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Improving the Speaking Skills of Second Semester Students at UNUGHA Cilacap Using AI Integrated Group Work in Short Dialogues Video

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Abstract: This study explores the effectiveness of integrating Artificial Intelligence (AI) into group work activities to enhance the speaking skills of second-semester students at UNUGHA Cilacap. The primary purpose is to examine how AI-supported collaborative tasks, particularly through the production of short dialogue videos, can improve learners' oral communication in English. Employing a qualitative research design with an Interpretative Phenomenological Analysis (IPA) approach, this study delves into students' lived experiences and perceptions of using AI tools during group projects. Data were gathered through participatory classroom observations, semi-structured interviews with students, and content analysis of student-produced video dialogues. The findings reveal that group-based video production fosters higher levels of student engagement, peer collaboration, and motivation. Furthermore, AI tools such as speech recognition, pronunciation analyzers, and language feedback systems significantly contribute to improvements in pronunciation accuracy, fluency, and real-time corrective feedback. These technological supports were found to reduce speaking anxiety and increase learners' self-confidence. Overall, the integration of AI in cooperative learning tasks demonstrates strong pedagogical value for enhancing speaking proficiency, offering insights into innovative approaches for English language instruction in higher education.

Keywords: *speaking skills; group work; artificial intelligence; video-based learning; english language education*

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Introduction

Effective English communication is essential in today's globalized society, particularly for college students. Because speaking requires real-time processing, pronunciation, fluency, and confidence, it is frequently regarded as the most demanding of the four language abilities. Universitas Nahdlatul Ulama Al-Ghazali (UNUGHA) Cilacap students have expressed that their limited vocabulary, fear, and lack of real-world speaking opportunities make it difficult for them to express themselves verbally.

New potential for language training are presented by recent technology breakthroughs, particularly in the area of artificial intelligence (AI). Autonomous learning and tailored, real-time feedback are made possible by AI-based solutions. The integration of artificial intelligence (AI) into

collaborative learning methodologies, such group video production, has the potential to improve student motivation and speaking ability.

Proficiency in English has become crucial in the current era of global communication, especially in higher education. Speaking is regarded as the most difficult of the four language skills—listening, speaking, reading, and writing—but it is also the most important for productive communication. Students frequently find it difficult to communicate their ideas clearly and effectively in English, particularly in situations when they are not exposed to a lot of real-world language usage.

Second-semester students at Universitas Nahdlatul Ulama Al-Ghazali (UNUGHA) Cilacap frequently struggle with speaking due to a lack of vocabulary, issues with pronunciation, nervousness, and a lack of opportunity to practice in authentic settings. These difficulties may impair their general communication skills and have an impact on their desire to learn English.

Innovative teaching strategies that combine technology, teamwork, and creativity are being investigated more and more in an effort to address these problems. Making short dialogue videos is one such technique that gives kids the chance to practice speaking in a meaningful and cooperative setting. Additionally, by encouraging student autonomy and offering real-time, tailored feedback, the incorporation of Artificial Intelligence (AI) tools—such as speech recognition, automatic feedback, and subject assistance—can improve the educational process.

Motivation is a key factor in influencing student involvement, perseverance, and success when learning a second language. Motivation is "very strongly related to achievement in language learning," according to Ur (1996), since it affects a learner's readiness to engage and take chances when using the language. According to Harmer (2004) and Brown (2001), motivation comes from an inner drive that propels students to take action in order to accomplish particular objectives. These inner motivations include the need for active engagement, new information, and ego enhancement. In contrast to low-motivated students, who are typically passive, nervous, or disengaged, high-motivation students frequently demonstrate greater initiative, originality, and participation in class activities (Harmer, 2004: 51; Brown, 2001: 75).

Focus group discussions (FGD) and group video creation are examples of interactive, collaborative jobs where social interaction and shared responsibility can further boost motivation. By fostering a structured group atmosphere where students co-construct knowledge and assist one another, the collaborative learning strategy improves learning outcomes (Johnson, Johnson, & Smith, 1991). According to Brown (2001), learners tend to generate more intrinsic motivation when they are offered choice and autonomy, such as when it comes to selecting roles or digital tools.

