Synthesis of blended learning and bichronous learning in improving undergraduates' English-speaking skills through short presentations

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Abstract

The significance of speaking English gained momentum in every walk of life due to its massive use in the global market. However, using technology makes it more interesting and exciting for students to excel in speaking skills. It can be optimized to help improve students' speaking skills as the Internet is accessible to most students in the 21st century. Considering the significance of English-speaking skills and the likelihood of improving them using digital technology, the researchers used Flipgrid asynchronously with the synchronously-used CEFR speaking rubrics to improve the undergraduates' English-speaking skills. In this study, the researchers used short presentations to hone the experimental group's English-speaking skills, for which they employed the synthesis of blended learning and bichronous learning. To be precise, the blend of traditional learning and digital learning (Blended learning) with the blend of synchronous and asynchronous learning (Bichronous Learning) was employed in improving the speaking skills of the undergraduates in this research. This study was conducted based on quantitative research by collecting and analyzing numerical data of a couple of research groups, the control group $(n_1=11)$ and the experimental group $(n_2=18)$, through Paired t-test, as the sample is small, i.e., n < 30. This research also used a closed-ended post-test questionnaire to elicit the students' responses on the asynchronous use of Flipgrid and synchronous use of CEFR Speaking rubrics in assessing their speaking skills. The findings of this study encapsulate the considerable improvement of the undergraduates' English-speaking skills by proving that the Calculated t > Tabulated t (Tab $t_{0.05}$ with 17 d.o.f is 1.740). As a result, the Null Hypothesis (H_0) was rejected, and the Alternative Hypothesis (H_1) was accepted. This way, the Speaking assessment training proved productive.

Key words: Flipgrid, Short Presentations, Educational Technology, CEFR, Blended Learning, Bichronous Learning

Introduction

The matchless significance of speaking in communication has been vivid in every walk of life, considering its massive use in the global market (Rao, 2019). Speaking can be recognized as an increasingly indispensable part of communication. The speaker of a language is considered the owner of the language. Therefore, Speaking is instrumental in the process of communication. The ever-growing corporate world escalates the necessity of acquiring speaking skills. Since the English language enjoys the status of the global language, the role of speaking English has gained momentum in leaps and bounds. The practices that help improve students' speaking skills have been connected with technology in the 21st-century classroom. Digital technology could unveil many opportunities for students to enhance their communicative competence, particularly during the COVID-19 pandemic and even before it. Bahadorfar (2014) asserted that technology could help improve students' speaking skills as the Internet is accessible to most students in the 21st century. Using the Internet, speech recognition software on mobile phones, Podcast, Quictionary, Quick Link Pen, and YouTube helped students acquire pronunciation, vocabulary, and

comprehension as part of their speaking skills during the COVID-19 Pandemic (Utami, 2021).

Technology is vital in language learning, allowing students to work independently and helping them self-learn and interact with the teacher. It also intrigues motivation for effective learning of language skills. The findings showed that technology makes teaching and learning more student-centred. It also helps the students feel more confident and thus promotes autonomy in learning. The authors recommended that implementing technology improves students' creativity and makes their learning enjoyable and exciting (Ahmadi & Reza, 2018). In recent years, the blended learning approach has gained momentum in ELT. Blended learning optimizes interaction and engagement as well. It also contributes to collaborative learning, where students can interact with their peers and teachers inside and outside the classroom. It develops oral production by giving the students different opportunities to speak at their own pace (Ehsanifard et al., 2020).

Blended learning can considerably impact the students' experience and is considered a productive approach that encourages self-learning (Hashemi & Si Na, 2020). Therefore, blended learning positively affects students' speaking skills (Isda et al., 2021). Ginaya et al. (2018) concluded that blended learning could enhance the speaking proficiency of the third-semester students at the vocational college by implementing the WebQuest application, which increased learners' motivation and interest. Apart from blended learning, bichronous learning is crucial in enhancing students' speaking skills. Bichronous learning combines synchronous and asynchronous online learning modes (Viriya, 2022), providing a flexible environment where no passive learning is entertained. It engages the students actively in learning and helps them exchange feedback to meet the learning outcomes (Mohammadi, 2023).

