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Interactive Ai-Driven Storytelling for Language Development

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ABSTRACT: To explore the efficacy of AI-powered storytelling in enhancing undergraduate students' language skills, including vocabulary development, pronunciation, grammar, and sentence structure, in this case study, participants' experiences with AI-powered platforms such as AI Dungeon, Plot Factory and Replika were examined. The research utilized narrative recordings together with weekly self- evaluation questionnaires spanning 13 weeks as the data collection approach along with whole-task analysis and language frameworks for analysis. The research proves that AI storytelling automation generated substantial progress in vocabulary improvement, pronunciation quality and sentence generation although grammar and discourse skill development faced diminishes. In addition, the current study confirms the claim that AI-powered tools promote learner independence and motivation, in compliance with multimedia and sociocultural theory in learning. Nonetheless, several limitations, such as a short duration for the study, diversity in participants, and AI moderation concerns, have been discovered. AI-powered storytelling holds significant potential in language instruction, with significant implications for curricula, teacher training, and AI-powered educational platforms.

KEYWORDS: AI-driven storytelling, language acquisition, digital literacy, interactive learning, ESL education.

1. INTRODUCTION

1.1 Background

One of the earliest methods of interpersonal interaction is storytelling, and a lot has been written by scholars about its value as a teaching technique for students to improve their language proficiency in both their first and a foreign or second language irrespective of students' understanding level or experience (Isbell et al., 2004; Cameron, 2001). It is also asserted that storytelling has a greater instructional impact on language acquisition than conventional teaching resources like textbooks. According to Atta-Alla, (2012); Kim (2010); and Wajnryb (2003), storytelling is successful because it is enjoyable, captivating, and incredibly remembered. This increases students' zeal in both receptive and productive skills.

Language academics have in recent times focused an excessive deal of importance on the usage of technological tools in language instruction as well as student learning (Shadiev & Yang, 2020; Shadiev et al., 2023). By facilitating individualized, engaging, and communicative procedures for learning, the use of technological resources in language instruction might improve students' learning outcomes (Rodinadze & Zarbazoia, 2012; Shatri, 2020; Rahimi & Fathi, 2022). Technological innovation has been embraced by language instructors to develop online language education settings that enthusiastically involve students and speed up language acquisition techniques (Fathi & Rahimi, 2022; Nguyen & Le, 2023). Artificial intelligence (AI) has become a potential resource in educational programs in information technology that may be used to improve language acquisition and instruction outcomes for students (Haristiani, 2019; Knox, 2020; Huang et al., 2023).

1.2 Significance of the study

Computer programs were more and more common in several sectors nearly three decades before. This emphasizes the requirement that individuals learn how to make use of technology relevant to their particular work or career in a technologically proficient manner. Consequently, the phrase "digital literacy" was created to evaluate fundamental computer-related ideas and abilities (Ng et al., 2022). As more individuals rely on computer technology to provide novel socioeconomic possibilities, the significance of digital proficiency grows (Leahy & Dolan, 2010). Parallel to the development of computer technology, AI technologies also began to emerge, replicating human intellect in devices so they might think, feel, and educate. AI began to gain traction in educational environments, and scientific and technological studies and has now permeated every aspect of our daily life (Ng et al., 2022).

AI indicates the usage of digital technologies to enhance human thought procedures and encourages students to get involved with more advanced cognitive tasks. Investigations have shown that AI literacy goes beyond just understanding and utilizing AI principles and practices to include other competencies that let learners critically assess AI technologies, interact and communicate

with AI in productive ways, and produce AI-driven artifacts (Long & Magerko, 2020). Hence, AI-driven storytelling methods frequently offer immediate feedback and let students proceed in their own space, which lessens failure anxiety and promotes language growth (Chan & Tsi, 2023). This method boosts enthusiasm and involvement levels all around in addition to encouraging learners to learn independently (Sun et al., 2023). Therefore, Interactive AI-driven storytelling plays a pivotal role in language development by providing engaging narratives that captivate users, fostering linguistic skills through active participation. As users interact with the story, they encounter diverse vocabulary, sentence structures, and contextual nuances, promoting language acquisition and comprehension (Smith et al., 2020). This dynamic approach corresponds with Vygotsky's sociocultural theory, highlighting the significance of interpersonal relationships and meaningful contexts in acquiring a language (Vygotsky, 1978). The incorporation of AI-driven elements enhances personalization, adapting content to individual proficiency levels, and creating an immersive linguistic environment conducive to cognitive growth (Zhang et al., 2019). This innovative tool holds promise for optimizing language development in a technologically driven era.

1.3 Objectives of the research

The current study attempts to investigate

1. the benefits of storytelling for language acquisition and how its potential to improve vocabulary and grammatical structure.
2. how storytelling can help with language skills, social-emotional growth, and creative thinking.
3. how generative AI can become a core gameplay element and shape new gameplay mechanisms.
4. the efficiency of AI-based educational tools in enhancing learners' language abilities and knowledge.

1.4 Research Questions

The purpose of this investigation is to investigate the given research concerns. These are the following:

1. How does interactive AI-driven storytelling influence language acquisition and development in undergraduate students to traditional storytelling methods?
2. What are the crucial design elements of interactive AI-driven storytelling programs that support effective language learning results in undergraduate students?
3. What ethical considerations and concerns should be addressed in the development and deployment of AI-driven storytelling resources for language development in undergraduate students?
4. What are the long-term results of exposure to interactive AI-driven storytelling on language skills, including speaking, pronunciation, discourse, vocabulary acquisition, grammar proficiency, and narrative comprehension?

2. LITERATURE REVIEW

2.1 Definition of AI-driven storytelling

Lambert (2013) first presented the idea of technology-based storytelling at “the Center for Digital Storytelling” in California. AI-driven narrative is the art of presenting stories to people electronically rather than verbally by fusing multimedia such as pictures, music, video, and online publishing, with storytelling. Other expressions that are employed alternately with digital storytelling include computerized storytellers, immersive storytelling, online broadcasts, online writings, and online diaries. "Sharing one's story through multiple mediums of imagery, text, voice, sound, music, video, and animation" is the simplest definition of digital storytelling (Lambert, 2013). It has been said that AI-driven or digital storytelling is an innovative method of storytelling. “The Digital Storytelling Association” claims that digital storytelling gives traditional storytelling a contemporary twist. Stories have traditionally been used by humans to share their expertise, wisdom, and morals; but, with the advent of new technologies, stories may now be presented and seen on computer and digital displays (Digital Storytelling Association, 2010). Moreover, digital storytelling enables everyone to tell their tales to build a social network and share their own experiences with others (Meadows, 2003).

