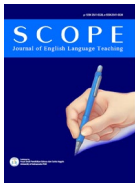
SCOPE
Journal of English Language Teaching
| p-ISSN 2541-0326 | e-ISSN 2541-0334 |
https://journal.lppmunindra.ac.id/index.php/SCOPE/



Language Teaching and Learning

Society 5.0 in Education: Interactive Learning through Digital Media Integration on Teaching Speaking

Nurul Fadhillah[1], Elsya Alfitri Sirega[2], Umi Hasana Pitri Lestari[3], Fadhlur Rahman[4], Khalsiah Khalsiah[5]

[1,2,3,4] *Institut Agama Islam Negeri Lhokseumawe, Lhokseumawe, 24532, Indonesia*
[5] *Universitas Malikussaleh, Lhokseumawe, 24532, Indonesia*

KEYWORDS

Interactive Learning;
Digital Media Integration;
Society 5.0;
Learning Application;
Teaching Speaking.

CORRESPONDING AUTHOR(S):

E-mail: nurulfadhillah@iainlhokseumawe.ac.id*

A B S T R A C T

Advancements in technology are crucial in achieving the goals of Society 5.0. To achieve this goal, teaching-learning process must be equipped to digital media technologies. As mastering speaking skills is considered as the most challenging aspect in language learning, the aim of this research is to investigate the impact of an interactive learning setting on students' engagement and motivation. Equally significant, to identify best practices for integrating digital media into teaching speaking. This study employed a mixed-methods, combining qualitative and quantitative to comprehend and answer the phenomena. Researchers collected the data by using surveys, observation, and speaking tests. Survey responses and test results were summarized using quantitative analysis. While qualitative analysis was used for observation, it was analyzed to identify common themes and insights about the use of digital media to teach speaking skills. The results of observation showed that interactive learning activities improved students' engagement and motivation in learning speaking skills, and the results of the speaking tests proved that the students' speaking skills improved. Survey results showed that using social media (TikTok) as a digital platform for teaching speaking is the best practice for integrating digital media in enhancing speaking skills within the framework of Society 5.0. This study has significant implications for education, especially in terms of incorporating digital technologies into teaching and learning practices. These findings will be useful for educators, policymakers, and institutions looking to improve learning outcomes in the digital age while also adhering to Society 5.0 principles.

INTRODUCTION

The idea of a technologically advanced, human-centred society is known as "society 5.0." In order to improve the quality of human life, society is anticipated to be able to use numerous technologies developed in the Industrial Revolution 4.0 period to solve various social difficulties and concerns. The Japanese government came up with this idea of a super-smart society where cutting-edge innovations like robotics, big data, the Internet of Things (IoT), artificial intelligence (AI), and digital transformation (DX) integrated every facet of daily life. This paradigm shift seeks to strike a balance between social

DOI: http://dx.doi.org/10.30998/scope.v9i1.24084

problem-solving and economic advancement to establish a more inclusive, sustainable, and human-centric society (Fukuyama, 2018). Technological innovation and digital transformation affect social infrastructure, healthcare, education, and environmental sustainability in addition to the industrial and economic spheres (Keidanren, 2018). All members of society are intended to profit from this all-encompassing strategy, which aims to ensure that the advantages of technology breakthroughs are widely distributed and help address problems like ageing populations, environmental degradation, and urbanization.

One of Society 5.0's most exciting uses is education, where the incorporation of digital media has the potential to completely transform interactive learning especially when it comes to teaching speaking skills. According to The educational paradigm of this period will use digital technologies to build more inclusive, effective, and personalised learning environments (Kim et al., 2021). This method seeks to improve education quality by attending to a variety of learning requirements and getting students ready for the workforce. Digital media can offer immersive and interactive platforms that greatly enhance spoken instruction and learning in the context of language education (Mayer, 2009; Ilham et al., 2023).

A new era of interactive learning has been brought about by the use of digital media into educational processes. Speaking is a key component of being able to communicate in a language, but traditional speaking instruction sometimes struggles to provide students with the responsive surroundings and immersive, interactive experiences they require. In order to address the shortcomings of traditional pedagogical approaches, this research proposes creative ways to improve interactive learning in the teaching of speaking through the integration of digital media (Tran et al., 2024).

Innovative answers to these problems can be found in digital media tools, including interactive storytelling platforms, virtual reality (VR) environments, interactive language applications, speech recognition software, and video-conferencing systems. AI-driven language apps powered by artificial intelligence (AI) can provide tailored feedback and learning routes that are adjusted according to each student's performance. Real-time feedback, teamwork, and active student participation are the key components of interactive learning. These features are improved by digital media integration, which offers dynamic and adaptable learning environments. With the help of these resources, students may have speaking fluency and confidence. Students may practice speaking in a range of situations and get rapid feedback. For example, real-time conversation practice is facilitated by platforms like Zoom and Google Meet, and speaking exercises are made more interesting by gamification in language learning applications like Duolingo and Babbel.