Literature Review

This literature review covers the previous research that helped learners improve their speaking skills using blended learning and various methods with technology. It also provides clear background research that supports the incorporation of Flipgrid and the CEFR speaking rubrics in improving learners' English speaking skills.

Ochilovna and Sameyevna (2021) stated that the 21st century is the epitome of modern innovative technologies used to learn a language enthusiastically, and digital technology makes the students' speech clear, accurate, and attractive. Dziecioł-Pedich and Dudzik (2021) rightly identified the synchronous and asynchronous tools to improve students' speaking skills during the COVID-19 pandemic. They said that the asynchronous use of Flipgrid considerably affected the methods used to enhance the students' speaking skills, supporting the first research question of this study. The idea of educational technology was fructified years ago, but the use of technology in education gathered momentum, especially during the COVID-19 pandemic. Though many teachers found it challenging to cope with the massive shock due to the sudden closure of educational institutions, the intervention of educational technology came to the rescue of the teachers and learners during the pandemic. This educational technology includes planned learning outcomes, diagnostic tools, learning models, and criteria for specific conditions for improving the students' speaking skills (Ivanova et al., 2020). It is also not to sneeze at the use of mobile in and out of the classroom for learning and the gradual paradigm shift from Computer Assisted Language Learning (CALL) to Mobile Assisted Language Learning (MALL) in education. Most MALL applications were developed to provide a platform for collaborative learning to acquire the target language (Akkara et al., 2020). Abugohar et al. (2019) recommend integrating mobile applications in teaching speaking skills and suggest making the students' learning more enjoyable using smartphones. Experts

also predict that various mobile devices will be used in the learners' formal and informal educational experiences.

Using mobile phone technology enriched the students' speaking skills and creative thinking of the students and helped students explore enthusiastically. Researchers' mixed methods of gathering qualitative and quantitative data proved that thirty-eight students could utilize mobile educational technology to improve their speaking skills and critical thinking (Kusmaryani et al., 2019). Eshankulovna (2021) affirmed that technology involves students in active learning by cultivating a sense of self-directed approach and self-paced interaction. It culminates in enhancing their speaking skills with educational technology tools such as Podcasting, Ouictionary, Ouick Link Pen and Technology Enhanced Language Learning (TELL). Ghallab (2020) recommended the implementation of the use of mobile phones in the classroom to improve students' speaking skills. Mobile technologies are more accessible than computers to students nowadays. More than 90% of the students agreed that mobile technology improves communication and speaking skills. Mahdi (2022) highlighted the significance of Technology Assisted Language Learning (TALL) in improving the second language through dramatizations, videos, and visual presentations that are necessarily incorporated in today's classroom. Multimedia enhanced the experimental group's PowerPoint presentation, speaking, and interaction skills. Most of the students from the experimental group opined that different multimedia approaches were significantly practical for learning as the multimedia was engaging and kept the students active throughout their learning, which enriched their speaking skills. In the participants' evaluation of the learning environment, the highest appreciation scores were given in favour of Standard Instruction on Computers and Video Clips. The researchers said that 'feedback' helped the participants learn a lot, followed by 'Video Clips'; thus, the utility of multimedia brought a significant difference in the process of improving the students' speaking skills through oral presentations (De Grez, 2009). Mabuan (2017) suggested that Pecha Kucha (20×20) presentations helped improve students' communicative competence, mainly speaking skills, and built students' confidence in speaking in front of an audience despite some technological limitations. 69.8% of the participants strongly agreed, and 27.9% agreed that Pecha Kucha's presentations improved their English speaking and oral presentation skills. 83.8% of the respondents also agreed that their preparation for Pecha Kucha presentations stimulated their interest in reading in their preparation and speaking in their performance. A maximum of 97.7% of participants openly agreed that using Pecha Kucha in their classroom bolstered their self-confidence. These findings stipulate the efficacy of Pecha Kucha presentations in developing students' public speaking skills. However, the blended learning technique has many advantages over conventional classrooms as it enhances speaking proficiency by providing the students with various opportunities to interact with their peers and teachers (Ehsanifard et al., 2020). Blended learning is an all-important concept that can be used to meet teaching goals successfully. It allows students to practise and enhance their English language skills outside the classroom, regardless of time. Besides this, it helps them reiterate lessons without any judgment or pressure (Banditvilai, 2016). Concerning all the previous research, going forward, we carried out our research to improve the students' speaking skills through short presentations using CEFR in the evaluation and using Flipgrid asynchronously in practice sessions.