AI-driven storytelling may be broadly divided into three categories: historical narratives, which focus on significant life events, personal narratives, which highlight significant life experiences, and narratives that are primarily meant to educate or enlighten readers about a particular topic (Robin, 2008).

Storytelling is often described by scholars in the area of language instruction as how it facilitates interactions between storytellers and story listeners (Lucarevschi, 2016). To interact with viewers, who also use mental imagination to offer the narrator with oral and visual input where a narrative construction is employed in the process of storytelling besides vocalization with or without theatrical and mental imagery (Dyson & Genishi, 1994). Similarly, according to Hsu (2010), storytelling is “the use of voice, facial expressions, gestures, eye contact, and interaction to connect a tale with listeners.” The narrator and the listeners are the key factors in the process of creating an interaction in any sort of story. Hence, the viewers physically respond to the story by blinking, gazing as well and laughing, offering the narrator immediate input about the way the storytelling is perceived when the narrator employs his or her voice and gestures to express a story (Lucarevschi, 2016).

Alterio and McDrury (2003), describe narrative as follows about its meaning or material: “Uniquely a human experience that

enables us to convey, through the language of words, aspects of ourselves and others, and the worlds, real or imagined, that we inhabit. Stories enable us to come to know these worlds and our place in them given that we are all, to some degree, constituted by stories." There is disagreement among scholars over whether storytelling and reading aloud are separate activities. Groeber (2007), and Wang and Lee (2007), for example, claim that, in narrative, the narrator concentrates on the major idea(s) of the narrative, as well as is allowed to employ subject-related experimentation, speech, imitated movement as well as hir inventiveness to deliver a story message to hir viewers. On the other hand, while reading aloud, a reader delivers a text that they have mastered to viewers or reads aloud the precise words in a narrative. The purported distinctions between reading and narrating are quite minor because, even though a reader reading aloud is anticipated to say exactly what is said in the selected story or deliver a text that they have remembered to the audience, they are still able to employ aspects like imitation and imagination to express a story message.

2.2 Styles and forms of stories

Scholars employ many narrative forms and structures to study the function of narrative in the enhancement of learning a new language. Different story kinds and structures have a crucial ascendancy on how pupils in second language classes react to these variations, which in turn helps instructors and/or researchers comprehend if and why the narrative kind or framework utilized in the learning environment matters. (Huang, 2006) looked at the use of fables, or tales involving fairies and magicians, as an instance of a narrative kind to inspect the contribution of storytelling in English to the improvement of a group of young EFL pupils' communication skills. Cary, (1998), conversely, investigated the ascendancy of narrating stories on the language skill growth of young Spanish pupils by using one 'fable, one fairytale, and two folktales' (stories that are associated with a custom or culture and are narrated through oral tradition). Fables are short stories involving animals that speak or perform like human beings as characters to express an ethical lesson. A study by Nicholas et al.(2011) examined how using narratives based on direct observation affected students' acquisition of English as an alternate language. Similar to this, (Ko et al., 2003) concentrate on utilizing narratives based on personal observations for storytelling assignments.

The reality that numerous investigations have employed various narrative forms is an issue that has to be considered when examining how students react to storytelling and when demonstrating how various story forms affect second language instruction and the reasons behind those effects. There is a paucity of investigation analyzing the effects of published and online narrative forms on the progression of second language proficiency in a specific subject group, despite consensus in the literature that stories generally aid in the enhancement of language competency in a second language. Researches that employ many story-telling types (Cary, 1998), do not examine or address if a certain story kind worked better than others and why. This would be crucial in demonstrating to language educators and/or scholars what sort of stories—and with which sorts of students—work most effectively in a given setting.

Interactive storytelling or online story storytelling is presently being utilized in second language classrooms besides more conventional printed stories plus oral storytelling which does not rely on written texts. AI storytelling refers to computer- aided applications that let students employ spoken narratives to generate their own stories. Students may develop narratives by using technology such as voice, pictures, music, and recording to express a narrative that is typically, but not always, inspired by recollections or personal experiences. (Normann, 2011; Zheng et al., 2011). Moreover, it is asserted that AI-driven storytelling is an inspiring, effective, and interactive teaching method that allows students to exchange experiences and provide each other with constructive criticism on their performances or material enjoyably and attractively (Porter, 2005; Sadik, 2008; Yang & Wu, 2012).

As a result, using interactive AI-driven stories in research on the impact of storytelling on language acquisition is additionally a standard practice. Even though AI-driven storytelling is thought to improve language acquisition due to its interesting and cutting-edge digital tools (Tsou et al., 2006; Skinner & Hagood, 2008), published stories are still thought to be just as beneficial for language ability development as AI-driven storytelling. In a nutshell, it is believed that the style of stories utilized in the classroom—printed or AI-driven storytelling has no bearing on the effectiveness of storytelling in fostering the language competency of students learning a second language.

2.3 Previous studies

The investigation conducted by Tsou et al. (2006), delves into the use of interactive program storytelling in English as foreign language classroom settings. Despite challenges such as an overloaded curriculum and a lack of experience, the researchers effectively developed a multimedia storytelling website. This website encompasses characteristics like account administration, story composition, and story re-playing. The researchers verified the website in an elementary school setting to assess its efficacy in facilitating narrative as well as improving teenagers' story remembrance procedures. The outcomes of the research offer substantial provision for the educational value of the multimedia storytelling method in English as a foreign language instruction. This investigation offers valuable insights into the prospective benefits of engaging based on AI storytelling in the context of language development.

A study was conducted by Nishioka (2016), on "Analyzing language development in a collaborative digital storytelling project:

Sociocultural perspectives." The motto of this project is to investigate how digital storytelling may be employed in language classes to support students' acquisition of the target language. It analyzes the procedure and results using the ideas of "private speech" and "collaborative dialogue." The findings indicate students employ grammar terms, personal discourse, and their native language strategically. In addition, there are pedagogical limitations to the project's implementation in schools with diverse abilities. According to the findings, students may focus on language acquisition at that stage by being grouped into groups with similar competence phases.

Another study on "Effects of offline vs. online digital storytelling on the development of EFL learners' literacy skills, by" Rahimi and Yadollahi (2017), says that the impact of based on AI narrative, both offline and online, on the academic growth of pupils who study English as not their first language was examined in this investigation. The group taking part in the experiment received instruction to utilize a digital medium, whereas the control group received an offline content-producing program. The findings demonstrated a strong increase in language abilities among users of online platforms as well as a favorable relationship between computer use and academic achievement.

Another study conducted by Alcalde-Peñalver and Santamaría-Urbieta (2021), on "Digital storytelling in ESP: Towards a new literacy in hybrid language learning," says that though there are chances to connect schools with the outside world through modern technology, there are difficulties in effectively teaching students for its usage. Scholars suggest combining technology-integrated learning with social constructivism to achieve educational objectives. The application of technology-based storytelling to classroom instruction is explored in this study, with a focus on language instruction. It also provides guidelines for crafting impactful digital stories. This study has demonstrated many advantages of digital storytelling and how it can be an engaging and relevant learning activity for learners.