Virtual reality (VR) may produce lifelike scenarios where students can practice speaking in public. Research has indicated that virtual reality (VR) has the potential to greatly improve foreign language education by providing students with engaging and interactive surroundings (Chien et al., 2020; Chen, 2024). By offering realistic circumstances for practice, these settings can enhance students' speaking abilities and make learning more exciting. But in order for implementation to be successful, issues like cognitive overload and technological hurdles must be resolved.

The use of digital storytelling is another method that shows promise. Through the use of digital technologies, students create and share tales as part of this strategy, which improves their speaking abilities by promoting creativity and active engagement. Digital storytelling has been shown to increase students' interest and involvement in the classroom as well as their speaking abilities. Because it enables interactive and collaborative learning even in remote situations, it has proven especially beneficial during the COVID-19 pandemic (Nair & Yunus, 2022).

Social networking sites like Facebook, WhatsApp, and Telegram and the recent popular apps like Instagram and TikTok can help people learn to speak more fluently, according to a systematic review. By giving students, the chance to practice speaking outside of the classroom, these platforms help them become more confident and less nervous when they speak in front of groups. Improvements in fluency, accuracy, and general communication abilities were seen in the analysed research (John & Yunus, 2021).

There is a lack of empirical research that specifically examines the impact of digital tools on student engagement, motivation, and skill acquisition in speaking, despite their availability. Furthermore, there is inadequate guidance and source regarding the most effective methods for incorporating these tools into formal teaching methods. Thus, the purposes of this research are to investigate the impact of an interactive learning environment on student engagement and motivation, and to identify best practices for integrating digital media into speaking instruction (Dixson, 2015; Kahu, 2013; Liu et al, 2019) The investigation aims to provide educators and practitioners with evidence-based insights and practical recommendations by pursuing these objectives. The objective is to enhance speaking skills instruction via innovative digital media utilization, aligning with the broader aspirations of Society 5.0 to create a more advanced and inclusive educational landscape.

Teaching Speaking Skills

Speaking is an activity used by someone to communicate with other. It takes place everywhere and has become part of daily activities. When someone speaks, they interact and use the language to express their ideas, feeling and thought. People also share information to other through communication. Speaking is identified to be difficult skill to learn in learning foreign language, and it need needs an integrated process. Instructing pupils how to speak is a basic component of language education. Grammar and vocabulary knowledge are just two aspects of effective communication in a second language (L2); another is the capacity to employ language effectively in a variety of situations. This calls for an all-encompassing strategy that incorporates dynamic and captivating techniques. Instructing pupils how to speak is a basic component of language education. Grammar and vocabulary knowledge are just two aspects of effective communication in a second language (L2); another is the capacity to employ language effectively in a variety of situations. This calls for an all-encompassing strategy that incorporates dynamic and captivating techniques.

Many second or foreign language learners consider that the comprehension of speaking skills in English is a priority. In addition, the learners often appraise that success in language learning is based on the effectiveness of their course based on how much they feel they have increased their speaking ability. Speaking is considered the priority in learning a second or foreign language than the other four skills, and all skills in learning a language are contained in speaking activities (Khamkien, 2010; Cai & Zhu, 2019).

Teaching speaking means teach language learners to: (1) produce the English speech sounds and sound patterns, (2) use word and sentence stress, intonation patterns and the rhythm of the second language, (3) select appropriate words and sentences according to the proper social setting, audience, situation and subject matter, (4) organize speakers' thoughts in a meaningful and logical sequence, (5) use language as a means of expressing values and judgments, and (6) use the language quickly and confidently with few unnatural pauses, which is called as fluency.

According to Brown (2004), there are five components of speaking skills concerned with grammar, vocabulary, comprehension, fluency and pronunciation. These components can be mastered by applying some characters of effective teaching, they are: (1) the instruction guided of preplanned curriculum, (2) the strong expectation for students learning, (3) clear and focus of learning situation, (4) students' orientation for the lesson, (5) teachers' and students' interaction during the class, (6) time consideration for learning (Richard & Rinandya, 2012). The teachers have to know the problems faced the students in learning speaking skill. Teaching speaking is to make the students understand the right way to interact with the right sounds and words through instruction, information or training.

Brown (2004) stated there are several principles to design speaking technique. They are: "(1) using techniques that cover the spectrum of learner needs, (2) providing intrinsically motivating techniques, (3) encouraging the use of authentic language in meaningful contexts, (4) providing appropriate feedback and correction, (5) capitalizing on the natural link between speaking and listening, (6) giving students opportunities to initiate oral communication, and (7) encouraging the development of speaking strategies (Brown, 2004).

Interactive Learning

When students actively engage in the learning process as opposed to passively absorbing knowledge, it is referred to as interactive learning (Michael, 2006). It is a dynamic and captivating instructional technique. This approach places a strong emphasis on communication between students and teachers as well as among the student body through group projects, dialogues, and technological use. The function of the teacher is that of a coach who plans, promotes, and directs student engagement; teachers must be adaptable while keeping interaction at the centre of their lessons—interaction between students and teachers, students and other students, and student and student.