The Role of CEFR in Improving Speaking Skills

Fennelly (2016) claimed that the Common European Framework of Reference for Languages (CEFR) was designed to fundamentally implement European Language Policy. However, it has had a considerable impact on the Japanese Education system of late. The purpose of CEFR is evident in the promotion of coherence and

transparency in the design of the English language curriculum and the field of evaluation in particular. CEFR was also considered for increasing students' self-awareness, self-evaluation, and autonomous learning. The designed materials concerning CEFR for beginner-level A2 students were found effective in improving the students' speaking skills. 100% of students agreed that there was a necessity to study speaking skills, and over 80% of the students strongly agreed with the employment of speaking material to increase the speaking skills of the students of IDeA Indonesia, which ensured the weighty evaluation and substantial evolution in their Speaking (Yuniarti, 2017).

Razali & Latif (2019) stated that the Common European Framework of Reference for Languages (CEFR) was utilized mainly in helping the Malaysian graduating non-native English-speaking students assess themselves and hence proved to have improved the students' speaking interaction and production as well based on the CEFR scale from A1 to C2. The authors also recommended that future researchers investigate students' speaking skills using the CEFR framework from educational institutions that use English as a medium of instruction in teaching and learning. This recommendation considerably backed up the first research question regarding the employment of CEFR in improving English Speaking Skills. Using the Common European Framework of Reference for Languages to know the Common Reference Levels of the students through self-evaluation with the help of CEFR descriptors and Can-Do statements resulted in a great deal of help for the students to write longer and more critical descriptions of their speaking skills. These CEFR descriptors also raised awareness among the students about their speaking abilities (Glover, 2011).

The Role of Flipgrid in Improving Speaking Skills

Köroğlu & Bilici (2022) claimed that integrating technology with speaking skills precludes the students from their fear of developing their speaking skills and enhancing their interest and willingness to speak. They also recommended using Flipgrid, an educational technology tool that significantly affects the learning of speaking skills. They also proved that Flipgrid could be optimized according to the lesson plan and assessment plan designed in their research. Miskam and Saidalvi (2019) showed that the utility of Flipgrid in improving engineering students' oral presentation skills was of great help to them, mainly when the students utilized their peer feedback on Flipgrid during the research. They thus could learn which level of learning they belonged to. Getting rigorous feedback from their peers on the students' work evolved their oral presentation skills. Using Flipgrid in various phases of the student's learning of oral presentation skills between the pre-test and the post-test brought about subtle differences among the experimental group's learning by the time they took part in their post-test. Petersen et al. (2020) highlighted the usability of Flipgrid through the responses taken from the students in the research. They recognized that downloading Flipgrid on a smartphone and recording and uploading videos on it would be simple. The authors also argued that the assigned tasks on Flipgrid were more beneficial for the students to perform at home at their own pace without being disturbed by any noise around, which is most likely to disturb the students in the classroom.

The results show that the students were very optimistic about using Flipgrid because of its interface, similar to many social networking applications. It is easy to use and simple for the learners to operate. Flipgrid turns a teacher-centred classroom into a learner-centred one, but it is difficult for many to accept technology in teaching and learning a language (Chien, 2021). In the context of EFL, students enjoyed learning to speak, could also be more expressive in speaking in their video on Flipgrid, and expected frequent use of Flipgrid to practice their speaking as well, using the method of TPS- Flipgrid (TPS stands for Think, Pair, and Share). This method greatly affected the student's performance in their speaking activities (Budiarta, 2020).