Students need regular, real-world practice in communicative settings when learning the English language, especially when it comes to speaking. AI-enabled collaborative learning gives students the chance to practice, edit, and consider their spoken language utilizing real-time feedback systems. According to Self-Determination Theory, this not only enhances language proficiency but also satisfies their psychological demands for relatedness, competence, and autonomy (Deci & Ryan, 2000).

This study is to explore how second-semester UNUGHA Cilacap students' speaking abilities can be enhanced through AI-integrated group work in short dialogue video production. It also looks at how this kind of approach affects students' motivation, using the ideas of Self-Determination Theory (SDT) to examine how autonomy, competence, and relatedness evolve during the learning process.

Through the theoretical lens of Self-Determination Theory (SDT), this study examines the effects of incorporating AI into group-based short dialogue video projects on the speaking growth of English language learners.

Research Method

Interpretative Phenomenological Analysis (IPA) was used in this study's qualitative research methodology to better understand students' perceptions and lived experiences during the learning process. In educational settings where meaning-making and internal processes are the main focus, IPA is especially well-suited for investigating how people interpret their social and personal experiences (Smith, Flowers, & Larkin, 2009).

1. Participant

Participants included fifteen second-semester students from Universitas Nahdlatul Ulama Al-Ghazali (UNUGHA) Cilacap who were engaged in the English Education Program. The participants were chosen using purposive sampling, a popular method in qualitative research that enables the researcher to choose people with a high level of expertise or familiarity with the topic under study (Palinkas et al., 2015). During class exercises that entailed creating collaborative dialogue videos with AI assistance, these students were fully involved.

2. Data Collection Techniques

Three qualitative data collection methods were used:

- a. **Participatory Observation:** To record how students used AI tools and worked together to create videos, the researcher made in-person observations during class and group activity sessions. According to Creswell (2012), observational data can provide valuable contextual insights, and the observation notes contained information on student behavior, engagement, peer interaction, and technology use.
- b. **Semi-structured Interviews:** To learn more about the feelings, ideas, and perspectives of a chosen group of students regarding the employment of artificial intelligence in speaking activities, interviews were held with them. Participants were able to freely discuss in a semi-structured style while still concentrating on important issues including learning tactics, motivation, and confidence (Gill et al., 2008).
- c. **Artefact Analysis:** The brief discussion movies that the students produced were used as educational resources. These movies were examined as multimodal texts that demonstrated both participation in cooperative learning activities and language performance (fluency, pronunciation, and vocabulary use) (Yin, 2011). Triangulation with observational and interview data was made possible by artifact analysis.

Thematic analysis within the IPA framework was used to analyze the data in accordance with Smith et al. (2009) criteria. In order to find recurrent themes and patterns associated with the following, the researcher coded observation notes, video transcripts, and interview transcripts:

- a. **Motivation** as seen through the prism of Self-Determination Theory, which emphasizes the psychological requirements of relatedness, competence, and autonomy (Deci & Ryan, 2000).
- b. **AI Integration**, namely the impact on learning autonomy and confidence of students using AI tools like speech recognition, pronunciation checkers, and transcription features.

- c. Development of Speaking Skills: This includes noticeable improvements in vocabulary, pronunciation, fluency, and readiness to speak in front of a group.

The findings' reliability and dependability were increased by triangulating data from several sources (Lincoln & Guba, 1985). By providing participants with a summary of the results, member checking was also used to confirm that the interpretations were accurate.

3. Engaging Participants

The study involved fifteen second-semester English Education Program students from Universitas Nahdlatul Ulama Al-Ghazali (UNUGHA) Cilacap in the 2024–2025 academic year. In order to find participants who are particularly informed or experienced about the topic being studied, purposive sampling—a technique frequently employed in qualitative research—was utilized to choose them (Palinkas et al., 2015). AI-assisted group projects and speaking assignments, especially the production of brief discussion videos, engaged all participants in class activities.

Students were divided into small groups of three to four people in order to encourage peer learning and active participation. In line with social constructivist ideas that highlight the importance of knowledge co-construction through contact, this grouping made it possible to design, rehearse, and produce videos in collaboration (Vygotsky, 1978; Dooly, 2008). To replicate real-world teamwork, each group was urged to assign duties to its members, such as:

- a. Scriptwriters, who used AI-based writing tools (such as Grammarly and QuillBot) to help them with vocabulary and grammar while they created the dialogues.
- b. Performers, who are in charge of recording and practicing the dialogue.
- c. Technical Coordinators, who oversaw the video editing process with the help of voice or subtitle tools backed by AI.
- d. Students interacted with various AI tools throughout the project. They used:
- e. Speech recognition applications (e.g., Google's speech-to-text, VoiceTube) to evaluate pronunciation and fluency.
- f. Grammar and style checkers (e.g., Grammarly, LanguageTool) during the dialogue drafting phase.
- g. Pronunciation analyzers or AI avatars (e.g., Elsa Speak, TalkPal) to practice before recording.

