

Teachers' Reactions to the Use of VideoScribe in Classroom Learning

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Abstract. The need for learning materials that promote student independence, collaboration, creativity, and innovation is crucial in today's educational environment. Integrating Information and Communication Technology tools, such as the VideoScribe animation application, presents a valuable solution. This study explores teachers' reactions to VideoScribe at SMP IT Ar Rasyid. Data were collected through questionnaires and interviews from teachers in various subjects, including English, Economics, Indonesian Language, Information and Technology, Mathematics, and Islamic Religious Education. Results show high enthusiasm among teachers through the use of videoscribe, leading to a notable increase in their competency with it. Seventy percent of teachers strongly believe, and thirty percent agree, that it significantly boosts interest in creating more innovative and effective educational materials. The findings highlight the effectiveness of diverse instructional methods in enhancing teachers' skills and enthusiasm for adopting new educational technologies, suggesting that thorough training programs are vital for improving teaching practices and learning experiences.

Keywords: Teachers' Reactions, VideoScribe, Learning, Animation in Education

1 Introduction

Over the past few decades, information technology has become an integral part of human life. The influence of electronic media on young people's lives has seen a remarkable surge over the last ten years[1]. Digital evolution has substantially altered the way individuals acquire and engage with information [2], [3]. Many young people today increasingly depend on online platforms as their primary news source, moving away from conventional media outlets like newspapers, radio, or television [4]–[7]. Furthermore, a 2019 Pew Research Center report indicates that 96% of people aged 18 to 29 possess a smartphone[8]. A recent study conducted by the advocacy organization Common Sense Media revealed that teenagers aged 13 to 18 spend over seven hours daily using screens, including computers, tablets, smartphones, e-readers, gaming consoles, and televisions [9]. Current research suggests that limiting media use, referred to as media fasting, can positively influence a person's well-being. As highlighted by [9], a key factor in enhancing the effectiveness of the teaching process is the use of media by educators to present learning materials to students. Hamalik, as referenced in [10], explained that incorporating instructional media in the teaching and learning process can inspire new interests and desires, boost motivation, promote active

learning, and influence students psychologically. Media is one of the learning devices necessary to support the success of the learning process in large classrooms. Kemp and Dayton, as cited in [11], stated that when instructional media is applied to extensive audiences, it needs to serve three primary purposes, including its ability to enhance interest, encourage action, and provide guidance [10] states that instructional media functions as a tool to convey messages, inspire creative ideas, and stimulate students' interests during the learning process. Moreover, Pulungan highlights that instructional media helps clarify teaching materials when they are not straightforward or clear. It is employed to assist teachers in presenting lesson content in a way that enhances students' comprehension [11]. On the contrary, a learning medium is not only intended to provide convenience for students in understanding a topic, but it is also expected to evoke excitement and a strong desire to continue exploring the material through integration with the learning medium. Hence, choosing the right medium should be approached thoughtfully to effectively spark students' interest and curiosity. This, in turn, will positively influence the success of the learning process.

Under the 'Merdeka Belajar' Curriculum framework, media should be utilized to inspire students to take a proactive role in their studies, while also fostering their creative and innovative capabilities. Thus, it is crucial to develop learning media that enable students to become independent, collaborative, creative, and innovative thinkers, especially at the elementary and junior high school levels. Successfully developing these skills during their early education not only prepares students for future academic challenges but also contributes significantly to creating a skilled and competent workforce for Indonesia.

A modern and efficient teaching approach is the use of Information and Communication Technology (ICT)-driven learning tools. Typically, this involves interaction with computers or mobile devices, internet connectivity, and animation software. The advancement of Information Technology (IT) in society has progressed significantly, with many modern services increasingly relying on IT [12]. Research has also shown that ICT-based learning media is considered an effective tool for enhancing the quality of the Teaching and Learning Process (KBM) in today's education [15].

The creation of ICT-based learning media must also take into account the skills and abilities of the educators [16]. While an ICT learning tool incorporating animation programs may be highly advanced in terms of technology, its effective use is still reliant on the educator's knowledge and skill level. Such learning media ultimately become less effective when used by teachers who are not familiar with developments in Information and Communication Technology (ICT). Therefore, efforts are needed to introduce teachers to ICT-based learning media that use animation programs, with a level of understanding that is accessible for all teachers. This form of ICT-based learning media is created to be user-friendly for all teachers, even without extensive ICT knowledge or skills. Additionally, engaging students in its use can foster independent, collaborative, creative, and innovative learning experiences.