Brown (2001) defined interactive learning as the collaborative exchange of ideas, or thoughts between two or more individuals that has a reciprocal impact on one another. In order to enable communication when teaching a language, it is imperative to educate the students how to use the language and become fluent in its grammatical structure. The grammatical structure of the language is portrayed more clearly and is made more accessible when the learners participate in the conversation. The contact also entails understanding the thoughts of others in addition to expressing one's own. One listens, one reacts, and others listen and respond as well.

Interactive learning strategies are developed through grouping and interactive methods, in which there are forms of class discussions, small group discussions, working on group assignments, and student collaboration in pairs. The teacher's role in implementing this strategy must include attitudes such as being able to create a comfortable and enjoyable classroom atmosphere, helping and encouraging students to express their desires and talk individually or in groups, assisting with activities and providing learning resources, guiding students to utilize learning resources, and explaining learning objectives.

Digital Media Integration

 DOI: http://dx.doi.org/10.30998/scope.v9i1.24084

There are many sophistication media that people can use in this technological era for daily life activities. For example, to learn foreign languages especially English. Students can use many applications on the Play Store to practice or study English skills. In learning English, the use of social media is one of the efforts in making the learning atmosphere to be effective and able to facilitate students in training in speaking English. This is because, having the ability to speak English is a demand for everyone nowadays.

According to results of the study by Dataindonesia.id from we are social. Friday February, the number of active social media users in Indonesia was 191 million people. WhatsApp 88,7%, Instagram 84,8%, Facebook 81,3%, TikTok 63,1%, and Telegram 62,8% respectively. This number has increased by 12,35% compared to the previous year which was 170 million people. Seeing the trend, the number of social media users in Indonesia continues to increase every year. However, its growth has fluctuated since 2014 – 2022. The highest increase in the number of social media users reached 34.2% in 2017. The number has increased again last year.

This research used social media of TikTok as integrated digital media to improving students speaking ability. One of the social media that is widely used by students today is TikTok. TikTok is in the form of audio-visual media, social media that can be seen and heard. In the TikTok application, there are several creator contents that can create conversations to practice reading fluency, pronunciation, and vocabulary mastery. There we can switch other people's videos to duet with us, the hashtag commonly used by content creators when making English conversation videos is "duet me".

TikTok is video-based application where the users are able to watch, create, and share the video to another platform. There are various kind of TikTok video such as health intelligence, food recipes, daily life hack, dance, lip sync, beauty, and education. This application was taking millennial attention which the majority of millennial is school-age children (Aji, 2018).

According to Dewanta (2020), several benefits of applying TikTok as a media for learning are: (1) TikTok can accommodate audio visual needs in language learning, especially listening; (2) by using TikTok learners can also process words to express, convey or express intentions, ideas, thoughts and feeling that are composed and de developed according to the needs of learners; (3) the edit feature can be used by learners to present data, ideas, or impression in a description form of an object, (4) TikTok application could be used as a media for learners to practice reading news.

Another opinion that written by Aji and Setiyadi (2020) argued that TikTok application can be used as an effective learning medium. First, the TikTok application meets the learning needs of students. Second, TikTok applications attract students' interest because TikTok has many features that can be implemented into learning. Finally, the TikTok application is equivalent to the development of maturity and experience as well as the characteristics of students who are the millennial generation, who are attached and close to the digital world, especially gadgets.

METHOD

This research exemplifies the critical role that upgrading technologies in education plays within the context of Society 5.0. It also highlights the significance of continuous skill improvement and learning that continues throughout one's life. The use of digital media into interactive learning is a crucial component of contemporary educational techniques, particularly for the purpose of transmitting complex abilities such as speaking a foreign language.

This study adopted a mixed-methods research methodology, integrating both quantitative and qualitative methodologies, in order to conduct an in-depth investigation into the impact that the incorporation of digital media has on the teaching of speaking skills within the context of Society 5.0. Participants in the study included thirty students in the eleventh grade as well as English teachers who had varying degrees of experience in incorporating digital media into their teaching methodological approaches. Surveys, classroom observations, and pre- and post-assessments of speaking proficiency were the three basic approaches that were utilized in the data collection process.

Through the use of Likert-scale questions, the surveys were administered both before and after the digital media intervention. The purpose of these surveys was to evaluate the students' perspectives on the acquisition of speaking abilities, as well as their levels of involvement and their own self-evaluation of their speaking ability.

Through the use of an observation checklist, the researchers were able to conduct classroom observations that involved the systematic documentation of actions that took place during digital media sessions. Among the criteria that were examined by this checklist were student contact, engagement with digital tools, and the frequency with which students participated in speaking activities with one another.

