The effects of voice blogging on upper secondary students’ L2 Kazakh speaking performance

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ABSTRACT

This investigation aimed to examine the impact of a 12-week voice blogging course on L2 Kazakh speaking performance among Russian-speaking upper secondary school students in Kazakhstan. The participants (n = 84) were randomly allocated to an experimental group engaged in weekly voice recording and posting via WhatsApp outside of class time and a control group that received the same regular classroom instruction but without extracurricular speaking practice. The oral performance of both groups was assessed in terms of complexity, fluency, and accuracy indices before and after the intervention. A questionnaire was administered to the experimental group to elicit their perceptions of the audio blogging course. The learners in the experimental group demonstrated higher complexity and fluency in their post-test narrations than the control group. However, no significant effect was found on the accuracy of speech. The participants reported a positive attitude toward the completed course and expressing willingness to recommend voice blogging to others. These findings suggest that audio blogging can be an effective and engaging method to enhance L2 speaking skills, but it may require additional support and feedback to address accuracy issues. The findings advocate the promise of voice blogging as a helpful approach for enhancing L2 oral skills.

Contribution/Originality: This paper provides new evidence for L2 acquisition research. This is the first study that approaches the assessment of spoken Kazakh performance using standards applied to the English language.

1. INTRODUCTION

People rely on speaking every day as a vital language skill that allows them to interact with others and share their opinions. In the modern world, speaking skills are valued as key competencies for global communication, access to higher education, and career opportunities (Ramalingam & Jiar, 2023). Speaking is considered the most crucial skill to develop when learning a language as it reflects learners’ communicative competence and is essential in every dimension of life, from education to work (Fenyi, Kongo, Tabiri, & Jones-Mensah, 2023). However, many L2 learners face various challenges in developing their oral language skills, such as a lack of exposure to authentic input and output (Rahman & Tomy, 2023) insufficient opportunities for practice (Wahyuningsih, Afandi, Kasriyati, & Khoeroni, 2023) limited feedback (Saeed & Al Qunayeer, 2022) and speaking anxiety (Chen, 2022).
Research evinces that students worldwide engage in diverse educational activities emblematic of student-centered approaches and integration of technology, all aimed at transforming them into lifelong learners. Yet at present, L2 oral language instruction is mostly teacher-centered and relies on a traditional one-to-many teaching model, similar to other subjects, without adequately developing students’ ability for independent learning, and is constrained by various external factors, such as time and location (Cao & Dong, 2022). Traditional classroom instruction often does not provide enough time and feedback for learners to hone their speaking, which is a crucial skill for anyone who wants to master a foreign language, especially in a multilingual context such as Kazakhstan, a Central Asian country with a multilingual population, where Kazakh is the state language while Russian is widely used as a lingua franca, or a bridge language.

1.1. Contextual Background

Kazakhstan inherited many Russian speakers after the Soviet Union collapsed. They were either ethnic Russians or Kazakhs who grew up mostly speaking Russian and had little or no knowledge of Kazakh. These days, despite Kazakh being taught as a compulsory subject, Russian is more widely spoken across the country, particularly in the northern and northeastern regions of Kazakhstan (Jašina-Schäfer, 2019). At the start of the 2020/21 academic year, the majority (51%) of general day schools (which provide education for elementary and secondary grades) offered instruction in Kazakh, whereas only 17% taught solely in Russian. The remaining 31% provided education in both Kazakh and Russian. However, the Kazakh language has been attracting more and more interest from the residents of Kazakhstan in recent years (Smagulova, 2021). Nonetheless, Russian-speaking students in Kazakhstan face challenges in learning Kazakh as a second language, particularly its oral dimension, and lots of people graduate without being fluent in Kazakh (Shibata, 2021).

Therefore, there is a need for alternative ways to enhance L2 learners’ speaking performance outside the classroom. One of the potential ways to address these challenges is to employ web-based technology, especially Web 2.0 tools, which allow users to create and share content online. Web 2.0 technology has been widely used in language education, as it offers various benefits for L2 learners, such as authentic materials, interactive communication, collaborative learning, learner autonomy, and reduced anxiety (Han, 2023; Klimova & Zamborova, 2023; Terzioglu & Kurt, 2022). Among the various Web 2.0 tools, voice blogging or audio blogging is a relatively new and innovative tool that can be used to facilitate L2 speaking practice and development.