VideoScribe is an animation tool designed for creating ICT-based learning media. This application enables users to produce animated videos with digital hand-drawn effects. With VideoScribe, users can generate animations that mimic hand-drawn sketches, giving the appearance that a hand is sketching images or text throughout the video. This program, developed by Google, is widely used for presentations, online learning, and creating visual content to illustrate concepts or share information in an engaging format. It enhances student participation in the learning process by allowing text, images, and audio to be embedded,

which fosters a more enjoyable and interactive learning environment [13]. Users can design images, text, or other elements and then animate them to give the impression that the visuals are being drawn directly on the screen. VideoScribe adds a creative and captivating dimension to presentations and educational materials with its distinctive visual effects.

The VideoScribe animation app is easy for teachers to use and doesn't require any advanced drawing skills. It includes a wide selection of images, icons, characters, and other objects in its menus, making it simple for teachers to create engaging animations as desired. Teachers can freely and creatively design animations that align with the learning topics they are covering. This animation tool can be used on multiple platforms, including both computers and mobile devices. Thus, teachers do not need much time to use the VideoScribe animation application. At AR Rasyid Islamic Junior High School, it was found that teachers still use PowerPoint in their teaching processes, even though students are already accustomed to using mobile phones and iPads. This occurs because teachers tend to stick with familiar learning media and are reluctant to try new ICT-based technologies. Moreover, teachers face time constraints due to their heavy workloads, which limits their ability to develop animation skills in ICT. The school also has limited software resources and infrastructure for creating ICT-based animated learning media, which further decreases teachers' motivation to explore this area.

Due to the lack of teachers' ability to create ICT-based instructional media with animations, the learning process can become monotonous and boring, leading to decreased student motivation to engage actively in learning. This can result in reduced potential for understanding and information retention, and can negatively impact learning outcomes. Furthermore, in order to cope with an increasingly digital environment, students need to develop technology skills. If teachers fail to effectively integrate ICT into the learning process, students may lack the necessary skills for future success. Teachers face limitations in using interactive instructional media based on information technology.

2 Methodology

This study employs a qualitative case study approach, concentrating on specific instances of teachers using VideoScribe. This approach helps gather teachers' subjective responses and understand the contextual factors influencing their reactions. Data collection involved focus group discussions, which provided a group setting for teachers to share experiences and reactions, facilitating discussions on common challenges and successes. Observations were carried out as teachers used VideoScribe in the classroom to capture immediate reactions and directly observe student engagement. Open-ended questionnaires were distributed to a group of teachers to gather varied insights on their experiences with VideoScribe. Data collected from interviews, focus groups, and other methods would be analyzed to identify recurring themes, including ease of use and technological challenges. Coding the data helps to identify patterns and categorize teachers' reactions. Observations and responses were quantified to provide an overview of common reactions across participants. The participants included teachers from different subjects and experience levels who had used VideoScribe in their lessons. The data source comprised 10 teachers from SMP IT, representing a range of subjects such as Mathematics (AR), English (EBU), Science (JL), ICT (VP), Economics (SIN),

Indonesian Language (FS), Islamic Religious Education (DN), Civic Education (YH), Aqidah Akhlak (WR), and Fiqh (RH).

3 Result and Discussion

3.1 Result

A study and data analysis were conducted to investigate teachers' responses to incorporating VideoScribe into the teaching and learning process. Presented here are the results from interviews and questionnaires conducted by the Researcher (R) with teachers at SMP IT Ar Rasyid on their use of Videoscribe. Ten teachers from various subject areas participated in this study on Videoscribe usage.

A. Data 1

R: Does the VideoScribe application assist teachers in the teaching and learning process?

VP: Videoscribe has greatly helped me in creating various types of teaching media.

RH: The students really enjoy using Videoscribe, and I have also taught them how to make it.

The following is the chart of the survey results from the teachers: Training and mentoring in the Videoscribe application greatly assist teachers during instruction.

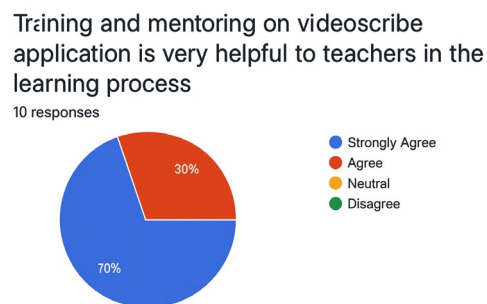


Fig. 1. Teachers' Responses to the Training and Mentoring in using Videoscribe

Chart 1 data reveals strong teacher support for training and guidance in using Videoscribe, with 30% agreeing and 70% strongly agreeing on its advantages. This strong approval underscores the importance teachers place on receiving adequate training to effectively implement educational technology, suggesting that structured support for technology integration is crucial for maximizing its benefits.