For the purpose of conducting an objective evaluation of the improvements in students' speaking abilities, pre-tests and post-tests were administered to the students both before and after the intervention. In order to complete the assessments, students were required to engage in speaking activities, such as giving a brief presentation or

participating in a role-play. These activities were evaluated using a standardized rubric that scored fluency, pronunciation, and vocabulary usage. It is possible that students will be asked to describe their daily routines during the pre-test, whereas the post-test will place a greater emphasis on more complex topics such as future career goals.

The examination of the data utilized both quantitative and qualitative approaches to data collection and analysis. The quantitative analysis examined the replies to the survey and compared the results of the speaking test both before and after the intervention in order to identify any changes in the students' attitudes and their ability to communicate effectively. Simultaneously, qualitative analysis consisted of examining observation notes in order to recognize recurrent themes and insights concerning the employment of digital media in the teaching of speaking. Important topics were increased student participation in activities involving digital media and improved opportunities for students to interact with one another through the use of video-based projects. The purpose of this strategy was to provide an all-encompassing viewpoint on the effectiveness of digital media in enhancing speaking abilities within the educational framework of Society 5.0.

RESULTS AND DISCUSSION

Digital Media Integration in Teaching

The results of the survey show that students have a very good attitude on the use of digital media in their education. Most students find using digital tools to be pleasant, motivating, and helpful; this suggests that they prefer taking classes that employ digital media over those that use traditional techniques. High levels of student participation are seen in their regular participation in online forums, their teamwork, their timely completion of interactive assignments, their search for further resources, and their frequent monitoring of course updates. Regarding learning outcomes, students express great confidence in their comprehension and application of the course material, as well as higher exam scores, sharper critical thinking abilities, and improved memory and recall of the material as a result of the incorporation of digital media. These results imply that using digital media in the classroom can greatly improve the learning outcomes and experiences of students.

Table.1 Surveys of 30 Students' Attitudes, Engagement Levels, and Learning Outcomes

No	Survey statement	Scale				
	Students' Attitudes towards Digital Media Integration: scale from 1 (Strongly Disagree) to 5 (Strongly Agree)	*1*	*2*	*3*	*4*	*5*
1	I find digital media tools helpful in understanding course materials.	-	-	-	5	25
2	The use of interactive digital content makes learning more enjoyable.	-	-	-	3	27
3	I feel more motivated to learn when digital media is used in the classroom.	-	-	-	2	28
4	Digital media integration has improved my overall learning experience.	-	-	2	8	20
5	I prefer courses that incorporate digital media over traditional lecture-based courses.	-	-	2	3	25
	Student Engagement Levels: *How often using digital media on a scale from 1 (Never) to 5 (Always)*	*1*	*2*	*3*	*4*	*5*
1	I actively participate in online discussions and forums.	-	1	2	10	17
2	I use digital tools to collaborate with my peers on assignments.	-	1	2	10	17
3	I complete interactive assignments and quizzes on time.	-	-	-	2	28
4	I seek additional resources and materials online to supplement my learning.	-	2	2	12	14
5	I regularly check the course platform for updates and new content.	-	-	5	5	20
	Students' Learning Outcomes: a scale from 1 (Strongly Disagree) to 5 (Strongly Agree)	*1*	*2*	*3*	*4*	*5*
1	I feel confident in my understanding of the course content.	-	2	5	9	14
2	I can apply the knowledge I have gained from this course to real-world situations.	-	1	2	10	17
3	My performance on assessments has improved since using digital media.	-	-	2	7	21
4	I have developed critical thinking skills through interactive learning activities.	-	-	5	5	20
5	I am able to retain and recall information more effectively due to digital media integration.	-	-	5	10	15

Source: The Online Student Engagement Scale (OSE) (Dixon, 2015).

