

THE USE OF HUME AI IN SPEAKING ASSESSMENTS: TEACHERS' PERCEPTIONS IN SENIOR HIGH SCHOOL CONTEXTS

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ABSTRACT

This research aims to investigate the perception of teachers about the use of Hume AI for assessing students' speaking skills in senior high school. English teachers (n=4) from public senior high schools in North Sumatra participated in this study. This research employed a descriptive qualitative method with semi-structured interviews and field note observations. The data was examined by using thematic analysis. The result indicated that Hume AI has a positive impact on students' enthusiasm and interest. However, several challenges hinder the optimal use of Hume AI in speaking assessments, particularly in spontaneous speaking, including their low motivation to learn English due to socio-economic factors, and insufficient access to technological infrastructure within schools. Despite these obstacles, teachers acknowledged the potential of Hume AI to enhance speaking assessment and recommended its integration as both a learning and assessment tool. These findings offer insightful information for teachers, policymakers, and AI developers looking to implement AI-based tools in language learning and assessment practices.

Keywords: Hume AI, Learning Media, Speaking Assessment, Teachers' Perceptions.

INTRODUCTION

Teachers hold a crucial position in the realm of English learning, teaching exactly in designing, executing, and evaluating (Hattie, 2012; Mundy et al., 2008). One of the most crucial functions of a teacher in a language classroom is to serve as an organizer, as it requires organizing both the students and the variety of activities involved in language learning (Naibaho, 2019). The English teacher was an organizer who created lesson plans, organized the syllabus, and oversaw the teaching and learning process (Budiharto & Affandi, 2018). As an executor, in addition to overseeing all classroom activities, the English teacher is in charge of the class. In this case, English teachers will transfer the knowledge they have to students. In general, an English teacher is in charge of assessing student progress regarding language proficiency as well as their areas of strength and weakness (Poudel, 2022).

In the conventional learning and teaching process, teachers are the central source of information, in which the teachers explain and students only listen, which is nowadays being reduced (Anggreini et al., 2023). Recently, the system began to change to be a learning

media-based method. Information-distributing media that are utilized to facilitate the learning process are referred to as learning media. Learning media constitute an integral and crucial component in determining the effectiveness of information delivery, particularly as tools that support student assessment. Their appropriate use ensures that the intended learning outcomes, as outlined in the instructional design, can be successfully and optimally achieved (Mutia et al., 2020).

The efficiency of the learning process in the classroom can be assessed by the extent of students' interest and active engagement in the instructional activities facilitated by the teacher. In order to ensure that students remain motivated throughout the learning process, it is the responsibility and duty of teachers to consistently maintain and enhance their students' motivation to learn. Teachers must actively seek effective strategies to boost students' enthusiasm for learning, address declines in motivation, encourage self-directed learning, and cultivate a sustained sense of motivation within the learners themselves (Dwijuliani et al., 2021). Therefore, it is essential to employ specific techniques and strategies that support the effectiveness of the teaching and learning process.

Technology-based interactive media can significantly enhance the learning process, as technology provides a hardware-oriented approach that facilitates the implementation of educational activities. The use of technology-based interactive media has the potential to actively engage all students in the learning experience. This involves the use of various instructional tools such as teaching machines, films, slides, simulators, overhead projectors, and videotape recorders (Kustyarini et al., 2020).

In the face of global challenges such as the climate crisis, security threats, and the COVID-19 pandemic, societies are compelled to explore and implement innovative, forward-thinking solutions to ensure resilience and sustainability (Stenbom & Geijer, 2025). Digital transformation, driven by technological innovation, provides a strategic avenue for re-envisioning and strengthening resilience across multiple sectors, particularly within the domain of education (Lasi et al., 2014; Vial, 2021). This transformation, characterized by the intricate convergence of cultural, political, and economic dynamics, fundamentally reconfigures human-technology interaction and engenders far-reaching implications for educational systems and theoretical paradigms, thereby necessitating a comprehensive reexamination of pedagogical practices and learning methodologies (Berry & Dieter, 2015; Gorecky et al., 2014).