In a research conducted by Fu et al.(2022), the focal point was on exploring how digital storytelling (DST) affects fluency in spoken English, precisely underscoring the correlation between speaking proficiency and student engagement. The researchers facilitated the formation of digital stories using Toontastic, a software application grounded in scaffolding theories. While the study revealed a substantial development in speaking proficiency, it did not classify any significant associations between fluency and student engagement. This research serves as a valuable precursor to the present study into the interactive AI-driven storytelling method and its implications for language development.

In a study conducted by Lustenberger (2024), the focus was on the utilization of imaginative technology-based storytelling activities in young learners in foreign language classrooms to improve speaking and prior knowledge. Nineteen fourth-grade Swiss pupils were involved in the research, which made use of audiovisual records, as well as interviews, to capture comprehensive perceptions. Results from the study showed that collaborative tasks facilitated creative language recycling among children. Scaffolding and clear guidance were recognized as crucial elements fostering collaboration and problem-solving competencies. The implications of these findings extend to the realm of young learners' foreign language pedagogy, offering valuable insights for educators in this field. This study contributes a related foundation for the current exploration into the potential benefits of interactive based on AI narrative in language development.

3. METHODOLOGY

3.1 Participants

An Indian public university hosted an interactive AI-driven storytelling ESL lesson for the 10 participants (Table 1). Five of them were locals and five were nonlocals who had relocated from different major regions of the country during the preceding two semesters. Despite being advanced learners who had studied English for a minimum of twelve years at their home educational institutions, they believed that more practice in language competence was necessary to enhance their language skills. Everyone who participated had a computer in their homes equipped with a microphone so they could record their stories, and they all had a positive outlook on utilizing self-study materials to improve their English. Three pupils utilized a laptop at least thrice a week, while seven participants used it daily.

Table 1: Respondents' details

Sl.No	Age	Gender	Education Level	Years studying English	Specialization
1	19	Male	Under Graduation	12	Information Technology
2	19	Male	Under Graduation	12	Business Studies
3	29	Male	Under Graduation	12	Business Studies
4	20	Male	Under Graduation	12	Information Technology
5	19	Female	Under Graduation	12	Business Studies

6	19	Female	Under Graduation	12	Engineering
7	20	Female	Under Graduation	12	Engineering
8	21	Female	Under Graduation	12	Business Studies
9	22	Female	Under Graduation	12	Engineering
10	21	Female	Under Graduation	12	Information Technology

3.2 Procedures

When respondents were provided a precise subject through chances for self-assessment, the present research employed storytelling, a student-focused activity, to evaluate participants' language competency, and boost their involvement with self-drive to language growth. Three AI apps such as AI Dungeon, Plot Factory, and Replika, were used to facilitate practicing and recording ten distinct weekly subjects related to everyday life experiences or interests. Because the objective of this research was to provide ESL pupils with opportunities for extracurricular activities, the respondents used above mentioned app accounts to record, rehearse, or listen to their performance at their convenience (Figure 1) AI tools for storytelling. Every participant recorded the amount of time they worked documenting, practicing, and listening while utilizing the aforementioned self-study tools on a Google Spreadsheet every week (Appendix A) to track their improvement. Each student's recorded record of time used for individual study demonstrates the amount of time and effort they put into practicing interactive AI-driven storytelling.

To get feedback, respondents willingly sent the teacher their captured URLs via email at least once a week while utilizing the recommended AI tools. Throughout the research time, the students kept records of their academic experience, and the teacher was able to evaluate the respondent's improvement in learning through these interactions. Instead of requiring pupils to turn in their personalized work, the teacher promoted independent study and facilitated the use of independent study materials through electronic mail exchanges.

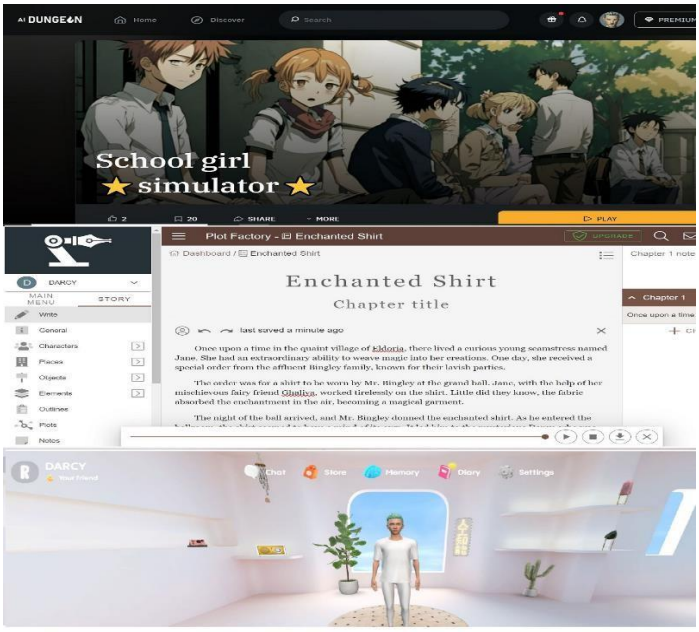

Figure 1: AI-driven storytelling tools of AI Dungeon, Plot Factory, and Replika (https://aidungeon.com/; https://plotfactory.com/; https://replika.com/)

This study employed a narrative assignment concerning AI technologies in weeks 1, 4, 7, 9 and 13 to evaluate participants' growth in language competency. The teacher encouraged every participant to watch the five storytelling snippets for three days before asking them to write stories by uploading them to their VoiceThread account (http://www.voicethread.com). The five stories from YouTube (Appendix B) titled "This Race Called Life," "Problems in Life," "A Father and a Son," "The Hugging Tree," and "Mastering Happiness" all included non-controversial cultural material. The respondents made their own stories about each narrative clip after accessing their VoiceThread accounts and receiving these short stories through email. Every respondent and the teacher had access to each respondent's recording, thus anytime someone recorded their story on VoiceThread, emails containing the audio were sent to all respondents. Students were allowed to keep an eye on both their own and their peers' performance during this procedure. The participants used AI Dungeon, Plot Factory, and Replika to practice language skills before recording their stories, however, they were not given feedback for this evaluation.

While the study's main goal was to investigate interactive AI-driven storytelling for language development, it's crucial to

remember that during the study's time, at the gathering every seven days, the participants received guidance from their teacher regarding the best way to successfully measure their own language proficiency and share narratives. In addition to the comprehensive written evaluation, the learners also got input in four areas: 'discourse, vocabulary, pronunciation, and sentence complexity'. To assist the students, in locating the right answers when they required them, the teacher also supplied learning resources including workbooks for composing sentences and vocabulary-learning websites.