These tools supported independent learning and fostered learner autonomy (Benson, 2013). Students were given freedom to choose the tools that best suited their needs, reflecting a learner-centered pedagogy. The teacher functioned as a facilitator and observer, supporting technical needs and ensuring inclusive participation across groups.

As a component of continuous formative evaluation, students turned in weekly reflection logs detailing their experiences, difficulties, and personal revelations. They tracked their own improvement and gained metacognitive awareness thanks to these logs (Zimmerman, 2002). Every video presentation was followed by peer evaluation sessions where students provided their peers with helpful criticism. This technique improved social presence, communication abilities, and critical thinking—all of which are crucial in digital and collaborative learning environments (Garrison, Anderson, & Archer, 2000).

4. Interview Participation

Six students were chosen for semi-structured interviews from the wider sample in order to investigate a deeper comprehension of learner experiences. Their roles within the group and their

differing degrees of English ability were taken into consideration while making the selection. The following topics were the focus of these interviews:

- a. Emotional reactions during video production (confidence, fear, engagement); • Perceptions of AI's utility and usability in linguistic tasks.
- b. Thoughts on how collaborative projects affect learning.
- c. Ideas for integrating AI tools into the classroom in the future.

Data from interviews shed important light on how students perceived the AI experience in connection to their language progress. Semi-structured interviews enable both flexibility and thematic depth in qualitative research (Gill et al., 2008).

5. Ethical Aspects

An informed consent form explaining the goal of the study, the methods used, and the ethical precautions was given to each student prior to participation. Pseudonyms were employed for reporting and transcription, and students were reassured of anonymity and the voluntary nature of their involvement. These steps are in line with the American Educational Research Association's (AERA, 2011) and Creswell's (2012) recommendations for ethical research procedures.

Research and Discussion

The results of this qualitative study revealed several key findings regarding the integration of Artificial Intelligence (AI) in collaborative learning activities, specifically in the context of short dialogue video creation for improving speaking skills among second-semester students at UNUGHA Cilacap.

1. Improved Fluency and Pronunciation

One of the most noticeable outcomes was the enhancement in students' fluency and pronunciation. As observed from the video artifacts and through teacher and peer feedback, students exhibited more natural speech flow and clearer articulation over time. AI tools such as speech recognition and pronunciation checkers allowed students to practice repeatedly, leading to noticeable gains in oral performance. This improvement is consistent with research that supports the role of repetitive, feedback-oriented practice in language learning.

2. Increased Motivation and Engagement

The integration of AI and group work significantly increased students' motivation and classroom engagement. Interviews revealed that students felt more enthusiastic and excited about the learning activities, primarily because of the novelty of using AI and the creative element involved in producing videos. Many students noted that this method was more enjoyable than traditional speaking drills or textbook exercises. The presence of AI tools added an element of technological relevance that made the learning feel modern and personally meaningful.

3. Enhanced Autonomy and Confidence

Students reported greater autonomy in learning as they used AI applications to monitor and improve their performance without waiting for teacher intervention. This self-directed learning process fostered confidence, especially among students who were previously hesitant to speak in class. The ability to review their own speech and make corrections independently helped reduce fear of making mistakes, thereby lowering speaking anxiety.

4. Development of Collaborative Skills

The group-based nature of the activity fostered key social and collaborative skills. During the planning, scripting, and recording phases of the video project, students had to work together, negotiate ideas, divide roles, and support each other. This collaborative process encouraged active participation and created a supportive environment for language learning. The teamwork also contributed to the development of communicative competence as students practiced real-life interaction and turn-taking.

5. Multimodal Learning and Reflective Practice

The student-created video artifacts functioned not only as a performance task but also as a medium for reflection and assessment. Students were able to see and hear their own progress, identify areas for improvement, and reflect on their speaking abilities over time. The videos demonstrated richer vocabulary use, more appropriate intonation, and better use of communicative expressions compared to their previous performance in classroom settings. This multimodal form of learning added a visual and auditory dimension to self-assessment.