Data 1 indicates that both educators and learners have adopted that Videoscribe app in the learning environment. As demonstrated by VP's statement, which notes that Videoscribe helps create a variety of instructional media, the application has proven to be a useful tool for teachers. This implies that the application improves teachers' ability to create captivating lesson plans, which probably results in more interactive and aesthetically pleasing lessons. RH observes that students react favorably to Videoscribe and have even received instruction on its use. This suggests that the application directly improves student engagement in addition to helping teachers. Giving students the freedom to use Videoscribe on their own can encourage creativity and digital literacy while enabling them to take an active role in their education.

Teachers strongly encourage training initiatives, and Videoscribe is a well-received tool that benefits both teachers and students.

B. Data 2

R: Is the animation in the Videoscribe application easy to design?

YH: Videoscribe simplifies the animation process by providing built-in assets, which helps speed up design, although it might still require some time to create more customized animations

WR: It's user-friendly for most people, especially if you're looking to create whiteboard-style animations quickly without detailed graphic design skills.

As for the survey data results, they are shown in the following chart.

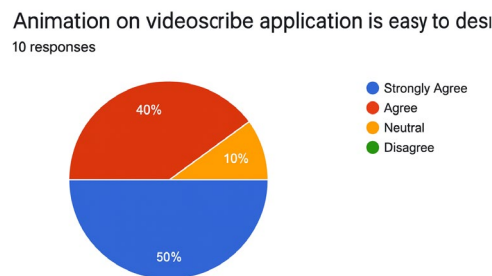


Fig. 2. Videoscribe Animation Is Easy to Design

This favorable opinion is further supported by the survey results. It is clear that the majority of teachers find the application straightforward, as 90% of them agree or strongly agree that creating animations using Videoscribe is simple (50% strongly agree, 40% agree). The 10% of teachers who are still unsure, however, points to a minority that might have run into restrictions or find customisation difficult. According to data 2, YH observes that the design process is accelerated by Videoscribe's built-in resources, which is probably appealing to educators or other users who need to create animations quickly and effectively. This supports WR's finding that Videoscribe works well for people who want to create animations without requiring a deep understanding of graphic design. Additionally, YH and WR point out that a variety of users, including those with no background in graphic design, can utilize Videoscribe. The software is accessible for making animations, particularly whiteboard-style content, which is frequently used in educational and instructional environments, because to its integrated assets and intuitive interface.

C. Data 3

R: Can training and mentoring in the Videoscribe application improve teachers' teaching competence both offline and online?

DN: Training and mentoring on Videoscribe can be beneficial, especially in online settings where engaging animations can capture students' attention more effectively.

FS: Yes, with the right guidance, teachers can use Videoscribe to make lessons more dynamic, potentially increasing student engagement and understanding in both offline and online environments.

And their comments supported by the following chart.

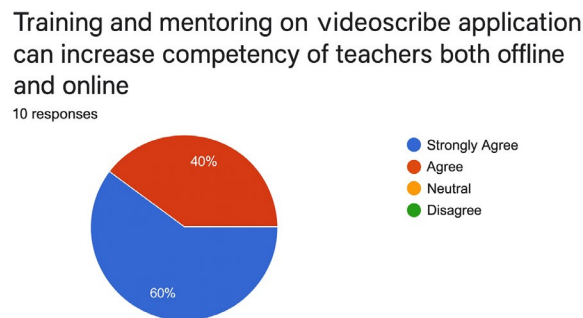


Fig. 3. The Videoscribe Application Enhances Teachers' Competence in Teaching Offline/Online

The teachers' opinions of the training and assistance given for the Videoscribe program in improving their offline and online teaching abilities are then shown in Chart 3. 60% of teachers strongly agree, compared to 40% who agree. According to the findings, 60% of participants are certain that the training and assistance provided by Videoscribe will improve their ability to teach. This points to a successful conclusion and shows that everyone who took part thought the training was very beneficial.

Then, DN's Response emphasizes how useful Videoscribe is in online environments, where animations can improve student engagement. This implies that the application is ideally adapted for online learning settings, where visual aids can assist students grasp difficult ideas and hold their attention.

FS's Response elaborates on this by pointing out that Videoscribe can enhance the dynamic and engaging nature of classes when used appropriately. This lends credence to the notion that the technology can be applied in both online and offline contexts, enhancing student understanding and engagement. According to the analysis, teachers strongly believe that Videoscribe training and mentorship enhance teaching efficacy, especially when it comes to involving students and developing engaging lessons.