However, the research on the use of Flipgrid so far stipulates the fact that the use of Flipgrid has been successful in improving the students' speaking skills with a few constraints, such as 'errors in vocabulary, grammar or syntax made by the students', difficulty in implementing teacher's feedback in an asynchronous learning environment, and some students feeling uncomfortable showing themselves in recorded videos' (Hammett, 2021). Our research used Flipgrid asynchronously for practice sessions and the CEFR Speaking rubric synchronously in the assessment sessions to mitigate the errors and barriers in students' speaking activities. This way, using Flipgrid asynchronously for the conduct of speaking activities and assessing students synchronously through face-to-face interactions for giving feedback on their speaking activities gave the students every opportunity to interact with their peers through their comments on Flipgrid and in person in the classroom, respectively to enhance their relationships as per the recommendations of (Chien, 2021). However, Syahrizal and Pamungkas (2021) also recommended using Flipgrid in the speaking class in light of the advantages that far outweigh the disadvantages of using Flipgrid. Considering the recommendations of the authors of the previous researchers, this study answers the following research questions.

- 1. Do the asynchronous use of Flipgrid in the speaking practice sessions and the synchronous use of CEFR speaking rubrics in the assessment help improve undergraduates' English-speaking skills?
- 2. Does the synthesis of blended learning and bichronous learning impact the pursuit of improving undergraduates' English-speaking skills?
- 3. Do the short presentations play a significant role in improving the undergraduates' English-speaking skills?

Methodology

Participants

In our research, twenty-nine students of Diploma in Civil Engineering in the academic year 2021-2022 at Sri Vasavi Engineering College participated voluntarily in the experiment. All these students were teenagers between 17 and 19 years old. The students participating in this research studied for their second-year second semester in Diploma in Civil Engineering at Sri Vasavi Engineering College, Tadepalligudem, West Godavari District, Andhra Pradesh, India. This research was carried out as part of their second-year English laboratory course, 'Communication Skills'.

Materials

In this study, 60 Computers in a Computer Lab with uninterrupted ethernet connectivity and a discussion hall provided by Sri Vasavi Engineering College, mobiles asynchronously used by the students for the speaking activities on Flipgrid, CEFR Speaking rubric employed by the researchers, were all taken as independent variables. At the same time, the coursework for the Diploma in Civil Engineering, 'Communication Skills', along with its lesson plan, was considered the dependent variable. The researchers chose Flipgrid to help the experimental group practice speaking at home asynchronously. They used the CEFR speaking rubrics to assess that group's practice sessions synchronously in the classroom.

Procedure

The researchers rigorously conducted this study on Tuesdays for over three months, from March 15, 2022, to June 21, 2022, as per the timetable designed by Sri Vasavi Engineering College. The researchers conducted the research for 3 hours each Tuesday as per the specified date and time. The research consumed 36 hours solidly in 12 weeks and excluded nine more passive hours in 3 weeks that were not considered because of the holidays during our research. The researchers took the institution's only Diploma in Civil Engineering section for the research. This Diploma in Civil Engineering section comprised 29 students aged from 17 to 19 years during their

second-year 2nd semester. This research was conducted to discover the asynchronous role of 'Flipgrid' in enhancing English-speaking skills and the synchronous use of the CEFR Speaking rubric in assessing the students' speaking skills using a quantitative method.

Our research explored the novel way of using Flipgrid with the CEFR Speaking assessment rubric concerning bichronous learning. This novel way of blending Flipgrid with CEFR-based speaking rubrics represents the quantitative research through the results of the Pre-test, Post-test, and post-research questionnaire with closed-ended questions that gathered the students' responses to the use of Flipgrid and CEFR Speaking rubrics in the twilight of this research, especially after their active participation in this research under the tutelage of the researchers.

The researchers conducted the pre-test on March 15, 2022, to determine the students' speaking level and implement the necessary steps to train the student group. However, the pre-test displayed a result, marking eleven students above the A1 level and confining eighteen students to the A1 level as per the CEFR Speaking rubric. This pre-test helped the researchers divide the students into two research groups: the control group with eleven students and the experimental group with eighteen students. Fig.1 represents the number of students in the control and experimental groups.

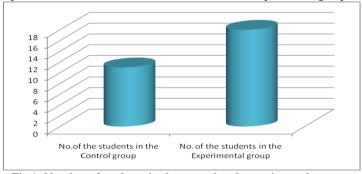


Fig.1: Number of students in the control and experimental groups.