 DOI: http://dx.doi.org/10.30998/scope.v9i1.24084

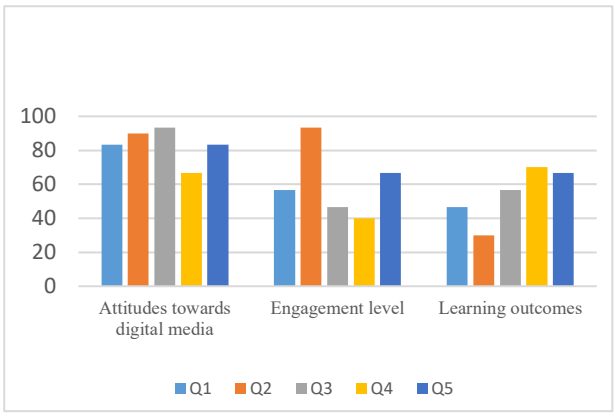


Figure 1. Digital Media Integration in Learning

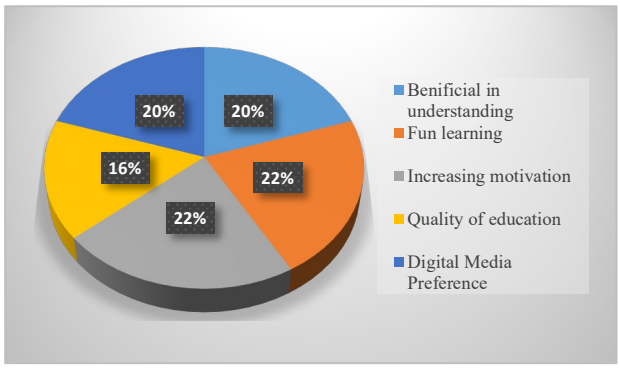


Figure 2. Attitudes towards Media Integration

Attitudes towards Digital Media Integration

The positive replies show that students view digital media as an essential part of their education. Digital media tools are beneficial in understanding course materials, according to 83.3% of students (25/30), which suggests that they probably improve comprehension and offer clarity. Furthermore, the engagement and interactive character of these technologies serve as major motivators for 90% (27/30) of students who strongly think that interactive digital content makes learning more fun. This result is similar with a study by Cheung and Slavin (2013), which found that educational technology applications generally produce positive effects on students' academic achievement across different subjects. Another study by Purnama et al. (2022) found that digital media tools significantly enhance students' understanding and engagement in learning processes. The purpose of the study is to determine how various digital media tools and resources affect students' motivation, involvement, and general learning processes. A number of important topics are examined, such as how well digital media can facilitate collaborative learning environments, how engaging and fun learning can be made, and how much these tools can improve students' academic performance and critical thinking abilities.

The high level of agreement (93.3%) on the usage of digital media to increase motivation suggests that these resources can greatly raise students' intrinsic motivation to learn. Furthermore, it is clear that students believe these technologies increase the quality of education, as seen by the 66.7% (20/30) of students who strongly agreed that the incorporation of digital media had improved their overall learning experience. An additional indication of this mood is the preference of 83.3% (25/30) of students for digital media-infused courses as opposed to traditional lecture-based courses.

Student Engagement Levels

Elevated levels of involvement serve as a glaring indication of how well digital media support dynamic learning environments. According to the findings, 56.7% (17/30) of students consistently engage in online forums and conversations, and a comparable proportion consistently utilize digital tools for peer collaboration. This collaborative effort and active engagement imply that digital media helps students communicate and operate as a team—two crucial elements of a dynamic learning environment. It is aligned with the findings of the study by Lameras et al. (2020), indicates that blended problem-based learning has the potential to greatly improve student involvement and perceptions of higher education learning. Through the integration of in-person and virtual learning, this methodology cultivates a more engaged, cooperative, and hands-on learning environment (Schmidt et al, 2009). The results indicate that in order to enhance student enthusiasm, engagement, and academic results, educators had to think about implementing blended PBL methodologies.

Furthermore, the remarkably high percentage of interactive projects that are finished on time (93.3% of the total) underscores the value of digital technologies in driving accountability and time management. The frequent search for more materials (46.7% always and 40% often) is evidence of a proactive attitude to learning. This finding suggests that digital media may be encouraging a habit of continuous learning and curiosity among its users. Students are interacting with the course material outside of regular classroom hours, as seen by the continuously high percentage of students who check the course platforms on a frequent basis (66.7%), which implies that digital media extends learning beyond the limitations of traditional classrooms. This reflects the importance of digital resources in providing an accessible and student-centred educational experience. Thus, the teaching-learning process is no longer restricted to the walls of classroom, instead it is a long on-going process that can be conducted at any time and in any place.

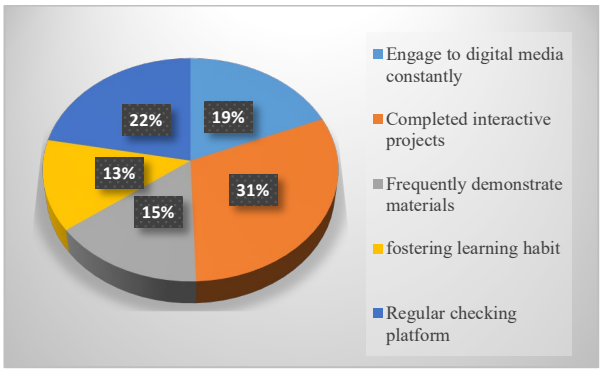


Figure 3. Students Engagement Levels

Learning Outcomes

The results of survey show that the incorporation of digital media has significantly improved perceived learning outcomes. 46.7% students (14/30) strongly agree and another 30% (9/30) agree that they feel confident in their knowledge of the course material. This confidence is probably a result of how interactive and captivating digital technologies are—they can offer customised learning experiences and quick feedback.

Additionally, 56.7% (17/30) of students strongly believe that they can apply the knowledge they have learned in their courses to real-world scenarios, suggesting that digital media may improve the skills and knowledge that can be applied in real-world scenarios. The enhanced performance on assessments (70% strongly agree) is another important sign that digital technologies have a favourable effect on academic achievement.

According to 66.7% (20/30) of students, the development of critical thinking skills implies that digital media-facilitated interactive learning activities foster higher-order thinking abilities. Last but not least, the capacity to remember and keep knowledge more successfully (50% strongly agree and 33.3% agree) emphasizes how digital media can improve memory retention by providing interesting and dynamic content.