D. Data 4

R: Is the training and mentoring of the Videoscribe application useful for creating test questions?

AR: While Videoscribe is primarily designed for creating animations, it can still be helpful in making test questions more interactive and visually appealing, which may improve student engagement

EBU: Yes, Videoscribe can be very useful for creating visually engaging test questions, especially for subjects that benefit from visual aids or whiteboard-style explanations.

Then the chart is as follows.

Training and mentoring on videoscribe application
is helpful in making test questions
10 responses

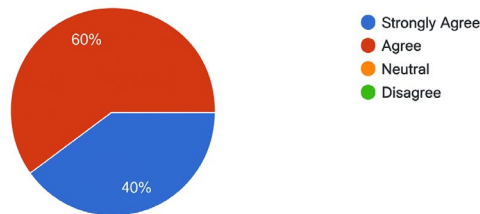


Fig. 4. The Videoscribe Application is useful for Creating Tests

According to Chart 4, 40% of teachers strongly agree and 60% of teachers agree that using Videoscribe to create exam questions is helpful. The fact that the vast majority of responders (100%) agree or strongly agree points to a promising future for the application in improving test design.

Additionally, AR responses that Videoscribe might be a useful tool for developing dynamic and eye-catching test questions even though its primary purpose is animation. This response emphasizes how exam questions can be made more interesting by the application's visual features, which could raise student interest and involvement. EBU response goes on to highlight how helpful Videoscribe is for crafting visually stimulating exam questions, particularly for subjects that are better served by visual aids. In educational settings where visual learning is essential, like in language arts, science, or math, this supports the notion that Videoscribe can be especially useful. The fact that a noteworthy 60% of educators strongly concur with the tool's usefulness suggests that they have a great deal of faith in its capacity to improve test questions' effectiveness and engagement. This demonstrates that educators think that adding visual components, like animations or illustrations, can raise the caliber of tests.

E. Data 5

R: Does training and mentoring in the Videoscribe application help in designing more effective assessment instruments?

JL: Yes, with the right guidance, teachers can use Videoscribe to create assessment instruments that are not only visually appealing but also more effective in evaluating students' understanding.

SIN: Training on Videoscribe can be beneficial in designing assessments that incorporate animations and visual aids, which can make the evaluation process more engaging and meaningful. The Chart is as follows.

Training and mentoring on videoscribe application is helpful in designing more effective assessment instruments

10 responses

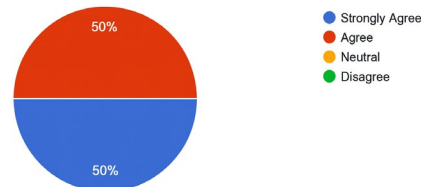


Fig. 5. The Videoscribe Application Helps in Designing more Effective Assessment Instruments

The range of teacher responses about the value of Videoscribe training in developing better assessments is displayed in Chart 5. 50% Agree and 50% Strongly Agree: This shows that half of the teachers who took part in the poll strongly agreed that the training was helpful, indicating that all of them thought it was beneficial. There is no sign of dispute, indicating a high degree of perceived worth and contentment. Positive outcomes show that the training has a significant impact on the creation of evaluation tools.

JL then highlights how teachers can design assessment tools that are more successful at assessing student understanding and visually appealing when they follow the right instructions while using Videoscribe. This demonstrates the importance of both aesthetic appeal and efficacy in terms of evaluation quality. SIN stated that the review process can become more interesting and significant by using animations and visual assistance using Videoscribe. This implies that Videoscribe is more than simply an aesthetic tool; it is a way to improve examinations' overall quality by making them more dynamic and engaging.

There is compelling evidence that Videoscribe training has a favorable impact on assessment tool design when combined with quantitative data (from Chart 5) and qualitative insights (from JL and SIN). The qualitative data emphasizes the particular advantages, such as captivating images and efficient student assessment. These opinions are supported by the quantitative data in Chart 5, which demonstrates that all participants gave good comments.

F. Data 6

R: Does training and mentoring in the Videoscribe application enhance teachers' skills in accessing effective learning websites?

VP: The training improves teachers' ability to explore and use digital tools, including learning websites, in their lessons. It provides them with the necessary skills to integrate Videoscribe and other online resources effectively.

JL: Through the training and mentoring in Videoscribe, teachers develop a broader understanding of digital tools, which includes accessing various educational websites to enrich their teaching content.