A total of three surveys (Appendix C) were used to examine the participants' perspectives regarding the development of language competency for this learning approach in weeks one, seven, and thirteen. When answering the initial two surveys, those posted onto the teacher's VoiceThread account, the respondents were requested to write. The participants' language profiles, computer proficiency, attitudes toward employing a personal laptop to learn English, and self-assurance in their language usage were all recorded in the first survey. In the second survey, respondents used VoiceThread, AI Dungeon, Plot Factory, and Replika as independent study tools to describe which language abilities they desired to develop as well as how their sense of trust in their language ability had altered. In the last survey conducted online, respondents answered reflecting research questions about how they were utilizing interactive AI-driven storytelling clips to assess themselves and be motivated, whether they believed the role of the educator and feedback helped them learn if they believed the AI Dungeon, Plot Factory, and Replika could assist them when they were evaluated on VoiceThread, and lastly, what areas of their language proficiency they thought enhanced throughout this research.

3.3 Data Analysis

The collected narratives were evaluated both analytically and comprehensively. The five phases of the holistic rubric (Appendix D) are “beginning speaking, developing speaking, competence speaking, achieved speaking, and advanced speaking.” The rubric was derived from Brown's, (2001), speaking competency assessing criteria. Additionally, the collected data was examined in five different areas (Appendix E) using a Choi (2005) grading system. which was according to the “Communicative Linguistic Ability (CLA)” concept presented in Bachman and Palmer (1996), to assess their growth in each speaking skill aspect. “Pronunciation, discourse, vocabulary, grammar, and sentence complexity” are the five elements. The ratings for each category range from 1 to 5. Applying the rubrics, two trained observers evaluated the collected information (Appendix F). Cohen's Kappa of.88 indicates the inter-rater reliability between two observers, while “Cronbach's Alpha” of 0.84 indicates a high degree of stability in the dependability across the five evaluations.

4. RESULTS AND DISCUSSION

4.1 Enhancing Oral Competency with Independent Study Materials

All respondents' overall competency in “vocabulary, sentence complexity, and pronunciation” significantly improved after taking the five assessments, however “discourse and grammar” did not significantly increase (Table 2).

Table 2: Development in oral proficiency for every individual

Elements	Mean	Standard Deviation	95% Confidence Interval	
			Upper Value	Lower Value
Overall Speaking	2.3	0.458	2.5838	2.0161
Pronunciation	1.8	1.090	2.4756	1.1244
Discourse	5.9	1. 135	6.6035	5.1965
Vocabulary	6.5	0.806	6.9996	6.0004
Sentence Competency	7.2	0.600	7.5719	6.8281

These findings were supported by the idea that ESL students' oral skills can be increased by utilizing an internet recording tool and a TTS (text-to-speech) application to record stories. Furthermore, via individual speech tracking and comments, storytelling appears to enhance the usage of extensive vocabulary to adequately represent the themes or contextualized circumstances. It also improves sentence complexity. Yet, because they had practiced creating ordered narratives on each weekly document, the majority of the respondents had arranged narrative lines to provide sufficient data on the material they learned from the story clips for each evaluation. The absence of grammar input on the holistic rubric suggests that input may have had an impact on respondents' grammar scores. This research implies that student feedback from instructors is crucial for enhancing their speaking abilities. Additionally, throughout the five tests, respondents' total spoken ability increased progressively. For instance, when comparing the initial and final evaluations taken over 13 weeks, respondents' speaking was substantially enhanced (Table 3). This finding could support the idea that teaching interactive AI- driven storytelling to ESL students improves their communication

skills.

Table 3: Paired t-test results for each evaluation's speaking competency development

Test	Pair differences	Mean	Standard Deviation	95% Confidence Interval	
				Upper Value	Lower Value
1	1st vs. 2nd	4.2	0.9797	4.942	3.458
2	2nd vs. 3rd	4.7	0.6403	5.305	4.095
3	3rd vs. 4th	5.2	0.4	5.576	4.824
4	4th vs. 5th	5.5	0.6	6.046	4.954
5	1st vs. 5th	6.3	0.6403	6.941	5.659

Additionally, respondents felt well about utilizing Replika, Plot Factory, and AI Dungeon to improve their speaking. Over the 13 weeks, Participants Three and Six who had used these applications to document and learn to speak had made the most progress in speaking. During their initial evaluation, they lacked confidence and kept using the same language. They also spoke incoherently, utilized short sentences without a lot of embedded clauses, and mispronounced terms. On the other hand, their speech substantially improved in discourse, vocabulary, syntax, sentence complexity, and pronunciation. While the fifth and eighth participants' overall speaking improved in discourse, grammar, vocabulary, and sentence complexity, they did not demonstrate any improvement in their pronunciation of words, including word stress and intonation. They recorded their speech with Replika frequently, but they only used AI Dungeon three times since they thought it was useless. The first participant's speaking score increased overall, but his discourse and grammar scores stayed the same. Participants Two and Four exhibited notable improvement, particularly in discourse, vocabulary, grammar, sentence complexity, and pronunciation. Initially lacking confidence and using repetitive language, their speech became more coherent and sophisticated, showcasing a commendable advancement in overall speaking proficiency. While Participant Seven showed improvements in overall speaking, discourse, and vocabulary, her pronunciation remained a challenge. Participants nine and ten, despite recording speech with Replika, did not exhibit substantial progress in pronunciation, including word stress and intonation. However, their overall speaking skills improved concerning discourse, grammar, vocabulary, and sentence complexity. The total oral proficiency of the second participant improved a little bit as well. Even though he logged in the fewest times and used his laptop the least in the group, the fourth participant's speaking improved. It's fascinating to note that after employing interactive AI-driven storytelling tools, every participant started speaking more confidently by utilizing a variety of expressions and longer sentences. They additionally believed that employing these could have a beneficial impact on boosting their self-confidence, as indicated by their questionnaire responses.

Participants Six and Seven indicated in the three surveys that they may record narratives to expand their working vocabulary. Her pronunciation was improved by Participant Nine's thinking recording applications. In response, Participant Eight said that she employed longer, more complicated phrases and that by using self-evaluation in the learning process, vocabulary and pronunciation could be improved. According to Participant Ten, recording programs are useful resources for practicing pronunciation. Participant One's overall speaking scores increased, showcasing advancements, particularly in vocabulary and pronunciation. Participant Two exhibited notable improvement, specifically in discourse, vocabulary, syntax, sentence complexity, and pronunciation. Participant Three's language development approach was not explicitly mentioned, and further insights are needed to assess progress. Participant Four showed positive signs of improvement, with a focus on recording narratives to expand vocabulary. Participant Five, while emphasizing the utility of recording programs for practicing pronunciation, requires additional context to evaluate the extent of his language development. These findings, which were obtained from the second survey, are virtually in line with the language abilities that each of them intended to enhance via this learning. Participant Nine wanted to work on her pronunciation, Participant Ten wanted to employ more complicated phrases, and participants Six, Seven and Eight wanted to increase their vocabulary. Participants One, Three and Five wanted to enhance their sentence complexity whereas participants Two and Four wanted to focus on listening skills.