The findings align with current studies regarding the effectiveness of digital media in education, including a meta-analysis by Schindler et al. (2017). Research indicates that digital technology significantly improve students' academic performance and critical thinking skills. The critical evaluation highlights the substantial enhancement of various aspects of student engagement using computer-based technologies. Digital technology can enhance learning by fostering behavioural, emotional, and cognitive involvement. The evaluation highlights that, when utilized judiciously and adeptly, educational technology can transform traditional instructional and learning methodologies (Kim & Kwon, 2020; Hwang & Fu, 2019). The synthesized literature provides a valuable resource for educators, policymakers, and scholars seeking to understand and effectively implement technology in educational settings.

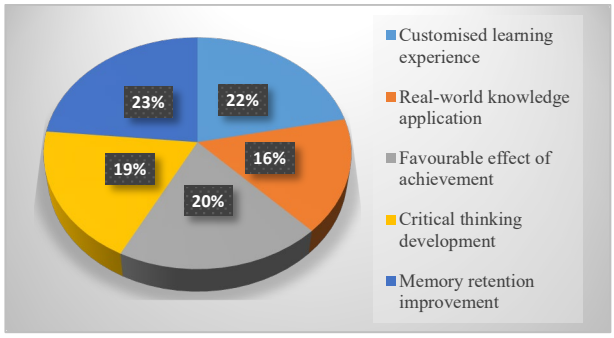


Figure 4. Learning Outcomes

Interactive Learning through Digital Media Integration in Teaching Speaking

The researcher did the observation of the activities during the teaching-learning process to find out the data of interactive learning through digital media integration applied in a class. Teacher and students were observed about how their attitudes when the teaching and learning process run, how the teacher delivered the subject and how the students respond it. The result of the observation checklist could be seen in table below:

Table.2 Observation Checklist of Classroom Activities

Teaching stage	Activities	Score
Lesson planning preparation	1. The lesson has clear, objectives related to speaking skills is well-defined	4
	2. Appropriate digital tools and resources are prepared and ready to use	5
	3. Lesson plans include interactive content (e.g., videos, interactive exercises, digital storytelling).	5
Classroom environment	1. Classroom is equipped with necessary technology (e.g., computers, tablets, internet access).	2
	2. The environment encourages student participation and engagement.	4
	3. There is a supportive atmosphere where students feel comfortable speaking.	4
Instructional Strategies	1. Teacher uses interactive activities that involve digital media (e.g., role-plays, simulations).	5

DOI: http://dx.doi.org/10.30998/scope.v9i1.24084

	2. Teacher provides real-time feedback using digital tools.	4
	3. Activities are student-centred, promoting active learning and participation.	5
Use of Digital Media	1. Teacher effectively uses multimedia resources to enhance learning (e.g., videos, podcasts).	5
	2. Digital storytelling is used to engage students and develop their speaking skills.	2
	3. A variety of digital tools are used to cater to different learning styles and preferences.	4
Student Engagement and Participation	1. Students actively participate in speaking activities facilitated by digital media.	5
	2. Students collaborate with peers using digital platforms.	5
	3. Students show increased motivation and enthusiasm for speaking activities.	5
Assessment and Feedback	1. Teacher uses digital tools for formative assessment to monitor student progress.	5
	2. Feedback is given in an interactive manner, often facilitated by digital tools.	4
	3. Students use digital media for self-assessment and reflection on their speaking skills.	4
Adaptability and Flexibility	1. Teacher adapts teaching methods based on student needs and responses.	5
	2. Teacher effectively handles technical issues that arise during the lesson.	4
	3. Teacher seeks and incorporates student feedback to improve the use of digital media in teaching.	4
Total Score		95
Percentage		90%

Note:

1. No indicator teacher did 0% - 40% : Very poor
2. Teacher did 10-40% indicator of activities 41%-55% : Poor
3. Teacher did 50% indicator of activities 56%-70% : Fair
4. Teacher did 80% indicator of activities 71%-85% : Good
5. Teacher did all indicators of activities 86%-100% : Very good

Referring to the result of observation, the researcher analyzed that the teacher's and the students' activities during the class which is used interactive learning and using digital media integration in teaching speaking was categorized very good. Teacher applied several interactive learning strategy and use digital media for instruction, practice and giving feedback for students. Specifically, the use of digital media TikTok for speaking which make students interact actively during the teaching speaking.

Result of Speaking Skill Test

Analysing the quantitative data is aimed to prove the hypothesis about the effectiveness of using digital media integration (TikTok) in teaching speaking toward students' speaking achievement. Before and after giving some intervention for teacher and students of using digital media integration in the class, researcher made pre-test and post-test of speaking. The speaking test covered some competencies, adopted from Brown (2004). The competencies are Grammar, Vocabulary, Pronunciation, Fluency and Comprehension. The data from pre-test and post-test were analysed using statistical formula t-test. The result score of pre-test and post-test is in the following table.