The experimental group trained using Flipgrid through blended learning, which helped the students interact and learn more about each other through its asynchronous use (Edwards et al., 2021). In contrast, the control group was confined to the traditional learning method. The researchers used short presentations as part of the students' English laboratory course 'Communication Skills' to train the student groups during the research. The control group took all the short presentations traditionally and synchronously in the classroom without technical assistance. However, the experimental group did all the presentations both in the classroom traditionally and at home asynchronously on Flipgrid and got feedback every next week after their presentations on Flipgrid. The experimental and control groups got feedback on their speaking activities using the CEFR Speaking rubric. After a three-month training, both groups took the post-test, administered on June 14, 2022. The experimental group, which used blended learning, could outperform the control group, resulting in considerable progress. The researchers prepared a questionnaire using the Likert Scale and gathered the students' responses to their research experiences on June 21, 2022, the last instructional day of this research.

Results & Discussion

The researchers conducted this study to improve undergraduates' English-speaking skills using a novel way of blended learning method through the asynchronous use of Flipgrid in practice sessions and synchronous use of CEFR speaking rubric in the assessment in support of the idea of blending synchronous learning and asynchronous

learning (bichronous learning) strategies (Yamagata-Lynch, 2014). Bichronous learning is a combination of synchronous and asynchronous online learning modes. It helps the students work at their own pace through the asynchronous part and makes them feel more engaged through the synchronous class (Viriya, 2022). Twenty-nine second-year undergraduate students of the Diploma in Civil Engineering participated in this research.

At the outset, the researchers administered a pre-test for all 29 students on March 15, 2022, and measured the students' speaking levels to set apart one student group from the other. Then, the researchers started training the experimental group, which consisted of eighteen students who got an A1 level in their speaking, and confined the control group, which comprised eleven students who got above A1 level as per the CEFR Speaking rubric, to traditional learning. The pre-test produced the results and opened the gateway to this study. In this study, the researchers used short presentations such as JAM (Just A Minute), seminars, and other academic presentations as part of the English Laboratory course for the Diploma in Civil Engineering academic year 2021-2022, titled ' Communication Skills.' The researchers took 3 hours per week and 36 hours in 12 weeks, excluding three more weeks with 9 hours as holidays during this study.

Pre-test

The researchers administered the pre-test on March 15, 2022, for twenty-nine secondyear students of the Diploma in Civil Engineering in their second semester of 2021-2022. In this pre-test, an impromptu short presentation activity (JAM) was assigned and performed synchronously using a conventional method. As a result, eleven students stood above the A1 level, and eighteen could reach the A1 level of their speaking as per the CEFR Speaking rubric. Fig.2 displays the results of all the students in the pre-test.

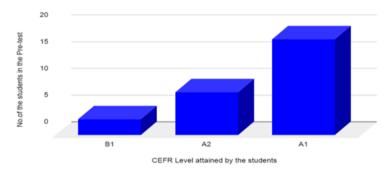


Fig.2: Number of the students in the Pre-test vs. CEFR Level attained by the students

The Pre-test was assessed based on the CEFR Speaking Assessment Criteria Grid (taken until B2 (Independent) level into consideration) and a Global Oral Assessment Scale with Can-Do statements employed by the researchers simultaneously. The researchers set a range of marks for each level of the CEFR. Also, they considered each parameter (Range, Accuracy, Fluency, Interaction, and Coherence) for 5 marks, as a full 25 marks for all the 5 parameters. The range of marks for each level is shown as A1: 0-25, A2: 26-50, B1: 51-75, and B2: 76-100 according to the CEFR-Based Global Oral Assessment Scale and Speaking Assessment Criteria Grid.

In the pre-test results, the control group (11 student participants) could attain above A1 level, i.e., 3 students got B1 level with the marks 54, 55 & 61, and 8 students got A2 level with the marks 29, 29, 31, 32, 33, 39, 44 and 45. The experimental group (18 student participants) could reach A1 level with the marks 7, 8, 8, 9, 11, 11, 12, 17, 18, 18, 18, 19, 20, 21, 21, 21, 24, and 25. All these were the average marks given to each student participant by the researchers. As the researchers used both the Can-Do statements and the Speaking Assessment Criteria Grid, they calculated the average marks of each participant.