Training and mentoring on videoscribe application increases teachers' skill in accessing more effective learning sites

10 responses

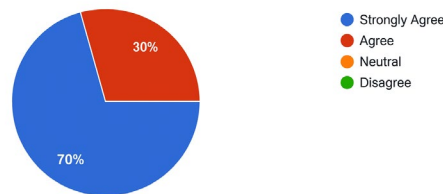


Fig. 6. Videoscribe Enhances the Instructors Proficiency

Chart 6. The primary question is whether mentoring and training from Videoscribe improve instructors' proficiency with digital resources, such as instructional websites. VP and JL response that the training does, in fact, increase teachers' proficiency with digital tools and resources. While JL stresses the expansion of teachers' knowledge of digital tools, including the usage of different educational websites to enhance teaching content, VP emphasizes that teachers acquire the skills they need to utilize Videoscribe and other online resources efficiently. The Videoscribe application enhances teachers' skills in accessing learning websites.

These assertions are supported by data in figure 6, which demonstrates that a sizable percentage of educators (70% strongly agree, 30% agree) believe that utilizing the Videoscribe app enhances their access to useful learning websites. The fact that so many teachers (70%) strongly agreed shows how confident they are in the training's efficacy and ability to improve their skills. The results indicate that instructors' abilities to explore and use digital instructional resources are significantly improved by Videoscribe training. This is consistent with VP and JL's replies, which both highlight how beneficial the training was for increasing teachers' digital literacy.

G. Data 7

R: Does training and mentoring in the Videoscribe application improve teachers' abilities in using technology and accessing the internet?

AR: The training improves teachers' ability to explore and use digital tools, including learning websites, in their lessons. It provides them with the necessary skills to integrate Videoscribe and other online resources effectively.

YH: Through the training and mentoring in Videoscribe, teachers develop a broader understanding of digital tools, which includes accessing various educational websites to enrich their teaching content.

Training and mentoring on videoscribe improves teachers' skill in using technology and accessing internet

10 responses

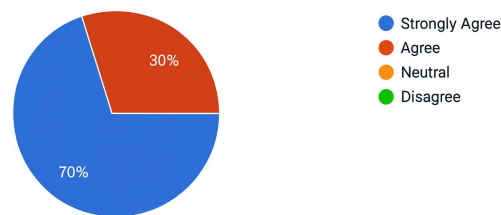


Fig. 7. The Videoscribe Application Enhances Teachers' Technology Skills

AR emphasizes that the training increases teachers' proficiency with digital technologies and their ability to incorporate online resources, like learning websites, into their courses. This implies that the Videoscribe training improves instructors' technological competency by giving them a thorough understanding of digital tools. YH then highlights that the training gives educators a more comprehensive understanding of digital tools, particularly enabling them to access a variety of educational websites. This supports the claim that teachers' capacity to interact with digital resources and enhance their instruction is increased by the Videoscribe training.

Then, AR and YH's comments that the training helps teachers become more proficient with a range of digital tools, such as exploring learning websites, in addition to using Videoscribe. Teachers are better equipped to use online resources because of their expanded knowledge of digital tools.

The data from chart 7, 70% of teachers highly agree and 30% agree that the Videoscribe program improves their capacity to use technology and connect to the internet. The vast majority (70%) strongly concur, indicating that the training is thought to be very successful in enhancing teachers' technological proficiency.

H. Data 8

R: Does the training and mentoring in the Videoscribe application increase interest in creating more creative, effective, and innovative learning experiences?

EBU: Absolutely, Videoscribe encourages teachers to think outside the box when designing lessons. The application's unique features, such as creating animated videos and integrating various multimedia elements, foster creativity. Teachers are motivated to incorporate these tools into their lessons, which in turn enhances the effectiveness and innovation of their teaching methods.

DN: Training in Videoscribe has a direct impact on teachers' willingness to try new approaches in their classrooms. The combination of mentoring and hands-on experience with the tool opens up new possibilities for creating visually appealing and interactive learning content. This fosters greater enthusiasm for designing lessons that are not only effective but also engaging and imaginative.

With training and mentoring of the videoscribe application, interest to create more creative, effective, and innovative learning

10 responses

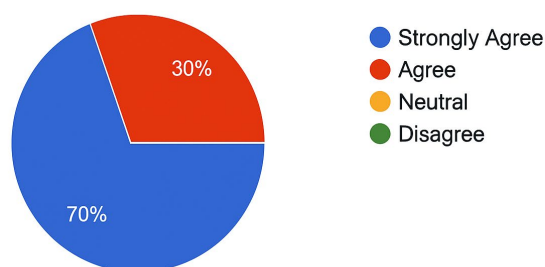


Fig 8. The Videoscribe Application Increases Teachers' Interest in Learning

Based on Chart 8, 70% of teachers strongly agree and 30% agree that the mentoring and training provided by the Videoscribe application has increased their desire to design more innovative and successful learning experiences. The assertion that Videoscribe positively influences instructors' drive to create more inventive and captivating classes is well supported by the uniform agreement of all teacher responses.