2. LITERATURE REVIEW

Voice blogging, also referred to as podcasting, is a form of blogging that uses audio or video recordings instead of text to express one’s thoughts and opinions on a subject and share it online for others to listen to and comment on. Voice blogging can be seen as a type of computer-mediated communication (CMC) that involves the use of computers or other electronic devices to exchange messages with others. CMC can be classified into two modes: synchronous and asynchronous. Synchronous CMC refers to real-time communication, such as online chat or video conferencing, while asynchronous CMC refers to delayed communication, such as email or audio blogging (Zenouzagh, Admiraal, & Saab, 2023).

Voice blogging can provide several benefits to L2 learners. First, this form of language learning provides more time for learners to plan and organize their speech before recording and posting it online (Chang & Windeatt, 2023), which can boost their speaking complexity and accuracy. Voice blogging can be beneficial for oral proficiency owing to regular practice aimed at key components of spoken language, that is pronunciation, intonation, stress, pauses, and rhythm (Kusuma & Waluyo, 2023). Furthermore, audio blogging can help mitigate anxiety related to pronouncing words perfectly due to its asynchronous nature, thus allowing learners the possibility for trial and error without fear of negative evaluation. In addition, voice blogging allows for prompt feedback on oral production from both peers and instructors, which is considered to be a crucial point when it comes to foreign language
learning (Ebadijalal & Yousofi, 2023). This feedback can assist students in identifying their strengths and weaknesses, and therefore enable them to refine their spoken L2 output. Finally, audio blogging can provide a sense of community and drive motivation (Leese, 2024) which can facilitate long-term engagement and improve overall language proficiency (Hafour, 2022). With the proliferation of mobile devices equipped with high quality microphones, as well as social media platforms designed specifically for podcasting, voice blogging presents itself as an accessible and relevant tool for promoting foreign language acquisition amongst young learners.

Given that audio blogging is a relatively new technology that has been used in foreign language learning, few studies have examined the effects of voice blogging on L2 learning outcomes. Sun (2009) used voice blogs as a platform for an extensive study of language learners’ speaking skills. However, the study did not provide data on participants’ progress due to audio blogging. The study by Hsu (2016) involved students recording and posting voice blogs on various topics over a 15-week period. The purpose was to investigate whether voice blogging could facilitate accurate language production, speaking complexity, and fluency of English learners. The students were also required to provide written responses to each other’s blog posts. A retrospective open-ended questionnaire was implemented to gain insights into the students’ blogging experience. The results suggested that audio blogging can support the advance of speaking complexity, but limited progress on fluency and accuracy was revealed. Le (2018) investigated the effects of voice recording on the speaking skills of English as a foreign language (EFL) learners in Vietnam.

The study involved 17 students who were asked to record their speech on various topics and post them on closed Facebook groups for feedback. The study compared the first and final recordings of the students in terms of fluency and complexity, and it was revealed that recording their speech on suggested topics and posting them on closed Facebook groups helped students improve their fluency and lexical complexity but not their syntactic complexity. The students also reported positive perceptions of voice recording as a tool for improving their speaking skills outside the classroom.

The dearth of research in this area does not allow for clear conclusions regarding the impacts of voice blogging on L2 oral production, more so since previous studies were restricted to EFL learners in higher education settings, with none of them having any other language as the target one or being carried out in a school setting. Therefore, more research is required to establish the potential of audio blogging as a tool for advancing L2 speaking skills, particularly in non-English and non-university contexts. While existing research has shed light on the general effects of voice blogging on language learning, this study could enrich the academic literature by addressing the specific research gap pertaining to the impact of voice blogging on L2 Kazakh speaking performance among upper secondary students.

The findings of this study can contribute to the development of effective language learning strategies for Russian-speaking students learning Kazakh as a second language, as well as inform language educators on the potential benefits of integrating voice blogging as a language learning tool into the curriculum.

3. ABOUT THIS RESEARCH

3.1. Significance of the Study

This study is valuable for several reasons:

1. This is the first study that approaches the assessment of spoken Kazakh performance using standards applied to the English language.

2. It reports the intervention involving a web tool for L2 education, yielding new evidence for second language acquisition research. The results are explained from the standpoint of the limited attentional capacity model.

3. It shows that audio blogging can be an effective way to bolster both the complexity and fluency of spoken L2 Kazakh.
3.2. Research Aim and Questions

The purpose of this study is to fill the aforementioned gap in the literature by examining the effect of a 12-week-long voice blogging course on L2 Kazakh speaking performance in upper secondary school students who are native Russian speakers. Specifically, the following research questions were posed:

Research question 1. Does voice blogging improve L2 Kazakh speaking complexity among upper secondary school students?

Research question 2. Does voice blogging improve L2 Kazakh speaking fluency among upper secondary school students?

Research question 3. Does voice blogging improve L2 Kazakh speaking accuracy among upper secondary school students?