Likewise, Indonesia's education sector is witnessing a significant increase in the integration of information technology. This transition reflects the sector's adaptive response to the demands and challenges posed by an increasingly dynamic and fast-evolving era (Widodo et al., 2021). Ongoing technological advancements continually contribute to the increased efficiency and practicality of various facets of human life. Among the most recent developments is the emergence of artificial intelligence (AI), which has garnered substantial scholarly and societal attention for its potential to emulate human cognition and behavior (Fitria, 2025).

The development of tools for generative artificial intelligence (GenAI), such as ChatGPT, has raised challenging questions about the nature of teaching, learning, and assessment in schools and universities (Tang et al., 2024). GenAI is expected to revolutionize

and change how we learn, think, and work by producing original material quickly. It will quickly make everyone who does not comprehend it feel left behind. The usage of AI software and robots as assistants, tutors, and peer learning facilitators in classrooms around the world is not surprising given the growing integration of AI technology into education (Vasagar, 2017). Artificial intelligence (AI) has been utilized in education for more than three decades, with applications such as predicting student performance, personalizing learning experiences, and automating assignment grading. In recent years, the integration of AI in education has become even more prominent, particularly following the release of advanced AI tools such as ChatGPT (Zawacki-Richter et al., 2019; Zhu et al., 2019). For the effective integration of artificial intelligence (AI) into educational practice, it is essential for educators to systematically evaluate methods for maximizing its positive impact on learning outcomes, while concurrently addressing potential risks and mitigating any adverse effects (Kim, 2021).

In Indonesia, the integration of artificial intelligence into educational media remains limited, primarily due to the unequal distribution of adequate technological infrastructure across schools (Helmiatin et al., 2024). Moreover, the utilization of artificial intelligence in Indonesia remains highly significant, particularly for educators and technology developers who advocate for the integration of AI-driven learning strategies within educational contexts (Jo, 2024).

In the field of education, assessing students' activities of various types is an integral part of teachers' workload (Alsalem, 2024). As asserted by (Beaumont et al., 2011), assessment has long been recognized as a crucial element that significantly contributes to both teaching and learning processes. Anton, within the field of ELT (Anton, 2009), argue that assessment plays a vital role in fostering the learning process and can effectively support learners in enhancing their academic development (Safdari & Fathi, 2020). According to Permendikbud No. 104 of 2014, Tests and attitude scales are examples of assessment instruments, which are tools used to evaluate student learning results.

Speaking is thought to be the most difficult of the four language skills (speaking, listening, reading, and writing) for junior high school teachers to evaluate (Navidinia et al., 2019; Rahmawati & Ertin, 2014; Zaim, 2017). Speaking ability examinations are used to assess students' speaking proficiency. The assessed aspects common for the speaking test are addressed to fluency, accuracy, pronunciation, grammar, vocabulary, and gesture (Brown, 2007). Learners can be considered to possess strong speaking skills if they demonstrate proficiency in the following categories (Aprianoto & Haerazi, 2019). Nevertheless, empirical research focusing on the development and assessment of learners' speaking proficiency remains relatively scarce (Vercellotti, 2015).

There are extensive studies exploring the use of various media to support speaking assessments; this area remains a subject of ongoing investigation. As Hung and Huang (Hung & Huang, 2015), examined the application of Web 2.0 tools, specifically blogs, as instruments for assessing and evaluating EFL learners' speaking performance. Their study revealed that blogs significantly contribute to the development of students' oral presentation skills and foster a positive learning experience.

Nevertheless, the focus of research should extend beyond assessment tools to include the underlying frameworks and assessment models that inform the evaluation of speaking proficiency. In this regard, Safdari and Fathi (Safdari & Fathi, 2020) highlighted Dynamic Assessment (DA) as a process-oriented, alternative assessment approach that promotes learners' active engagement and autonomy in the learning process (Crick & Yu, 2008). DA has a significant impact on speaking accuracy of the participant; however, for speaking fluency, DA did not significantly improve.