EBU highlights that when it comes to class planning, Videoscribe enables teachers to use their creativity. Teachers are encouraged to use the application's animated video and multimedia integration capabilities in their courses, which increases their creativity and originality. This implies that Videoscribe gives educators the resources and inspiration they need to improve the originality and efficacy of their instruction.

DN emphasizes how Videoscribe training directly affects teachers' openness to trying out novel teaching strategies. Teachers can provide dynamic and visually appealing content by combining mentoring with practical tool experience. This encourages a stronger desire to create innovative and successful teaching materials. The idea that teachers are encouraged to innovate in their teaching methods by Videoscribe training is supported by this reaction. The comments from DN and EBU both support the data, demonstrating that Videoscribe not only promotes creativity but also gives educators the resources they need to try new things and develop their teaching methods. The capacity to produce multimedia-rich and animated content encourages educators to think creatively and develop more visually intriguing and engaging lesson plans.

I. Data 9

R: Does the ability to perform tasks improve after using the Videoscribe application?

JL: Yes, once teachers become familiar with Videoscribe, they are able to perform tasks more efficiently. The application automates many aspects of content creation, and the training provided helps teachers master the tool quickly. As a result, they can focus more on creating engaging lessons and less on the technical aspects of the task.

FS: Absolutely, the ability to perform tasks improves significantly after using Videoscribe. Teachers gain a deeper understanding of how to create and edit digital content, which helps them accomplish tasks more quickly and with better results. The skills learned in training make it easier to use the application effectively, which in turn boosts their productivity in lesson planning and delivery.

Tasks completion ability increases after attending training and mentoring on videoscribe application

10 responses

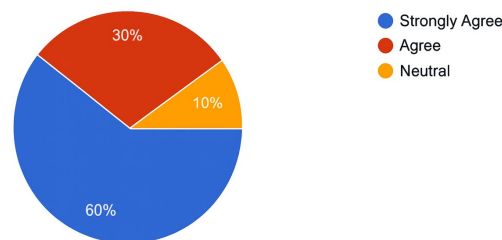


Fig. 9. The Videoscribe Application Increases Teachers' Interest in Learning

Chart 9 reveals that 30% of teachers agreed and 60% strongly agreed that the training and mentorship of the Videoscribe program increased their capacity to complete assignments, while 10% expressed uncertainty.

JL says that because Videoscribe automates a lot of the work involved in creating material, teachers can work more productively once they get the hang of it. Teachers can quickly become proficient with the tool thanks to the training, freeing them up to concentrate more on developing interesting classes than on resolving technical issues. This implies that the Videoscribe tool improves work performance by streamlining the process of producing instructional content. FS emphasizes how using Videoscribe greatly enhances teachers' productivity, especially when it comes to producing and editing digital content. Teachers can do jobs more quickly and with greater quality because to the deeper understanding they get via training. This supports the notion that teachers can become more effective and productive by becoming proficient with the instrument.

JL and FS's answers are consistent with Chart 9's data. Both stress how Videoscribe lets teachers focus on more crucial facets of their jobs, such as lesson planning and student engagement, by automating and streamlining the content creation process. The assertion that Videoscribe increases instructors' task efficiency is supported by the data, which indicates that 90% of teachers think their task performance has increased after using the program. It seems that Videoscribe increases teachers' productivity by allowing them to concentrate more on the lesson's content than on technological issues.

J. Data 10

R: Is the training and mentoring in the Videoscribe application highly effective and efficient?

RH: Yes, the process is both effective and efficient. Teachers quickly learn how to use Videoscribe to improve their teaching methods and develop interactive lessons.

WR: While the training is generally effective, some teachers may require additional support to fully grasp how to maximize the app's features in an efficient manner. However, overall, it meets the needs of most educators.

Training and mentoring on videoscribe applicary is very effective and efficient

10 responses

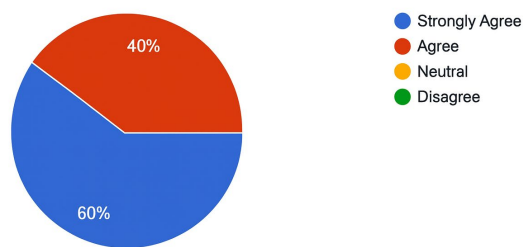


Fig. 10. The Videoscribe Application is Highly Effective and Efficient

Based on the data above, 40% of teachers agree and 60% strongly agree that the training and mentorship provided by Videoscribe are very successful and efficient. This demonstrates that the majority of educators find the support and training beneficial and useful in enhancing their instruction..