During the Study

The researchers provided both student groups with the same list of topics of JAM (Just A Minute), seminars, and other academic presentations. However, the control group followed the mere traditional method of learning. They practised and performed their speaking activities synchronously in the classroom and got their researchers' feedback synchronously concerning their performances using the CEFR Speaking rubric. The experimental group also performed their speaking activities on par with the control group and subsequently got their feedback in the classroom. Apart from this, the experimental group practised the same speaking activity asynchronously on Flipgrid before their next performance in the classroom and got their feedback synchronously in the classroom every next week of their performance. During this one week, the experimental group spoke better about their topic on Flipgrid as there was enough time for them to practice, perform and appear for their next performance in the classroom on par with the control group. The researchers provided the experimental group with feedback in the classroom in the presence of all the students, using the CEFR Speaking rubric. Giving feedback to the experimental group occurred every time before they began their next performance.

For example, the second week of this study opened the threshold of the students' speaking activities. Both the research groups performed and were given feedback spontaneously and synchronously. However, the experimental group got their feedback on one more performance of theirs on the same topic on Flipgrid, which they used at home. The feedback on their performance on Flipgrid was given synchronously the very next week, i.e., during the third week of this study. This way, the procedure of this study continued for over 3 months. Eventually, it brought a subtle difference between the performance of the control group and that of the experimental group in the post-test administered on June 14, 2022.

Post-test

The researchers eventually administered the post-test on June 14, 2022, after over a three-month training for both student groups. The control group pursued traditional learning, while the experimental group held blended learning. In the Post-test, all twenty-nine students participated in an impromptu speaking activity (JAM). The researchers evaluated all the students' performances using CEFR Speaking rubrics. The results produced in the post-test depict the subtle difference in the performance between both groups. In the post-test, conducted using a conventional method, seven students from the experimental group could achieve an A2 level with marks 30, 32, 39, 42, 45, 46 and 49. Nine students could go up and got B1 level with marks 53, 53, 57, 58, 58, 62, 68, 69 and 70, and only two students stayed back in the A1 level with marks 17 and 24. However, seven students in the control group could get A2 with marks 27, 35, 36, 42, 44, 48 and 49, and four students could get to the B1 level of the CEFR speaking rubric with marks 55, 59, 62 and 65. Neither of the groups could attain the B2 level. This way, the experimental group could outperform the control group and improve their Speaking proficiency (Ehsanifard, 2020). As the number of students in the experimental group was 18, 16 students (for over 88%) getting over the line was phenomenal in this study.

The following Fig.3 & Fig.4 state the speaking levels of the control and experimental groups, respectively, in the post-test, while Fig.5 depicts all the students' CEFR speaking levels attained in the post-test.

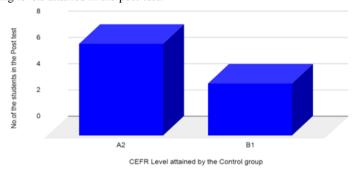


Fig.3: Number of the students in the Post-test vs. CEFR Level attained by the Control group

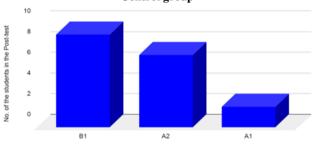


Fig.4: Number of the students in the Post-test vs. CEFR Level attained by the Experimental group

CEFR Level attained by the Experimental group

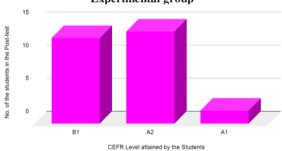


Fig.5: Number of the students in the Post-test vs. CEFR Level attained by all the students

Statistical Analysis

Below are the scores obtained in the Speaking assessment by the experimental group of 18 students before and after the training. Fig. 6 shows the difference in the scores.

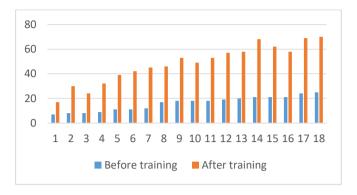


Fig. 6: Scores obtained in the speaking assessment

Test whether the training is productive at a 0.05 level of significance.

The researchers have chosen a Paired t-test because the sample size is small.