Based on some of the previous studies above, there are still very few studies that discuss AI as a tool in speaking assessment. Therefore, this research was conducted to find out how teachers perceive an AI used to assess students' speaking skills. Specifically, the focus of this research are: 1) how teachers perceive the Hume AI as a tool to assess students' speaking skills in senior high school? 2) what are the challenges faced by teachers while using this tool for assessing speaking skill? Top of Form Bottom of Form

The findings of this study offer valuable insights for readers, particularly teachers, regarding the potential use of artificial intelligence, specifically Hume AI, as a tool for assessing students' speaking skills. The integration of such technology is expected to provide practical benefits for teachers by facilitating a more efficient and objective assessment process. Furthermore, this study contributes to the existing body of literature and may serve as a reference for future researchers interested in exploring the application of Hume AI in educational assessment. In addition, the findings may serve as constructive input for AI developers, encouraging the development of applications that function not only as learning media but also as reliable assessment instruments.

METHODS

This study employed descriptive qualitative research to investigate the perspective of teachers while using the Hume AI to assess students' speaking skills and employed phenomenology, which is specialized to emphasize the lived experiences of participants and is frequently based on in-depth interviews (Patton, 2002). This study used a qualitative method due to the desire to learn more about instructor perspectives and gain a deeper understanding of all of them.

For the study, four English teachers in senior high school from four public schools in North Sumatra were chosen. The participants in this study were English teachers with over ten years of teaching experience. These teachers were selected based on their extensive professional background and their considerable experience in teaching a diverse range of students. All participants in this study were female teachers. Furthermore, these teachers were identified as individuals who are well-regarded by their students, as reflected in their positive rapport and favorable reputation within the school community. This intentional decision is warranted since the qualitative case study's sample selection procedure emphasizes the depth of the participants' comprehension of the problem rather than the population's representativeness.

The data were collected by classroom observations and semi-structured interviews. To find out how teachers utilize Hume AI to evaluate students' speaking abilities and whether Hume AI can evaluate speaking skills in general, non-participant, less structured

observations of each teacher and some students were carried out by field notes. The semi-structured interview has the following section: 1) perception of teachers related to the use of Hume AI to assess speaking skill 2) challenges that are faced by teachers while using Hume AI. These broad topics were considered to cover the teachers' holistic experience and perspective.

Qualitative content analysis was employed to examine the information gathered from semi-structured interviews and classroom observations. In this investigation, four stages of the analytical method were used. The verbatim transcription of the data was the first step in the data analysis process, which was conducted with the simultaneous gathering and interpretation of the qualitative data in mind. The researchers manually entered the transcriptions into word processing papers. All of the recordings were turned into texts because the qualitative element was the main emphasis. In order to become familiar with the facts, the texts were then read and reread in their entirety. The first step in the data reduction and interpretation process was text coding. The texts were divided into sections during the first coding process, and the parts were labelled, frequently in the participants' own words. Hard copy printouts of the texts were utilized for the first coding, and the margins were labelled. Higher-order themes were then created by grouping the original codes that shared concepts.

RESULTS

Teachers' perceptions of students' enthusiasm and interest in using Hume AI

Respondents were asked to share their response on students' enthusiasm and interest when using the Hume AI for assessment. The findings showed that teachers observed all students displayed heightened enthusiasm when first introduced to Hume AI as a tool for assessing their speaking skills. The novelty of technology like this AI seemed to capture their interest, leading to a more engaged learning environment. In the school, this AI was first implemented in English language learning as media for assessing speaking skill, but most students seem to like and be very interested in this AI. As one teacher noted, *"So, if we continue to use this, I think it will grow because this way these students will be enthusiastic, especially when they first hear it"*.