By demonstrating that teachers can quickly become proficient with Videoscribe and use it to enhance their teaching strategies, RH's reaction supports the evidence. The procedure is praised for being both efficient and successful, which supports the widespread belief that the majority of users benefit from the training. However, WR admits that even if the training is often successful, some teachers might want extra assistance in order to properly understand the app's functionality. This response offers a little more nuanced perspective, emphasizing that although the majority of teachers gain from the training, there might be certain instances where further time or direction is needed. This might be connected to variations in teachers' preferred methods of learning or their past technological proficiency. In spite of this, the majority of teachers report feeling encouraged, and the feedback is generally good. Based on the data, it appears that teachers are quite satisfied with the training and mentorship provided for the Videoscribe application. To guarantee that all educators can effectively incorporate the tool into their instruction, it might be helpful to offer extra assistance to those who find specific components difficult.

3.2 Discussion

The study discuss about Teachers' Reactions to the Use of VideoScribe in Classroom Learning, exploring insights from educational experts on digital learning, multimedia, and animation tools in education will provide context on both benefits and potential challenges. The analysis results indicate that VideoScribe has a significant positive effect on teachers'

ability to navigate and use digital educational resources. This aligns with the responses from teachers at SMP IT Ar Rasyid who describe the value of the training in broadening teachers' digital literacy. Some of previous research have been discussed about this such as [14] argues that tools like VideoScribe can transform abstract ideas into concrete visualizations, making concepts easier to understand and remember, which can positively influence teachers' attitudes towards its use in lessons. Videoscribe is also very easy for teachers to use. Teachers can easily create and use this application without needing to know advanced technology. Teachers are more likely to embrace VideoScribe if they perceive it as enhancing learning without requiring complex technical skills [15]. He suggests that professional development is crucial for helping teachers see the value of technology and for building confidence in using it, which can result in positive reactions to tools like VideoScribe. Then, [16] stated that one major barrier to technology adoption is the additional time required for lesson preparation, especially when teachers are unfamiliar with the software. This aligns with reactions from teachers who may feel that while VideoScribe is engaging, the initial learning curve and time investment can be barriers to its consistent use.

Furthermore, the application has proven to be a helpful tool for teachers in creating varied educational media. The application enhances teachers' capacity to develop engaging instructional content, likely making lessons more visually appealing and interactive. The impact will be on the students that they respond enthusiastically to Videoscribe and have even been taught how to use it. This indicates that the application not only benefits teachers but also has a direct positive impact on student engagement. Allowing students to use Videoscribe themselves can foster creativity and digital literacy, empowering them to participate actively in the learning process. Videoscribe is a well-received tool that supports both teachers and students, and that there is strong backing among teachers for training initiatives.

Meanwhile, [17] discuss a pedagogical content knowledge and technology framework, which focuses on the fusion of content knowledge, pedagogy, and technology. They argue that when teachers are given tools that enhance their creative control-like VideoScribe, which allows for personalized animations tailored to their specific lesson goals-they are more likely to adopt these technologies. VideoScribe's flexibility can empower teachers to design customized content, which can lead to greater satisfaction and a positive attitude toward its use. However, [18] highlight the role of institutional support in effective technology integration. Teachers may encounter resistance to tools like VideoScribe due to limited technological resources, lack of training, or inadequate infrastructure. Ensuring that teachers receive adequate training and support can foster a positive reaction to new tools and reduce frustration stemming from technical or logistical challenges.

4 Conclusion

On the basis of the data analysis results, it indicates that teachers' reactions to using the Videoscribe application were very positive. Teachers were able to improve their skills and competencies using Videoscribe, which has impacted their students. VideoScribe can transform teaching and learning when implemented thoughtfully. Teachers' reactions are generally positive when they perceive clear benefits to student engagement and understanding, supported by adequate training and resources. Addressing time constraints, technical

challenges, and providing creative freedom can further enhance teachers' openness and satisfaction with using VideoScribe in the classroom.