However, Participant One expressed that the lack of specific details on language development strategies and the minimal improvement in discourse and grammar raise concerns about the depth of progress. Participant Two indicated that despite AI Dungeon, Plot Factory, and Replika, a more comprehensive understanding of the strategies employed for language development would enhance the feedback. Participant Three mentioned that a clearer insight into the methods used would aid in providing constructive feedback. Participant Four expressed that the feedback would be more beneficial with specific details on the extent of progress and additional areas requiring attention. Participant Five highlighted that without elaboration on the degree of improvement and other language skills, the feedback lacks specificity. Six to ten respondents did not voice any disapproval of this kind of instruction.

4.2 Interactive AI-driven storytelling for language development and motivation

This study promoted the language development of ESL students through storytelling. Storytelling is an important tool for enhancing students' language ability since it can facilitate natural speech as a storytelling activity whenever students of language generate fresh or innovative thoughts or occurrences. The majority of respondents said that telling stories makes them more likely to think about skills, in regarding themselves and engage in conversation about their choices or everyday life. Because storytelling requires respondents to improve their analyzing as it relates to the narrating procedure, acquire new vocabulary, construct longer sentences, and improve their pronunciation, respondents believed that storytelling helped them improve their speaking abilities and other language skills. As indicated by their surveys, students were also able to increase their self-reliance during this procedure. The respondents additionally stated that the storytelling served as a useful prompt for them to develop their language skills, regarding the usage of AI tools. In the survey, respondents stated that they were inspired to write their own stories and to be more explicit in the language they used to describe them using AI tools for storytelling. They said that even though the goal of these tests was to evaluate the participants' language development, learner-centered learning was achieved because, throughout the five assessment periods, respondents collected stories and tracked their advancement when utilizing AI resources for independent study.

In a similar spirit, they believed that these evaluations served as both a continuation of their continuous independent study and a chance for them to get input from the teacher on how to meet their mutually established language development learning objectives. Additionally, participants stated that utilizing the VoiceThread tool for storytelling facilitated group work since it allowed them to keep an eye on one another's development and track their language development throughout five evaluations.

The study on interactive AI-driven storytelling for language development's findings demonstrates that ESL students' speaking ability has significantly improved in several areas. This advancement was made possible in large part by the employment of AI technologies like VoiceThread, Plot Factory, Replika, and AI Dungeon. One of the main conclusions was that, after using the AI tools, all respondents had an overall improvement in their vocabulary, sentence structure, and pronunciation. This shows how well these resources assisted students in increasing the number of words in their vocabulary, creating longer, more complex phrases, and perfecting their pronunciation. For instance, using Replika gave students the chance to practice speaking and get feedback, which probably helped them pronounce words more correctly. The study also discovered that employing AI technologies to narrate stories improved students' capacity to use complex sentences and a wide range of vocabulary. This shows that students were able to create more intricate and well- organized sentences by practicing and incorporating a broad variety of language into their stories with the aid of AI technologies. Additionally, the findings showed that students' speaking confidence rose when they used AI technologies for storytelling. This is a noteworthy discovery since confidence is frequently a crucial component of successful language learning. Students' increased comfort level when honing their speaking abilities is probably due to the participatory aspect of the AI tools, which will eventually boost their confidence. Overall, the study shows that using AI technologies to support language growth in ESL students can be quite successful. These resources can help students become more proficient speakers by offering chances for practice, feedback, and storytelling involvement. They can also assist students increase their vocabulary, sentence structure, and pronunciation. Therefore, the study's findings imply that using AI technologies like VoiceThread, Plot Factory, AI Dungeon, and Replika can greatly improve ESL students' language development. These resources offer beneficial chances for interaction, practice, and feedback, which enhances oral competence in several ways. As technology develops, including AI technologies in language learning curricula may prove to be a fruitful strategy for improving ESL students' language development results.

4.3 Discussion

The current study demonstrates that AI-driven interactive storytelling represents a transforming educational method for second language learning based on English (ESL). This paper uses research questions alongside findings and existing academic work to analyze AI-controlled storytelling methods in language acquisition and assess their design structure along with ethical aspects and prognostic effects.

4.3.1 Research Question 1: Comparative influence of AI-driven storytelling versus traditional methods on language acquisition

This study's participants had significant improvements in terms of vocabulary development, sentence complexity, and pronunciation, with technology playing a significant role, supported by previous studies (Shadiev et al., 2023; Rahimi & Fathi, 2022). In particular, Rahimi and Yadollahi (2017) showed that computer-mediated narrative, through an online platform, was a more effective tool in developing reading and writing skills, supporting, therefore, the current study's findings, which showed AI-facilitated narrative through platforms such as AI Dungeon, Plot Factory and Replika to be effective in developing rich and immersive language learning environments. Though they show restrictions in grammar and discourse similar to what Fu et al. (2022) noticed in their digital storytelling intervention, the grammar and discourse are not dramatically changing. What this discrepancy suggests is that AI-driven tools should focus more on the practice of conversation than explicit grammar instruction: another gap in storytelling studies as mentioned by Huang (2006).

4.3.2 Research Question 2: Critical design elements of AI-driven programs

Storytelling software that uses AI is significant for its role in language acquisition effectiveness. The critical design features are interactivity, responsiveness, multimodal integration, and individualized feedback (Long & Magerko, 2020). Interactive response and individual learning routes are essential in AI storytelling software to promote learner participation and facilitate skill acquisition (Shadiev & Yang, 2020). In the present research, AI Dungeon and Plot Factory enabled interactive and immersive experiences, with the potential for students to generate stories in real time. Participant feedback, however, indicated that the absence of structured scaffolding impacted grammatical accuracy, with the implication that AI tools need to incorporate explicit grammar instruction and discourse modeling (Rahimi & Yadollahi, 2017).

The inclusion of multimodal features, including text, sound, and visual aids, greatly increases language memorability (Mayer, 2022). Tools such as VoiceThread provide audio-visual features that support cognitive engagement and pronunciation skill development (Huang et al., 2023). However, some AI tools, including Replika, did not have personalized linguistic feedback, hence undermining their pedagogical value. AI innovations in the future need to have real-time error correction and systematic feedback mechanisms (Tsou et al., 2006). The study calls for user-centered, interactive, and ethically governed AI narrative tools to facilitate second language learning.