Another teacher added:

I think it is the best one. I see they like it very much, and they are definitely motivated. I think it can improve their interest, their ability, and they will try to focus.

The word 'definitely motivated' highlights the positive impact of using Hume AI on student motivation. The teacher indicated that the integration of technology in the classroom could enhance not only the interest and enthusiasm of students but also students' motivation to participate in speaking activities.

In addition, findings from student observations support the respondents' statements, indicating that when Hume AI was first introduced and practiced in class, students expressed positive emotions, such as smiling and showing enthusiasm. The students listened attentively and in an orderly manner to the instructions on how to use Hume AI. They also actively asked questions when they encountered difficulties in understanding how to

operate the application. Furthermore, during the practice session, many students showed interest and were eager to directly communicate with Hume AI.

The reason why students are motivated and enthusiastic because the current generation, who are mostly high school students, are very exposed to technological developments. Therefore, they are more enthusiastic and excited when this AI is implemented in their English assessment. Like one teacher stated:

"They look motivated because I think they are not far from items or technologies like this. Isn't it?"

The majority of senior high school students were able to engage with and benefit from English learning through the use of Hume AI. They also demonstrated ease in understanding the instructions for operating the AI during the speaking assessment conducted by the teacher.

Teachers perceived the advantages of Hume AI for assessing speaking skill

When participants were asked to say their opinion regarding the advantage of Hume AI, especially as a media for supporting speaking assessment, the majority of teachers reported that they actually seldom integrate technology into assessment practices. Technology is predominantly utilized for instructional purposes, such as delivering learning materials through presentations or videos. In contrast, assessments are generally conducted using conventional manual methods, as one teacher stated:

"....., then the assessment is straightforward. Directly assessed. Manual."

In conventional manual methods, speaking assessments are typically conducted through dialogues or conversations based on written texts, which they subsequently memorize. Similarly, some teachers organize activities such as drama performances or debates; however, these tasks also rely on written scripts that students are expected to memorize in advance. Overall, the majority of speaking assessments conducted in these contexts require students to produce written texts, commit them to memory, and then present them orally in front of the class.

"Yes, written and then read or practiced by the students in front of the class"

Teachers believe that measuring students' speaking abilities can be effectively conducted through practical speaking exercises. However, on average, teachers do the assessment manually so that when this AI was first implemented at school, especially in assessment, teachers seemed enthusiastic because they thought this AI could measure students' speaking skills. As the teacher stated:

"If you measure students' abilities, it can be measured because Hume AI is directly practical, the AI directly talks to students."

Based on the observation of students who participated in the assessment using Hume AI, teachers appeared satisfied, as the use of this AI encouraged students to actively engage their thinking in order to understand and formulate appropriate responses during the assessment. Furthermore, the assessment process conducted by the teacher proceeded smoothly.

The direct interaction, where students articulate their thoughts, allows for immediate assessment of their fluency, pronunciation, and overall speaking competence. Students will

also be more focused on listening and answering questions and also train to be quick and responsive in giving and answering questions without preparing and memorizing the answer in advance. This suggests that real-time speaking activities are crucial for evaluating students' oral skills.

On the other hand, teachers emphasize the importance of aligning AI assessments with the existing curriculum and syllabus. The expectation is that by the time students graduate from senior high school, they should be able to speak English fluently. Teachers stated: *"It means that in senior high school, graduate from senior high school, students are expected to be able to speak English fluently. so that is an indicator of students who have learned English in senior high school."*

Since one of the requirements for passing English learning in senior high school is the ability to communicate fluently in English, Hume AI can be utilized as a learning tool, particularly as an assessment instrument for English speaking skills. If students can speak English fluently with this AI whose background language is native speakers, students are expected to be able to face the world of work and college. As one teacher stated: *".....After graduating from senior high school, students can be speaking directly to apply for jobs in English."*

That is curricular goals, ensuring that students are adequately prepared for real-world applications of their language skills, such as job interviews.