Research question 4. What are the students’ perceptions of the voice blogging course?

4. METHODS

This research employed a quasi-experimental pre-test/post-test control group design. The study population was a convenience sample who were enrolled between September 2022 and January 2023.

4.1. Participants

The present study employed a pre-test/post-test control group design. The participants comprised 84 Russian-speaking students (45 females and 39 males, aged from 14 to 18 years, with a mean of 15.82) in upper secondary school grades 9–11 who were enrolled in a Kazakh language class but had poor knowledge of Kazakh (A1-A2 according to Qaztest). The participants were recruited from six classes at gymnasium 1, Shymkent (Kazakhstan), two classes from each of the 9th, 10th, and 11th grades, 28 from each grade, 14 from each class. Students were randomly assigned to either an experimental group whose regular school lessons in Kazakh were supplemented by voice blogging (n = 42) or a control group in which the syllabus was not paralleled by additional practice speaking Kazakh (n = 42).

All students participated in the study voluntarily and anonymously. All collected data was kept confidential and securely stored. The participants were informed that they had the right to withdraw from the study at any time, without penalty. Informed consent was obtained from all participants prior to data collection.

4.2. Intervention

First, participants were asked to join a private WhatsApp group created by the researcher (corresponding author). In addition to attending their routine Kazakh language lessons, the students were required to produce an audio blog entry outside of class time weekly for a total of 12 weeks (from early February to the end of April 2023). Once a week, the researcher sent out a reminder to the participants to post a voicemail to the group about the topic that was covered in that week’s Kazakh language class. The participants were instructed to keep their voice recordings between 30 seconds and five minutes in length. The researcher listened to all voicemail recordings and recorded a response voice message with constructive criticism for each of the 42 participants who sent their audio message to the group.

4.3. Measurement

A picture description task was used in the study to assess the complexity, fluency, and accuracy of the participants’ spoken Kazakh before and after the intervention in a standardized way. The task involved showing participants a series of simple pictures, such as daily routines and food and asking them to describe what they saw in Kazakh. For instance, for the topic of daily routines, the pictures included a person waking up, having breakfast, going to school or work, having lunch, doing homework or office work, and going to bed. The participants had to
mention the type of activity and provide additional details as appropriate. Similarly, for the topic of food, the pictures included various types of food, such as dairy products and meat, and the participants were asked to name them in Kazakh and, if possible, specify their color and taste. Each participant was given three minutes to prepare before beginning the description task. The narratives were recorded for later evaluation.

The narrative test outcomes were transcribed and analyzed using a quantitative content analysis approach by means of PRAAT software to estimate changes in the participants’ oral performance over the research period according to speaking complexity (total number of clauses / total number of sentences), fluency (total number of syllables / seconds of speech record) × 60, and accuracy, i.e., total number of grammatical and lexical errors (aside from minor mispronunciations) per 100 words of the speaking test response. It was impossible to compute the Guiraud index since, unlike in English, there is no commonly accepted list of the most frequently used Kazakh words.

A seven-item student satisfaction questionnaire answered on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was designed based on scales by Alamri (2019) and Hazzam and Wilkins (2023). The items were adjusted to the context, translated from English to Russian, and piloted among four upper secondary students outside of the study sample to see if the text was comprehensible to the target audience. After the post-test procedures, feedback on the audio blogging course was obtained from the experimental group participants through the questionnaire (Spearman–Brown’s split-half reliability of 0.792).

4.4. Data Analysis

Means (M) and standard deviations (SD) were calculated for demographics, speech data, and survey responses. To examine the presence of significant differences between the groups on the combined three response variables, and to evaluate the influence of covariates on these variables, a one-way multivariate analysis of covariance (MANCOVA) was employed. Group (control versus experimental) was treated as the independent variable. The dependent variables were the participants’ post-test scores on fluency, accuracy, and complexity. To adjust for baseline differences, pre-test scores, grade point average (GPA) in Kazakh (M = 3.65, SD = 0.35), gender, age, and grade served as covariates.

Apart from the multivariate test, analyses of covariance (ANCOVAs) were performed as follow-up univariate tests to inform on whether there were significant differences between the groups on each individual dependent variable, accounting for the covariates. The D’Agostino-Pearson test and a visual inspection of the Q–Q plots revealed that all variables were normally distributed. The p-value obtained from Box’s M test was above 0.01, which proved the homogeneity of covariance matrices of the dependent variables. The pre- and post-test oral performance scores were subjected to a two-tailed independent t-test to explore between-group differences, with a Bonferroni-adjusted significance level of 0.017 (0.05/3). The effect size was expressed as Cohen’s d, conventionally interpreted as small (0.20 to 0.49), medium (0.50 to 0.79), or large (≥ 0.80). Statistical procedures were run using psych, lattice, and ggplot2 libraries in an R programming environment.