Table.3 The Result of the Students' Pre-test

No	Competency					Total score	Converted score
	G	V	P	F	C		
1	2	2	3	2	1	10	50
2	1	3	3	2	2	11	55
3	3	4	4	3	2	16	75
4	1	1	1	1	1	5	25
5	3	3	4	3	4	17	85
6	3	3	4	3	3	16	80
7	3	3	4	4	4	18	90
8	2	3	3	2	1	11	55
9	3	3	3	3	3	15	75
10	1	2	3	2	1	9	45
11	3	2	2	2	4	13	65
12	2	3	3	2	3	13	65
13	3	3	4	3	3	16	80
14	3	3	4	3	3	16	80
15	1	2	2	2	1	8	40
16	1	1	1	1	1	5	25
17	1	1	1	1	1	5	25
18	1	1	1	1	1	5	25
19	2	3	3	2	3	13	65
20	2	2	3	2	2	11	55
21	3	3	4	3	3	16	80
22	2	3	3	2	2	12	60
23	2	3	4	3	2	14	70
24	3	3	4	3	4	17	85
25	2	2	3	2	2	11	55

26	2	2	3	2	3	12	60
27	3	2	3	2	2	12	60
28	2	3	3	2	1	11	55
29	3	3	2	2	4	14	70
30	3	3	4	3	3		80
	Mean						60.8

Table.4 The Result of the Students' Post-test

No	Competency					Total score	Converted score
	G	V	P	F	C		
1	3	3	3	2	2	13	65
2	2	3	3	2	2	12	60
3	3	4	4	3	4	18	90
4	2	2	1	1	2	8	40
5	4	3	4	3	4	18	90
6	4	3	4	3	4	18	90
7	3	3	4	4	4	18	90
8	2	3	3	2	2	12	60
9	3	4	4	4	4	19	95
10	2	2	3	2	1	10	50
11	3	2	3	2	4	14	70
12	3	3	3	2	3	14	70
13	3	3	4	3	4	17	85
14	3	3	4	3	4	17	85
15	2	2	2	2	2	10	50
16	1	2	1	1	2	7	35
17	2	2	2	1	1	8	40
18	1	2	1	1	2	7	35
19	2	3	3	2	3	13	65
20	3	2	3	2	3	13	65
21	3	3	4	3	4	17	85
22	3	3	4	2	3	15	75
23	2	3	4	3	3	15	75
24	4	4	4	3	4	19	95
25	3	2	3	2	3	13	65
26	3	2	3	2	3	13	65
27	3	3	4	2	4	16	80
28	3	3	4	2	2	14	70
29	4	4	4	3	4	19	95
30	3	3	4	3	3	16	80
	Mean						70.5

The test was conducted in order to know whether criteria of success were achieved or not. The invention and application of interactive learning through digital media integration is concluded effective if students' grades reach the average score of the school standard score based on curriculum. The school standard score is 70. The result of pre-test 60.8, it means the students score did not meet the criteria of success yet. But the average after some meeting with the intervention and observation has done in the class, the post-test average score increased to 70.5 it has met the criteria of success. It means that the implementation of interactive learning through digital media integration in teaching speaking could improve students speaking skill.

Table.5 The Result of the Students' Pre-test and Post-Test

Test	Average Score
Speaking pre-test	60.8
Speaking post-test	70.5

CONCLUSION

This study illustrates the essential function of enhancing technologies in Education within Society 5.0, highlighting the significance of ongoing skill enhancement and lifelong learning. The research reveals that the utilization of digital platforms, particularly social media platforms like TikTok, is highly effective for the instruction of speaking skills. These platforms offer educators practical strategies that they can put into practice. The practices have significant repercussions for educators, policymakers, and educational institutions, as they offer recommendations that are supported by evidence for the incorporation of digital tools into instructional strategies. This research is in line with the goals of Society 5.0, which are to create an educational environment that is more advanced, interactive, and inclusive, and to prepare students for the challenges that the digital era will bring. The findings of this study highlight the potential for digital media to revolutionize education by increasing student engagement, personalization, and the effectiveness of learning, among other benefits.

This study has important implications for the field of education, particularly the incorporation of digital technologies into the teaching and learning process. The findings of this study can help educators implement more interactive and relevant teaching strategies by emphasizing the power of digital tools, such as social media platforms, to improve skill development and student engagement. These insights are particularly valuable because they are consistent with the principles of Society 5.0, which advocate for the use of advanced technologies to create a human-centered society in which innovation improves quality of life, including in education. The study offers policymakers evidence-based recommendations for

 DOI: http://dx.doi.org/10.30998/scope.v9i1.24084

incorporating digital tools into the curriculum, ensuring that educational policies are current with the technological realities and requirements of the digital era. This can result in the development of strategies that facilitate students' ongoing skill development, preparing them for the demands of the modern workforce.