Teachers' perceptions of challenges faced by teachers while using Hume AI for assessing speaking

Participants were asked to share their insight on challenges faced by ELT while using Hume AI. The results indicate that one of the primary challenges encountered during the implementation of Hume AI for speaking assessment is students limited foundational knowledge of English-speaking skills. This was particularly evident during classroom observations, where students frequently exhibited confusion when responding to questions posed by the AI. It was also observed that students often sought clarification from the teacher regarding the meaning of the AI's questions, which disrupted the assessment process and hindered its effectiveness. Consequently, teachers were required to divide their attention between assessing students' speaking performance and translating or explaining the AI's prompts. In many cases, students who struggled to comprehend the AI's instructions remained silent or abandoned the assessment before it was completed. As one teacher stated:

".....yes, that's how the students are here. They really don't know anything at all."

Students' knowledge was only up to writing in a structured way, but to speak and interact directly using English, they had a bit of difficulty. There are some students who can speak well using the Hume AI, but that is only at the beginning; in the middle, many students do not know and understand what is being asked. Besides that, during the assessment process, many students are limited in vocabulary mastery. a lot of unfamiliar vocabulary they hear from the AI, so the students do not catch the meaning of the questions given.

The reason why students do not have a strong English base is that students lack motivation and interest in learning English.

“On average students show a lack of interest in learning, particularly in speaking English. We have given motivation, indeed lack of interest in learning, lack of persistence, especially in English. So, it's difficult if you make a media-based strategy for improving English listening skills, because students tend to lose focus and become disengaged from the beginning.”

The loss of motivation and lack of interest of students is influenced by the economic situation of the family. The average student treated by AI has a middle to lower economy. Thus, making students not interested in learning, especially English, because they think learning English will not be useful for them.

“Here the economy is lower middle class; most of their parents are fishermen. That means they have no interest in English. And also, they don't think learning English is important to them.”

Another reason why students do not have a strong English base is because students do not take courses outside school. Most students are unable to pay for tutoring outside of school. As one teacher stated, ‘That's why it's difficult for students to take lessons outside. It's difficult to eat every day’. Several students who can communicate with this AI have a background and are currently taking English lessons outside of school.

“.....at least from taking a course, it will help them to explore this lesson using this AI.”

In addition, the challenge faced by teachers is insufficient facilities. Limited facilities are an obstacle in developing teaching methods. In English language learning, facilities are an important aspect to support the quality of learning. The 4 main aspects of English (writing, reading, listening, and speaking) mostly require adequate facilities so that students can easily practice. But some schools have limitations in having these tools or media.

Because the school facilities are also less supportive, we are also delayed too. For facilities we are very much looking forward to media tools to help with English as a speaking tool.

Based on observations in several schools, the facilities that support English learning are still very limited. For example, in some schools, there is only one projector available, which forces the teachers to take turns using the device. Regarding speakers, only a few schools provide high-quality speakers, while others do not have speakers at all.

Due to the lack of facilities, teachers' ideas and plans to make lessons fun and interactive must always fail, especially during speaking lessons, which are always postponed later and later. This causes teachers to finally rarely use technology and use manual methods to keep lessons active and exciting. As one teacher said, ‘Actually in this school, most of the teachers teach manually.’

Limitations such as the internet network and tools that support speaking assessments, such as speakers and projectors, are the weaknesses of this AI implemented in schools. Like teachers stated:

“If it can be held, one of them is the internet network here. There is no network at school; besides that, there are no radio speakers here.”