References

- [1] M. E. Gomes, L. Kime, J. M. Bush, and A. B. Myers, "The Electronic Media Fast and Student Well-Being: An Exercise in Transformational Teaching," *Teach. Psychol.*, vol. 48, no. 4, pp. 351–357, Oct. 2021, doi: 10.1177/0098628320965260.
- [2] A. S. Kümpel, "Nebenbei, mobil und ohne Ziel? Eine Mehrmethodenstudie zu Nachrichtennutzung und -verständnis von jungen Erwachsenen," *Medien Kommun.*, vol. 68, no. 1–2, pp. 11–31, 2020, doi: 10.5771/1615-634X-2020-1-2-11.
- [3] R. Fletcher, A. Kalogeropoulos, and R. K. Nielsen, "More diverse, more politically varied: How social media, search engines and aggregators shape news repertoires in the United Kingdom," *New Media Soc.*, vol. 25, no. 8, pp. 2118–2139, Aug. 2023, doi: 10.1177/14614448211027393.
- [4] P. J. Boczkowski, E. Mitchelstein, and M. Matassi, "'News comes across when I'm in a moment of leisure': Understanding the practices of incidental news consumption on social media," *New Media Soc.*, vol. 20, no. 10, pp. 3523–3539, Oct. 2018, doi: 10.1177/1461444817750396.
- [5] S. Edgerly, "The head and heart of news avoidance: How attitudes about the news media relate to levels of news consumption," *Journalism*, vol. 23, no. 9, pp. 1828–1845, Sep. 2022, doi: 10.1177/14648849211012922.
- [6] J. Schneider and M. Eisenegger, "Newsrepertoires junger Erwachsener," 2018, pp. 93–107. doi: 10.1007/978-3-658-20498-3_7.
- [7] S. Geers, "News Consumption across Media Platforms and Content," *Public Opin. Q.*, vol. 84, no. S1, pp. 332–354, Aug. 2020, doi: 10.1093/poq/nfaa010.
- [8] PEW Research Center, "Mobile Fact Sheet." <https://www.pewresearch.org/internet/fact-sheet/mobile/>
- [9] V. Rideout and M. B. Robb, "The common sense census: Media use by tweens and teens. www.common sensemedia.org/sites/default/files/uploads/research/2019-census-8-to-18-key-findings-updated.pdf," 2019.
- [10] A. H. Pulungan, "The Use of Interactive Learning Media for Teachers in Rural Areas," *Budapest Int. Res. Critics Linguist. Educ. J.*, vol. 4, no. 1, pp. 524–532, Feb. 2021, doi: 10.33258/birle.v4i1.1705.
- [11] N. D. Lestari, N. R. D. Ariani, and Ashadi, "Pengaruh Pembelajaran Kimia Menggunakan Metode Student Teams Achievement Divisions (Stad) dan Team Assisted Individualization (Tai) Dilengkapi Media Animasi terhadap Prestasi Belajar Siswa pada Materi Asam Basa Kelas Xi Semester Ganjil Smk Sakti Gemolong," *J. Pendidik. Kim.*, vol. 3, no. 1, 2014.
- [12] A. Tsohou, M. Siponen, and M. Newman, "How does information technology-based service degradation influence consumers' use of services? An information technology-based service degradation decision theory," *J. Inf. Technol.*, vol. 35, no. 1, pp. 2–24, Mar. 2020, doi: 10.1177/0268396219856019.
- [13] N. D. Shalikhah and A. Mardiana, "Edutainment with video scribe in thematic learning," *J. Phys. Conf. Ser.*, vol. 1517, no. 1, p. 012058, Apr. 2020, doi: 10.1088/1742-6596/1517/1/012058.
- [14] R. E. Mayer, *Multimedia Learning (2nd ed.)*. Cambridge: Cambridge Scholar Publishing, 2009.
- [15] P. A. Ertmer and A. T. Ottenbreit-Leftwich, "Teacher Technology Change," *J. Res. Technol. Educ.*, vol. 42, no. 3, pp. 255–284, 2010, doi: 10.1080/15391523.2010.10782551.
- [16] L. Cuban, H. Kirkpatrick, and C. Peck, "High Access and Low Use of Technologies in High School Classrooms: Explaining an Apparent Paradox," *Am. Educ. Res. J.*, vol. 38, no. 4, pp. 813–834, Jan. 2001, doi: 10.3102/00028312038004813.
- [17] P. Mishra and M. J. Koehler, "Technological Pedagogical Content Knowledge: A Framework

for Teacher Knowledge,” *Teach. Coll. Rec. Voice Scholarsh. Educ.*, vol. 108, no. 6, pp. 1017–1054, 2006, doi: 10.1177/016146810610800610.

- [18] Y. Zhao and K. A. Frank, “Factors Affecting Technology Uses in Schools: An Ecological Perspective,” *Am. Educ. Res. J.*, vol. 40, no. 4, pp. 807–840, Jan. 2003, doi: 10.3102/00028312040004807.