Implementing the findings of this study allows institutions to create a more technologically accommodating, adaptable, and inclusive educational environment. The research demonstrates how all stakeholders (educators, practitioners, policymakers, and institutions) may cooperate to create a more advanced educational environment that not only improves learning outcomes but also equips students with the skills and competencies they need to succeed in a digital society. For further research, it is anticipated that the concepts of Society 5.0 would enable the educational environment to adapt to technological improvements while emphasizing the long-term development of students.

REFERENCE

Brown, H. D. (2001). *Teaching by principle: An integrative approach to language pedagogy (2nd ed.).* San Francisco State University: Longman.

Brown, H. D. (2004). *Language assessment. Principles and Classroom Practices*. New York: Pearson Education.

Cai, H., & Zhu, W. (2019). Integrating digital media in teaching speaking skills: A practical approach. *Educational Media International*, 56(1), 54-66. https://www.tandfonline.com/doi/abs/10.1080/09523987.2019.1583467

Chen, Y. C. (2024). Effects of technology-enhanced language learning on reducing EFL learners' public speaking anxiety. Computer Assisted Language Learning, 37(4), 789-813. https://doi.org/10.1080/09588221.2022.2055083

Chien, S. Y., Hwang, G. J., & Jong, M. S. Y. (2020). Effects of peer assessment within the context of spherical video-based virtual reality on EFL students' English-Speaking performance and learning perceptions. Computers & Education, 146, 103751. https://doi.org/10.1016/j.compedu.2019.103751

Dixson, M. D. (2015). Measuring Student Engagement in the Online Course: The Online Student Engagement Scale (OSE). *Online Learning*, 19(4). https://doi.org/10.24059/olj.v19i4.561

Fukuyama, M. (2018). Society 5.0: Aiming for a new human-centered society. *Japan Spotlight*, 27(5), 47-50. https://www.hitachihyoron.com/rev/archive/2017/r2017_06/trends/index.html

Hwang, W. Y., & Fu, S. J. (2019). The effects of an augmented reality learning system on improving spatial ability and learning achievement. *Educational Technology & Society*, 22(4), 119-129. https://www.j-ets.net/collection/published-issues/22_4

Ilham, M., Rahman, F., Sari, D. D., & Annisaturrahmi, A. (2023). Enhancing Preschool English Vocabulary Through Multimedia Tools: Insights from a Mixed-Methods Study. *Al-Athfal: Jurnal Pendidikan Anak*, 9(2), 93-102. https://doi.org/10.14421/al-athfal.2023.92-02

John, B., & Yunus, M. M. (2021). Social media's role in developing speaking skills among ESL learners: A systematic review. *International Journal of Interactive Mobile Technologies*, 15(8), 4-18. DOI: https://doi.org/10.3991/ijim.v15i08.20401

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758-773. https://doi.org/10.1080/03075079.2011.598505

Keidanren. (2018). Society 5.0: Co-creating the Future. https://www.keidanren.or.jp/en/policy/2018/095_proposal.pdf

Kim, H. J., & Kwon, Y. S. (2020). Using interactive digital storytelling to improve speaking skills: A comparative study. *Language Learning & Technology*, 24(3), 12-26. https://doi.org/10.125/llt.24301

Kim, J., Yoshida, N., Iwata, S., & Kawaguchi, H. (2021). *Lesson Study-based Teacher Education*. London and New York: Routledge.

Liu, S. H., Liao, H. L., & Pratt, J. A. (2019). Impact of media-rich classroom technology on learning engagement: A case study. *Journal of Educational Computing Research*, 57(3), 607-630. https://doi.org/10.1177/0735633118755910

Mayer, R. E. (2009). *Multimedia Learning (2nd ed.).* Cambridge University Press.

Nair, V., & Yunus, M. M. (2022). Digital storytelling as a tool for enhancing speaking skills: A systematic review. *Sustainability,* 13(17), 9829. https://doi.org/10.3390/su13179829

Schmidt, H. G., van der Molen, H. T., te Winkel, W. W., & Wijnen, W. H. (2009). Constructivist, Problem-Based Learning Does Work: A Meta-Analysis of Curricular Comparisons Involving a Single

Medical School. *Educational Psychologist*, 44(4), 227-249. https://doi.org/10.1080/00461520903213592

Schmidt, H. G., Van der Molen, H. T., Te Winkel, W. W., & Wijnen, W. H. (2009). Constructivist, problem-based learning does work: A meta-analysis of curricular comparisons involving a single medical school. *Educational psychologist*, 44(4), 227-249. https://doi.org/10.1080/00461520903213592

Tran, N., Hoang, D. T. N., Gillespie, R., Yen, T. T. H., & Phung, H. (2024). Enhancing EFL learners' speaking and listening skills through authentic online conversations with video conferencing tools. Innovation in Language Learning and Teaching, 1-11. https://doi.org/10.1080/17501229.2024.2334809

 DOI: http://dx.doi.org/10.30998/scope.v9i1.24084