DISCUSSION

This study set out to explore how teachers perceive Hume AI as a tool for assessing speaking skills among senior high school and the challenges faced by teachers while using this AI for assessing speaking. The findings revealed that the heightened enthusiasm and motivation demonstrated by students upon the introduction of Hume AI aligns with research

highlighting the positive impact of technological innovation on student engagement (Fitria, 2025; Vasagar, 2017). The novelty of AI-based assessment tools appeared to spark students' interest, supporting the notion that technology can enhance learner motivation and participation (Dwijuliani et al., 2021). Moreover, the current generation of learners, who are accustomed to digital devices and technological advancements, exhibited increased receptiveness to AI-based learning environments, corroborating previous studies emphasizing the importance of aligning educational approaches with learners' technological backgrounds (Widodo et al., 2021).

Teachers acknowledged the practical benefits of utilizing Hume AI for assessing speaking skills. Compared to traditional, predominantly manual assessment methods—such as memorized dialogues, debates, or oral presentations—Hume AI offers real-time, interactive speaking tasks that better reflect authentic language use. This aligns with Brown's (Brown, 2007) emphasis on assessing fluency, accuracy, pronunciation, grammar, vocabulary, and gesture through spontaneous speaking activities. Furthermore, teachers perceived that AI-based assessment could help prepare students for real-world applications, such as job interviews, consistent with the curricular goals of senior high schools.

Nevertheless, several challenges emerged that may hinder the optimal integration of Hume AI in speaking assessment. The most significant barrier relates to students' insufficient English language proficiency, particularly in oral communication. This finding resonates with previous research emphasizing speaking as one of the most challenging language skills to master and assess (Navidinia et al., 2019; Zaim, 2017). Students' limited vocabulary, lack of listening comprehension, and unfamiliarity with spontaneous interaction in English created obstacles during AI-assisted assessments. Furthermore, the socioeconomic background of students, characterized by low-income families and limited access to private English courses, exacerbated these challenges, reducing students' motivation and preparedness for speaking tasks—a phenomenon previously observed in similar educational contexts (Jo, 2024).

Additionally, this study highlights infrastructural constraints as a major limitation. Inadequate facilities, such as insufficient internet connectivity, lack of supporting devices (e.g., speakers, televisions), and outdated technological infrastructure, impede the effective use of AI-based assessment tools. This finding echoes Helmiatin's (Helmiatin et al., 2024) argument regarding the unequal distribution of technological resources in Indonesian schools, which restricts the widespread adoption of AI in education.

In line with Kim (Kim, 2021), it is imperative for educational stakeholders to adopt a systematic, context-sensitive approach to AI integration. Such an approach should prioritize not only the technological dimensions but also the pedagogical, infrastructural, and socio-economic factors that influence the successful application of AI in language assessment.

Overall, while the integration of Hume AI in speaking assessment demonstrates promising potential to enhance student engagement, motivation, and authentic assessment practices, its effectiveness is contingent upon addressing several contextual barriers. These include improving students' English language foundation, increasing access to supplementary language learning opportunities, enhancing technological infrastructure, and providing adequate teacher training for AI-assisted assessment implementation.

CONCLUSION

This study revealed that the integration of Hume AI has a positive impact on enhancing speaking assessment practices by fostering student enthusiasm, increasing motivation, and providing a more authentic and interactive assessment experience.

Teachers reported that students demonstrated increased interest and active engagement when Hume AI was introduced, highlighting the relevance of integrating technology into the learning and assessment process to align with students' familiarity and comfort with digital tools. Moreover, teachers acknowledged the potential of Hume AI to support the achievement of curricular goals, particularly in preparing students to use English fluently for real-world communication, including future employment opportunities.

However, several challenges hinder the optimal use of Hume AI in speaking assessments. The most prominent challenges include students' limited English proficiency, particularly in spontaneous speaking, their low motivation to learn English due to socio-economic factors, and insufficient access to technological infrastructure within schools. These issues reflect broader systemic constraints that must be addressed to ensure the effective integration of AI in educational settings.

Therefore, while Hume AI offers promising opportunities to enhance speaking assessment in senior high schools, its successful implementation requires comprehensive efforts to improve students' language competence, strengthen their motivation, and provide adequate technological support.

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