Table X. Summary of Research Findings Related to Student Motivation in AI-Integrated Collaborative Learning

No	Theme	Description	Motivational Dimension (SDT)	Supporting Literature
1	Improved Fluency and Pronunciation	Students practiced with AI tools (e.g., speech recognition) to enhance fluency and articulation. They felt capable of producing clearer speech after repeated AI-assisted exercises.	Competence	Chun (2020); Li & Hegelheimer (2013)
2	Increased Motivation and Engagement	Students were excited by the novelty of AI and creative tasks. They viewed learning as more meaningful and enjoyable than traditional exercises.	Intrinsic Motivation	Ryan & Deci (2000); Zawacki-Richter et al. (2019)
3	Autonomy and Self-Directed Learning	Learners chose their own AI tools, managed their learning schedules, and revised their work independently without waiting for teacher correction.	Autonomy	Benson (2013); Deci & Ryan (2000)
4	Collaborative Skill Development	Students worked in small groups to plan, script, and record videos. Peer interaction fostered responsibility sharing, mutual feedback, and a sense of belonging.	Relatedness	Vygotsky (1978); Johnson et al. (2008)
5	Reflective Practice and Self-Evaluation	Students viewed and evaluated their own video performances, which helped them identify progress and areas for improvement. This increased confidence and awareness of personal learning goals.	Competence Integrated Motivation	/ Zimmerman (2002); Huang & Hew (2018)

The findings from this study, as summarized in Table X, illustrate how the integration of Artificial Intelligence (AI) in collaborative short video dialogue projects contributed significantly to both the improvement of speaking skills and the enhancement of student motivation. The analysis was guided by Self-Determination Theory (SDT), which focuses on the fulfillment of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000).

1. Competence through AI-Enhanced Fluency Practice

Students experienced noticeable improvements in their fluency and pronunciation, facilitated by AI tools such as speech recognition apps and pronunciation feedback systems. These tools provided

immediate and personalized feedback, which helped students identify their errors and refine their spoken English through repeated practice. As learners observed measurable progress, they developed a greater sense of competence, which motivated them to continue improving. This supports Chun (2020) and Li & Hegelheimer's (2013) findings on AI's role in promoting language accuracy and confidence.

2. Intrinsic Motivation through Engaging, Modern Tools

The novelty of using AI tools and the creativity involved in making dialogue videos were key factors in increasing students' intrinsic motivation. Many students expressed that learning felt more enjoyable, modern, and personally meaningful compared to traditional classroom methods. This enjoyment led to greater participation and persistence in completing tasks. According to Ryan & Deci (2000), such enjoyment is a hallmark of intrinsic motivation, which sustains learning in the long term.

3. Autonomy and Ownership in Learning

AI applications empowered students to take control of their learning by enabling self-directed speaking practice. Rather than relying entirely on the teacher, students independently selected digital tools, assessed their own performance, and revised accordingly. This autonomous learning behavior increased their sense of ownership and accountability. Benson (2013) emphasizes that learner autonomy is crucial for sustained motivation and deeper learning outcomes.

4. Relatedness through Collaborative Group Work

The group-based nature of the video project supported students' need for relatedness, as they engaged in cooperative tasks such as brainstorming dialogues, dividing roles, rehearsing lines, and recording videos. These social interactions cultivated a sense of belonging, reduced speaking anxiety, and encouraged risk-taking in language use. This finding is consistent with Vygotsky's (1978) theory of social learning and Johnson et al.'s (2008) work on the benefits of cooperative learning environments.

5. Reflection as Motivation and Metacognitive Growth

The reflective component of the video task—where students reviewed their own recordings—enabled them to recognize their progress, identify areas for improvement, and set personal learning goals. This reflective process supported the development of integrated motivation, where students internalize the value of the learning task and align it with their self-concept and future aspirations (Zimmerman, 2002; Deci & Ryan, 2000). It also reinforced their competence, as they became more aware of their capabilities and limitations.

Furthermore, the study found that students who participated in the AI-integrated short dialogue video projects developed a more positive attitude toward English speaking activities. Through interviews and reflection logs, many students expressed that they enjoyed the learning process more than in conventional classroom methods. The task of creating videos was perceived as creative, meaningful, and less intimidating, particularly because the use of AI tools allowed for private practice and self-correction, reducing their fear of making mistakes.