4.3.3 Research Question 3: Ethical considerations

The use of AI-driven storytelling resources in language development attracts ethical issues centered on the protection of user data and algorithm discrimination and the quality of content and instructional effectiveness. Bender et al. (2021) together with other research papers on AI ethics identify how massive AI models maintain biases while creating false and problematic textual narratives. The concerns about unsafe material exposure apply more intensely to language learning tools like AI Dungeon, Plot Factory and Replika because they show content with no filtering or bias to undergraduates and all language learners. Luckin et al. (2016) emphasize transparent AI decision systems yet storytelling platforms run as opaque systems, so users have restricted moderation access. The use of AI-driven storytelling in CALL systems increases student engagement over regular CALL practices yet introduces problems regarding both digital literacy among users and proper AI use (Chapelle, 2001). AI-based narrative production leads to heightened creativity and writer fluency as per Chukharev-Hudilainen and Klepikova (2016) but AI hallucinations and false information require continuous monitoring as per Floridi and Chiriatti (2020). AI storytelling technology needs to integrate ethical protections including user content review processes combined with bias prevention techniques and pedagogical standards when supporting language skills development.

4.3.4 Research Question 4: long-term language outcomes

The fourth question addressed long-term language achievement limits created by the specified 13-week duration making extensive longitudinal examinations challenging. Research on lasting achievement from the chosen program remains insufficient because the participants demonstrated better confidence and vocabulary retention, but their long-term progress requires more study. According to Huang et al. (2023), the ongoing application of AI tools proves effective in developing extensive language capabilities throughout extensive periods. The long-term effectiveness of educational programs remains uncertain because Lustenberger (2024) explains that similar educational interventions experience significant student attrition due to motivation and access-related issues.

The study confirms a strong correlation with Vygotsky's (1978) theory of sociocultural development, in that VoiceThread's blended use facilitated a "zone of proximal development" through a mix of peer observation and teacher feedback. Yet, in contrast with the narrow improvements seen in grammar, it raises a question about the theory's claim that social interaction alone can enable full language mastery. Conventional approaches, tending to combine narrative with explicit grammar instruction (Cameron, 2001), could present a balanced view, suggesting that AI tools should include organized language practice.

The significant improvements in vocabulary, in contrast, lend weight to cognitive theory in multimedia learning (Mayer, 2022), in that concurrent processing of visual and audio information aids in recall. Materials such as Plot Factory, combining text and picture, most probably involved cognitive processes supporting lexical development, similar to mixed-methods approaches discussed in terms of Alcalde-Peñalver and Santamaría-Urbieta (2021). Yet, including motivation testing in the study raises questions about bias, a flaw also seen in Nishioka's (2016) review of computerized narrative interventions. The fact that participants' improvement in pronunciation stands in contrast with Fu et al.'s (2022) report of no significant activity and fluency relation could be a result of the present study's use of text-to-speech (TTS) technology, providing immediate audio feedback—not a feature in Fu et al.'s (2022) model. That technological development accords with Skinner and Hagood's (2008) advocacy for multimodal feedback in language development processes.

4.4 Implications

The outcomes of this study make important contributions in a range of areas, offering insightful information about theoretical, practical, policy, social, and future study implications.

Theoretically, the study confirms Vygotsky's (1978) theory of socioculturalism, depicting how AI-powered storytelling enables social language development through social interaction. The documented improvements in vocabulary development and

pronunciation improvements coincide with cognitive theory relevant to multimedia learning (Mayer, 2022), and therefore, confirm the value of multimodal feedback in language development. Nevertheless, a lack of significant impact in terms of grammar development reveals that AI-powered narrative must be supplemented with explicit grammar instruction (Cameron, 2001). From a pragmatic viewpoint, the study confirms the effectiveness of AI-powered platforms such as Plot Factory, VoiceThread, AI Dungeon, and Replika in enhancing learners' speaking skills. Interactive and learner-centered aspects of such tools promote learner motivation, learner autonomy, and learner engagement. Language instructors should combine such AI-powered tools with conventional narrative approaches, and in doing so, develop an enriched and personalized educational environment (Tsou et al., 2006).

From a policy viewpoint, the study re-emphasizes the imperative for responsible integration of AI in educational settings. AI-powered tools for storytelling must implement content moderation, data security protocols, and bias-mitigation techniques to maintain safe and respectful environments for learning (Bender et al., 2021). Besides this, policymakers must endorse AI training in literacy to enable instructors to integrate AI into language instruction effectively (Long & Magerko, 2020). From a social viewpoint, AI-powered storytelling raises digital literacy and prepares students for a technology-intensive future. By enhancing both language and cognitive skills, such tools contribute to enhancing students' employability and international communicative competencies. Nevertheless, it is important to tackle concerns about access and technological inequality to mitigate the danger of digital exclusion (Leahy & Dolan, 2010).

Subsequent research studies will include longitudinal studies to evaluate the long-term impact of AI-powered narratives in language skill development. In addition, comparative studies between AI-powered narrative approaches and conventional narrative approaches can yield deeper insights into both approaches' effectiveness. In addition, additional studies about AI in supporting discourse skills and grammar accuracy will also be beneficial (Rahimi & Yadollahi, 2017).

4.5 Limitations and recommendations

The valuable insights from this study are limited by various shortcomings that affect its findings and establish research directions for the future. The analysis period of 13 weeks during the study prevents proper evaluation of how AI-driven storytelling affects the long-term acquisition of language skills. The long-term effects of continuous AI-based storytelling exposure on language development remain unknown because the process continues over time according to Huang et al. (2023). Research in this field should use longitudinal methods to study lasting outcomes in the language skills of students. The study has two limitations because the sample size remains small, and the participants represent limited diversity. The study's restricted participant group of ten undergraduate students from one specific university affects how broadly the generated findings can be applied. Student responses to AI storytelling differ because of their cultural roots previous AI experience and their capability to understand English material (Fu et al., 2022). Increasing the diversity of participants who come from different language and cultural backgrounds would produce stronger analysis results.

The research mainly evaluated oral fluency, but it provided minimal assessment of grammatical and discourse-level competencies. The implementation of AI tools delivered better vocabulary skills alongside pronunciation abilities, yet these tools proved no effective in improving grammatical accuracy based on Rahimi and Yadollahi (2017). Studies focusing on language improvement should combine existing structured grammar teaching with AI technology for producing stories to develop student language abilities. Research should examine AI content generation ethics while investigating possible biases since Bender et al. (2021) presented such concerns. Future investigations should develop flexible AI narrative frameworks that adjust feedback processes according to learners' requirements, allowing for uniform improvement at any level of language skill. As argued by Shadiev et al. (2023), a mix of AI narrative and teacher-guided pedagogical approaches through mixed methods yields better educational performance.

