *JUWARA: Jurnal Wawasan Dan Aksara*, 4(2), 140–149.
- Matthew B. Miles, A. Michael Huberman, J. S. (2014). Qualitative data analysis: a methods sourcebook. In *Sustainability (Switzerland)* (Vol. 11, Issue 1).
- Mayer, R. E. (2019). E-Learning and the Science of Instruction. *Sustainability (Switzerland)*, 11(1), 1–14.
- Mayer, R. E. (2020). Multimedia Learning. *The Annual Report of Educational Psychology in Japan*, 41(0), 27–29. https://doi.org/10.5926/arepj1962.41.0_27
- Meier, D. (2003). The Accelerated Learning Handbook Panduan Kreatif. In *Mc Graw-Hill Companies, Inc.*
- Piaget, J. (2021). Jean-Piaget's Constructivist Theory of Learning and Its Application in Teaching. *Doran-International Early Childhood Education*.
- Ramadhani, G. P., & Samsi, Y. S. (2023). Efl Junior High School Students' Perception Towards Using Youtube in Learning Process of English Listening Skills. *EDUSAINTEK: Jurnal Pendidikan, Sains Dan Teknologi*, 11(1), 351–366. <https://doi.org/10.47668/edusaintek.v11i1.970>
- Septiana, R. G., Sukardi, Masyhuri, Suryanti, N. M. N., & Yuvita, S. (2024). Pengaruh Model Pembelajaran Savi (Somatis, Auditori, Visual, Dan Intelektual) Berbantuan Media Vlog Terhadap Hasil Belajar Siswa. *Pendas :*

Jurnal Ilmiah Pendidikan Dasar, 09(04), 444–453.

Sophian, S. K., Hidayah, R. R., Fia, A., Safitri, D., & Suryanda, A. (2025). *Model Pembelajaran SAVI (Somatic , Auditory , Visualization , dan Intellectually) untuk Meningkatkan Hasil Belajar Siswa*. 4(1), 1–7.

<https://doi.org/10.54259/diajar.v4i1.2751>

Sulistiyaningsih, R. (2024). *Electrum journal*. 4(2), 1–10.

Wisrance, M. W., & Kristanti, E. (2024). Psychological Barriers on Efl Students' Speaking Performance in Border Area. *Exposure : Jurnal Pendidikan Bahasa Inggris*, 13(2), 413–430. <https://doi.org/10.26618/exposure.v13i2.15634>

Yin, Robert K. (2018). *Case study research: Design and methods*.

Yusuf, M., & Agung, L. (2021). Rahmatika 1 , Munawir Yusuf 2. *Journal of Education Technology*, 3(1), 152–158.