Null Hypothesis (H_0): The Speaking assessment training has no significant effect.

Alternative Hypothesis (H_1) : The Speaking assessment training is productive.

Level of Significance (α): 0.05 with v = n-1 degrees of freedom

Test Statistic:

Differences $(d_i) = -10, -22, -16, -23, -28, -31, -33, -29, -35, -31, -35, -38, -38, -47, -41, -37, -45, -45$

$$\bar{d} = \frac{\sum_{i=1}^{n} d_i}{n}$$

$$\bar{d} = \frac{-584}{18} = -32.44$$

Variance (S²) =
$$\frac{\sum_{i=1}^{n} (d_i - \bar{d})^2}{n-1}$$

$$= (-10+32.44)^2 + (-22+32.44)^2 + (-16+32.44)^2 + (-23+32.44)^2 + (-28+32.44)^2 + (-31+32.44)^2 + (-33+32.44)^2 + (-29+32.44)^2 + (-35+32.44)^2 + (-31+32.44)^2 + (-35+32.44)^2 + (-38+32.44)^2 + (-38+32.44)^2 + (-47+32.44)^2 + (-41+32.44) + (-37+32.44)^2 + (-45+32.44)^2 + (-45+32.44)^2 / (18-1) \\ = (503.55 + 108.99 + 270.27 + 89.11 + 19.71 + 2.07 + 0.31 + 11.83 + 6.55 + 2.07 + 6.55 + 30.91 + 30.91 + 211.99 + 73.27 + 20.79 + 157.75 + 157.75) / 17 \\ = \frac{1704.38}{17} = 100.25$$

Standard Deviation (S) =
$$\sqrt{S^2}$$
 = $\sqrt{100.25}$ = 10.01

Test Statistic
$$|\mathbf{t}| = \frac{\overline{d}}{\frac{S}{\sqrt{n}}} = \frac{-32.44}{\frac{10.01}{\sqrt{18}}} = \frac{-32.44}{\frac{10.01}{4.24}} = \frac{-32.44}{2.36} = 13.74$$

Tab $t_{0.05}$ with 17 d.o.f is 1.740 (according to the Statistical Table for the Probability as an Area under the Curve)

Conclusion:

Calculated t > Tabulated t, so we reject the Null Hypothesis (H_0) and accept the Alternative Hypothesis (H_1) , i.e., the Speaking assessment training is productive.

Considering the previous research, this study focused on improving the undergraduates' English speaking skills using Short Presentations. It was carried out as quantitative research using the synthesis of blended learning (conventional

learning+digital learning) and bichronous learning (synchronous+asynchronous). The researchers trained the experimental group for over 3 months and administered the post-test to measure the progress of this group through the results. The researchers also analyzed these results statistically through the Paired test as the sample size is small, i.e., $n \leq 30$. The difference between the marks of the experimental group both in the pre-test and the post-test revealed that the Calculated $t > Tabulated\ t$ (Tab $t_{0.05}$ with 17 d.o.f is 1.740). Therefore, the Null Hypothesis (H₀) was rejected, and the Alternative Hypothesis (H₁) was accepted. This way, the Speaking assessment training proved productive. The researchers tested the following two hypotheses:

Null Hypothesis ($\mathbf{H_0}$): The Speaking assessment training has no significant effect because there is no significant improvement in the experimental group before and after the training.

Alternative Hypothesis (H_1): The Speaking assessment training is productive because there is a significant improvement in the experimental group before and after the training.

Post-research Questionnaire

After the post-test, a ten-question questionnaire was given to the experimental group using the Likert Scale to elicit their responses on the asynchronous use of Flipgrid and synchronous use of CEFR Speaking rubrics in assessing their speaking skills, as shown in Table 1 below.