Hastuti (2024) observed that when students learn through group-based methods like Focus Group Discussions (FGD), their motivation to learn English significantly improves. In her study, learners who worked in teams to discuss and speak in English were more willing to participate, showed greater confidence, and became more engaged in the learning process. The sense of safety and support they found in group work made it easier for them to express their ideas and practice speaking. Rather than

feeling nervous, students became more comfortable and involved, which helped reduce anxiety and build stronger communication skills.

These observations closely match what this study found: students who worked together to create AI-supported short dialogue videos also showed more enthusiasm, practiced more often, and were generally more confident in their speaking. With AI providing instant feedback and group members encouraging one another, students were able to grow not just in their language skills, but in their motivation and enjoyment of the learning experience.

Speaking more frequently, being more motivated to participate, and improving speaking performance—particularly in areas like fluency, vocabulary utilization, and pronunciation accuracy—were all results of this enhanced enjoyment. During both the final recordings and the rehearsals, students gained confidence and increased their expressiveness. The findings of Huang & Hew (2018), who observed that authentic performance and frequent practice in video-based activities can promote speaking fluency and learner satisfaction, are in line with these results.

According to Ryan and Deci (2000), students' intrinsic motivation was further enhanced by the sense of enjoyment, creativity, and technology involvement, which increased their level of investment in the activity. Therefore, in addition to providing a linguistic output, the short video projects also helped students become more motivated, enjoy learning, and become proficient speakers in the long run.

Conclusion

Students' enthusiasm and enjoyment of studying English were greatly increased when Artificial Intelligence (AI) was incorporated into group speaking projects, such as creating short dialogue videos. This also enhanced students' linguistic proficiency. Students experienced a dynamic and encouraging environment where they felt more self-assured, independent, and involved in speaking assignments because to the mix of real-time AI feedback and meaningful group engagement.

Many UNUGHA Cilacap students said that creating videos with AI support increased their enthusiasm for learning English. They were able to get over their fear of making mistakes and improve their speaking clarity and fluency by using AI technologies, such speech recognition and pronunciation software, to practice in private. Increased intrinsic motivation resulted from the sensation of technological novelty and control over the creative process, which is consistent with what Ryan & Deci (2000) define as the inner fulfillment that emerges when students feel capable, independent, and socially connected.

The results of this study support the notion that artificial intelligence (AI) can serve as a stimulant for motivation in addition to being a technological help. AI facilitates the satisfaction of fundamental psychological needs as suggested by Self-Determination Theory (SDT) by making individualized, interesting, and reflective learning possible. Students thus showed significant improvement in their English speaking abilities in addition to enjoying the learning process.

References

- American Educational Research Association. (2011). Code of ethics. AERA.
- Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman.
- Benson, P. (2013). Teaching and researching autonomy (2nd ed.). Routledge.

- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Longman.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Education.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Dooley, M. (2008). Constructing knowledge together. In *Telecollaborative language learning: A guidebook to moderating intercultural collaboration online* (pp. 21–45). Peter Lang.
- Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Routledge.
- Hastuti, E. (2024). The effectiveness of focus group discussions (collaborative learning techniques) to teach English is viewed from the students’ motivation. *Conference on English Language Teaching*, 4(1), 259–268. <https://proceedings.uinsaizu.ac.id/index.php/celti/article/view/1032>
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, 204(6), 291–295. <https://doi.org/10.1038/bdj.2008.192>
- Harmer, J. (2004). *The practice of English language teaching*. Longman.
- Huang, B., & Hew, K. F. (2018). Implementing video projects in the EFL classroom: Challenges and benefits. *Computers & Education*, 127, 223–236. <https://doi.org/10.1016/j.compedu.2018.08.010>
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (2008). *Cooperation in the classroom* (8th ed.). Interaction Book Company.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Active learning: Cooperation in the college classroom*. Interaction Book Company.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. Sage.
- Ur, P. (1996). *A course in language teaching: Practice and theory*. Cambridge University Press.

- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wentzel, K. R. (2009). Peers and academic functioning at school. In K. Rubin, W. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 531–547). Guilford Press.
- Yin, R. K. (2011). *Qualitative research from start to finish*. Guilford Press.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 1–27. <https://doi.org/10.1186/s41239-019-0171-0>