5. CONCLUSION

The study investigates the effects of AI-based interactive storytelling which helps undergraduate students develop language skills against conventional storytelling methods. The study evaluates essential elements of AI storytelling tools together with ethical considerations and checks the enduring effects of language development. The research indicates that AI storytelling enhances vocabulary learning while improving pronunciation and sentence structure knowledge although it only provides minimal benefits for grammar and discourse development (Rahimi & Yadollahi, 2017). The key findings reveal that AI tools such as AI Dungeon, Plot Factory, and Replika promote learner independence and motivation, in agreement with Vygotsky's (1978) theory of sociocultural development and Mayer's (2022) multimedia learning principles. Nevertheless, the narrow participant diversity and short duration of the study restrict generalizability (Fu et al., 2022). Biases in AI-created content raise concerns about responsible AI integration in educational settings (Bender et al., 2021).

The study identifies both pragmatic and policy-related implications of AI use in language instruction. The core educational improvement strategy in this proposal depends on the integration of adaptable AI structures with explicit grammar training methods. Communication studies enriched by AI need to study diverse student groups during extended periods as per the findings

of Huang et al. (2023). AI enhances educational impact by becoming an advanced educational tool for language skill development through adaptable teaching approaches. Proper ethical implementation of this technology brings about total transformation to contemporary methods of language education.

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APPENDIX A. List of Practice, Recording, and Listening

Week	Topic/Assessment Questionnaire	dent 1			dent 2			dent 3			dent 4			dent 5			dent 6			dent 7			dent 8			dent 9			udent 10		
		P	R	L	P	R	L	P	R	L	P	R	L	P	R	L	P	R	L	P	R	L	P	R	L	P	R	L	P	R	L
1	First evaluation and first survey		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
2	The Forgotten Town			1	1	1		1	1	1	1	1					1	1	1	1	1	1				1	1	1			
3	The Quest for Identity		1	1	2	1	2	2	2	2	2	1	2	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1
4	Second evaluation	1		1	1	1	1	2	1	1	1	1		1	1	1	2	1	1		1	1	1	1	1	1	1	1	1	1	1
5	The Haunting Melody	1		1	2	1		1	1	1	2	2		1	1	1	1	1	1	1	2	1	1	1	1	2	2	2			
6	The Last Letter	1		1	1	1		1	1	1	2	1		1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1
7	Second survey		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1
8	The Mirror's Reflection			1	1	1		1	2	2	1	1	1	1	1	1	1	2	2		1	1	1	1	1		1	1		1	
9	Third evaluation	1	1	1	2	1	1	2	2	2	2	1	1		2	1	2	2	1					2	1	1	2	1	1	1	1
10	The Art of Deception			1	2	1	1	2	2	2	2	2	1	1	1	1	2	1	1		1	1	1	1	1		2	1			
11	The Secret Garden			1	1	1	1	2	2	2	1	1	1		2	1	1	1	1	1	1			2	1				1	1	1
12	The Unlikely Friendship			1	2	1	1	1	1	1	2	2	1		1	1	1	1	1		1	1		1	1	1	2	1		1	1
13	Fourth evaluation and Third Survey	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1		1	1	1	2	2	1	1	1

Note: P represents practicing with the AI tool AIDungeon; R represents recording with Plot Factory and Replika; L represents listening their speaking.

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Appendix B: Five short stories from YouTube

Assessment	Story	Link
1	This Race Called Life	https://www.youtube.com/watch?v=/ bq8eOm0zEIs&ab_channel=Daretodo.Motivation
2	Problems in Life	https://www.youtube.com/watch?v=/ ieFWfWtKmTc&ab_channel=WordsofWisdom
3	A Father and a Son	https://www.youtube.com/watch?v=/ pFDNl874GWk&ab_channel=TheTriumphantTales
4	The Hugging Tree	https://www.youtube.com/watch?v=CCZY_/ TIwhDU&ab_channel=SARAHSHIVA
5	Mastering Happiness	https://www.youtube.com/watch?v=/ W6wVU5b5nQk&t=14s&ab_channel=/ Daretodo.Motivation

APPENDIX C. Three Questionnaires

First Questionnaire

1. For what duration have you been a student of English in your home country?
2. In high school, which ESL courses did you take?
3. Why are you learning English primarily?
4. What is your frequency of computer use? Does your house have a computer and a microphone?
5. What is your opinion about utilizing a computer to study English?
6. How did you first feel while conversing with an English-speaking person?

Second Questionnaire

1. How frequently do you use the AI Dungeon, Plot Factory, and Replika AI programs to practice speaking?
2. What are your thoughts on utilizing VoiceThread, AI Dungeon, Plot Factory, and Replika for speaking practice?
3. In what areas of your speaking abilities would you most like to see improvement?
4. Do you feel more comfortable speaking now that you've used online programs, compared to how you answered the first questionnaire?
5. How do you feel right now about conversing with someone who is proficient in English?

Third Questionnaire

1. Which features of interactive AI-driven storytelling programs do you find most effective in enhancing language learning outcomes?
2. How do you perceive the role of design elements, such as interactivity and personalization, in contributing to the effectiveness of AI-driven storytelling for language development?
3. What ethical concerns, if any, do you think should be addressed in the development and deployment of AI-driven storytelling resources for language development?
4. How important do you consider transparency and user privacy in AI-driven language learning tools?
5. Over time, how have your language skills evolved as a result of exposure to interactive AI-driven storytelling? (e.g., speaking, pronunciation, discourse, vocabulary acquisition)
6. Do you believe that long-term engagement with AI-driven storytelling has influenced your comprehension of narratives and overall grammar proficiency?
7. Reflecting on your language development journey, how do you think interactive AI-driven storytelling compares to traditional storytelling methods in terms of sustaining long-term language proficiency?
8. In your opinion, what aspects of language learning are better addressed by interactive AI-driven storytelling, and where might traditional methods have advantages?