Table 1: Post-research Questionnaire

Sl	Questionnaire					
No		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Blending educational technology with the conventional way of learning encouraged me to pursue my speaking skills	58.7%	34.6%	6.2%	0.5%	0%
2	I relished using educational technology asynchronously, which helped me practise my speaking as many times as I wanted to	28.9%	62.3%	7.5%	0.3%	0.7%
3	The blending of asynchronous learning and synchronous learning intrigued my pursuit of learning	24.7%	59.2%	12.2%	2.7%	1.2%
4	Practising short presentations helped me scale my level of Speaking and improve it to a greater extent	37.7%	49.4%	8.7%	4.2%	0%
5	The asynchronous use of Flipgrid allowed me to practise my Speaking at my own pace	77.8%	17.1%	4.9%	0.2%	0%
6	Using Flipgrid made me	16.5%	59%	18.3%	3.2%	3%

	aware of my speaking errors through my peers' comments					
	on Flipgrid.					
7	The CEFR-based speaking assessment had a significant impact on my learning	32.8%	55.4%	10%	1.8%	0%
8	Synchronous assessment based on CEFR speaking rubrics made me know that my Speaking level is on par with my peers.'	44.5%	40.4%	9.4%	3.9%	1.8%
9	Bichronous Learning (Synchronous+Asynchronous) through the blend of Flipgrid and CEFR had my speaking skills substantially nurtured	27%	64.5%	3.3%	5.2%	0%
10	Bichronous Learning resolved the challenges, such as students' lexical, grammatical, or syntactical errors that arose in the asynchronous learning environment alone	58.4%	23.7%	15.5%	2.4%	0%

Conclusion

The sheer dominance of heutagogy in and out of the classroom recently has been phenomenal, especially in teaching and learning. The focus was shifted from teachercentric education to a student-centric one, which is evident and exceptional in contemporary research. This study unhesitatingly supports the vision of a student's self-directed learning rather than teacher-instructed learning. This study highlights the prospects of using educational technology to deliver short presentations, backing up the third research question, for undergraduate students to improve their Englishspeaking skills. In this research, the asynchronous use of Flipgrid in the practice sessions and the synchronous use of CEFR-based speaking rubrics in assessing the student's speaking skills were implemented through a blended learning method, supporting the first research question of this study. In this study, the experimental group, which pursued blended learning, improved more in overall speaking proficiency than the control group, which pursued traditional classes. Thus, the experimental group could utilize the advantages of both online and face-to-face interaction (Ehsanifard, 2020). The results in the post-test of this study demonstrate the considerable improvement of the experimental group's English-speaking skills by proving that the Calculated t > Tabulated t (Tab $t_{0.05}$ with 17 d.o.f is 1.740). As a result, the Null Hypothesis (H_0) was rejected, and the Alternative Hypothesis (H_1) was accepted. This way, the speaking assessment training proved productive.

This study was conducted even in support of the blend of synchronous and asynchronous approaches engrossingly presented in all their excellence. This study effectively tested the synthesis of blended learning and bichronous learning, pertinent to the second research question. As a result, the experimental group in this study could improve their speaking skills better than the control group in the post-test conducted after a three-month training. Blended learning made it easier for the experimental group to sustain their speaking skills, which needed continuous momentum throughout the training. The experimental group could also shy away from their bundle of nerves in light of their continuous asynchronous use of Flipgrid, allowing them to stand in front of the camera and deliver the goods. This way, recording their Speaking on Flipgrid helped them know where they made mistakes

and what they needed to improve in their speaking. The use of Flipgrid also allowed the experimental group to practice at their own pace without any peer pressure. However, the feedback using the CEFR Speaking rubric in a synchronous classroom made it gripping for the students to interact with one another and helped improve their speaking accordingly. However, the challenges such as 'students' errors in grammar, vocabulary, or syntax, difficulty in providing teacher's feedback in an asynchronous online learning environment, and some students feeling uncomfortable showing themselves in recorded videos' (Hammett, 2021) were resolved in this study through the blending of asynchronous and synchronous learning (Bichronous Learning) that reduced the challenges encountered in the asynchronous online learning alone (Martin et al., 2023).

Limitations of the study

This study had a couple of constraints, such as the limited time for speaking synchronously in the classroom and limited hours provided as per the collegiate classwork timetable for the exchange of peer assessment in the classroom. This study has also been limited to a small number of undergraduates as the participants due to the researchers' less accessibility to more than one section of a similar category of students.

Prospects for future research

A longitudinal study synthesizing blended and bichronous learning is recommended to improve large-scale tertiary and secondary-level students' speaking skills.

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