Appendix D: Holistic Rubric

Score	Level	Criteria
5	Advanced Speaking	The narrative has well-structured speech; the facts are accurate and believable, and they are delivered rationally with suitable transitions. Complete vocabulary includes all idioms, colloquialisms, and relevant cultural allusions. Excellent flow and precise pronunciation of each note The majority of sentences have more than 12 words.
4	ccomplished Speaking	Speech is often structured like a narrative; facts are conveyed rationally, with some degree of precision and plausibility. The vocabulary is quite precise and diverse, including colloquial idioms.
		Occasionally non-native speakers make pronunciation mistakes, but they are usually understandable. Every sentence has a minimum of 12 embedded clauses or phrases.
3	Competent Speaking	Speaking is a relatively structured narrative; information may be vague or implausible. In general, a wide range of vocabulary is used, including some colloquial terms. There are occasional issues with speech tempo and intonation, but they don't result in significant intelligibility issues. Every sentence comprises at least eight words and contains embedded clauses or phrases.
2	Developing Speaking	Basic principles may not be covered in sufficient detail, and the material may be vague or implausible. Several words from the lexicon are used repeatedly instead of a diverse range of terms. foreign tension and many phonemic mistakes that may make the speaker difficult to understand. A few sentences feature at least five words and embedded clauses or phrases.

1	Beginning Speaking	Restricted capacity to react to the narrative; material is erroneous or irrelevant There is a dearth of vocabulary terms utilized, and individual phrases are employed more often than whole sentences. Extremely noticeable phonetic mistakes and extraneous emphasis that make the speaker incomprehensible Every sentence is less than five words and does not contain any embedded clauses or phrases.

Appendix E Analistic Rubric

Classification	Score	Description
Pronunciation	1	The speaker is incoherent due to extremely serious phonemic mistakes, foreign stress, and intonation patterns.
	2	The speaker's intonation patterns and frequent phonemic mistakes, despite their somewhat comprehensible speech.
	3	The speaker is understandable despite occasional persistent phonemic faults and alien stress and intonation patterns.
	4	The speaker occasionally makes pronunciation mistakes, but they are usually understandable.
	5	Few accentuation and nonnative pronunciation mistakes
Discourse	1	Restricted capacity to react to the narrative; material can be erroneous or irrelevant.
	2	Information is erroneous or vague; speech may be inadequate and badly ordered with fundamental ideas.
	3	The speech is a little disorganized and inadequate, and the information may be vague or false.
	4	Information is presented rationally, with precision and plausibility, and speech is typically structured like a tale.
	5	The narrative has well-structured speech; the facts are accurate and believable, and they are delivered rationally and with the right amount of transition.
Vocabulary	1	There is a dearth of vocabulary terms employed, and words alone are used more often than entire sentences.
	2	A large number of vocabulary terms are used repeatedly instead of a diverse range of words.
	3	There is a broad variety in vocabulary, some of which include idiomatic terms.
	4	There is a wide range of vocabulary, including colloquial terms.
	5	Complete vocabulary includes all idioms, colloquialisms, and relevant cultural allusions.
Grammar	1	Almost no syntactic or grammatical command, with the exception of short stock phrases.
	2	Some basic grammar control, but with significant and/or recurring mistakes that make the writing difficult to understand.
	3	Overall strong control throughout the whole composition, with grammatical mistakes that don't detract from readability.

	4	Occasional little grammatical mistakes that even fluent speakers could unintentionally make.
	5	There aren't many grammatical mistakes that natural speakers might unintentionally make.
Sentence Competency	1	Every sentence is less than five words and does not have any embedded clauses or phrases.
	2	A couple of sentences feature a minimum of five words and embedded clauses or phrases.
	3	Every sentence comprises at least eight words and includes embedded clauses or phrases.
	4	Every sentence comprises a minimum of 12 words and includes embedded clauses or phrases.
	5	The majority of statements contain more than twelve words.

Number	Participant	Overall Speaking		Pronunciation		Discourse		Vocabulary		Grammar		Sentence Competency	
		R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
1	1	3	3	3	3	4	4	3	3	3	3	2	2
	2	3	3	3	2	4	4	3	3	3	3	4	4
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	3	3	3	2	4	4	3	3	3	3	3	4
	5	3	3	3	3	4	4	2	2	3	3	2	3
	6	3	3	3	3	3	3	3	3	3	3	3	3
	7	2	2	2	2	3	3	2	2	2	2	2	2
	8	3	3	3	3	4	4	2	2	3	3	3	2
	9	2	2	2	2	3	2	2	3	2	2	2	3
	10	2	2	2	2	3	2	2	3	2	2	3	2
2	1	3	3	3	3	4	4	3	3	3	3	3	3
	2	3	3	4	4	4	3	3	3	3	4	3	3
	3	3	3	3	3	4	4	3	3	3	3	3	3
	4	3	3	4	4	4	3	3	3	3	4	4	3
	5	4	4	3	3	4	4	3	3	3	3	3	3
	6	3	3	3	3	4	4	3	3	3	3	3	3
	7	3	2	3	3	4	4	2	2	3	3	2	2
	8	4	4	3	3	4	4	3	3	3	3	3	3
	9	3	2	2	2	2	3	3	2	3	3	2	3
	10	3	3	2	2	3	3	3	2	3	3	3	3
	1	3	3	3	3	4	4	3	3	3	3	4	4
	2	4	3	4	4	4	4	3	3	3	3	4	4
	3	4	4	4	4	4	4	3	3	3	3	4	4

Appendix F: Speaking Rubric

3	4	4	3	4	4	4	4	3	3	3	3	4	3
	5	4	4	3	3	5	5	4	4	4	4	4	4
	6	4	4	4	4	4	4	3	3	3	3	4	4
	7	3	3	3	3	4	4	4	4	3	4	4	4
	8	4	4	3	3	5	5	4	4	4	4	4	4
	9	3	3	2	2	3	3	3	4	4	3	4	4
	10	3	3	2	2	3	3	3	4	4	3	4	4
4	1	4	4	4	4	4	4	4	4	3	3	4	4
	2	4	4	4	4	4	4	4	4	4	4	4	4
	3	5	5	5	5	5	5	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	4	4	3	3	4	5	4	4	4	4	4	4
	6	5	5	5	5	5	5	4	4	4	4	4	4
	7	3	3	2	3	4	4	3	3	3	3	3	3
	8	4	4	3	3	4	5	4	4	4	4	4	4
	9	4	3	2	2	3	4	4	3	3	3	4	3
	10	3	4	2	2	4	3	4	4	3	4	4	4
5	1	5	5	4	4	4	4	4	4	3	3	4	4
	2	5	4	4	4	5	5	5	4	4	5	4	5
	3	5	5	5	5	5	5	5	5	4	4	4	4
	4	4	5	4	4	5	4	5	4	4	4	5	5
	5	4	4	3	3	4	5	4	5	4	4	5	4
	6	5	5	5	5	5	5	5	5	4	4	4	4
	7	3	3	2	2	4	4	3	3	4	3	3	4
	8	4	4	3	3	4	5	4	5	4	4	4	5
	9	3	4	2	2	4	3	4	4	3	4	4	4
	10	4	4	2	2	3	4	4	4	3	4	3	4

Note: R1 and R2 represent for Rater 1 and Rater 2 (anonymous teachers).