5. FINDINGS

The first step in answering the research questions was performing MANCOVA multivariate tests that assessed the overall effect of the experiment (voice blogging) on the combined dependent variables (post-test complexity, fluency, and accuracy) while controlling for the covariates. In this study, the MANCOVA yielded Wilks’ lambda, Hotelling’s trace, Roy’s largest root, and Pillai’s trace values that were identical, so the last one is reported as an F-statistic test criterion. The multivariate outcome (see Table 1) indicated a statistically significant effect of the group variable on the combined dependent variables (Pillai’s trace = 0.294, F (3, 73) = 7.412, p < 0.001). This implies that there were significant differences in the overall post-test speaking performance between the subjects involved in audio blogging and those who were not after accounting for the influence of the covariates. Follow-up univariate
tests were carried out to ascertain whether there were significant differences between the groups for each individual dependent variable, thereby addressing research questions 1 to 3.

Table 1. Multivariate analysis of covariance on upper secondary students’ L2 Kazakh speaking performance (n = 84).

<table>
<thead>
<tr>
<th>Predictor/Covariate</th>
<th>Pillai’s trace</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>0.234</td>
<td>7.412</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Complexity (Pre-test)</td>
<td>0.053</td>
<td>1.370</td>
<td>0.259</td>
</tr>
<tr>
<td>Fluency (Pre-test)</td>
<td>0.006</td>
<td>0.150</td>
<td>0.930</td>
</tr>
<tr>
<td>Accuracy (Pre-test)</td>
<td>0.023</td>
<td>0.562</td>
<td>0.642</td>
</tr>
<tr>
<td>Age</td>
<td>0.091</td>
<td>2.490</td>
<td>0.073</td>
</tr>
<tr>
<td>Gender</td>
<td>0.048</td>
<td>1.213</td>
<td>0.311</td>
</tr>
<tr>
<td>GPA in Kazakh</td>
<td>0.005</td>
<td>0.127</td>
<td>0.944</td>
</tr>
<tr>
<td>Grade</td>
<td>0.025</td>
<td>0.632</td>
<td>0.597</td>
</tr>
</tbody>
</table>


The effect of the experimental condition on the number of clauses per sentence in participants’ Kazakh speech was examined in the univariate test for post-test speaking complexity. The results (see Table 2) suggest that post-test complexity was significantly affected not only by the group variable (F (1) = 8.711, p < 0.004), but also by pre-test complexity (F (1) = 4.038, p < 0.048), with the latter pointing to the contribution of the initial complexity scores to post-test complexity level. The t-test (see Figure 1) evinces that at the end of the treatment period, blogging partakers’ L2 speaking complexity (M = 1.576, SD = 0.183) was significantly higher compared with their counterparts (M = 1.463, SD = 0.169) (t = 2.9, p = 0.004, Cohen’s d = 0.642).

Table 2. Analysis of variance on upper secondary students’ L2 Kazakh speaking performance (n = 84).

<table>
<thead>
<tr>
<th>Predictor/Covariate</th>
<th>Post-test</th>
<th>Mean square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Complexity</td>
<td>0.268</td>
<td>8.711</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>260.339</td>
<td>12.200</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>53.616</td>
<td>2.494</td>
<td>0.118</td>
</tr>
<tr>
<td>Complexity (Pre-test)</td>
<td>Complexity</td>
<td>0.124</td>
<td>4.038</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>0.284</td>
<td>0.013</td>
<td>0.909</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>1.491</td>
<td>0.069</td>
<td>0.783</td>
</tr>
<tr>
<td>Fluency (Pre-test)</td>
<td>Complexity</td>
<td>0.003</td>
<td>0.107</td>
<td>0.745</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>2.333</td>
<td>0.109</td>
<td>0.742</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>4.220</td>
<td>0.196</td>
<td>0.659</td>
</tr>
<tr>
<td>Accuracy (Pre-test)</td>
<td>Complexity</td>
<td>0.029</td>
<td>0.945</td>
<td>0.334</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>13.023</td>
<td>0.610</td>
<td>0.437</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>0.007</td>
<td>3.880</td>
<td>0.985</td>
</tr>
<tr>
<td>Age</td>
<td>Complexity</td>
<td>0.003</td>
<td>0.091</td>
<td>0.764</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>146.376</td>
<td>6.860</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>22.125</td>
<td>1.029</td>
<td>0.314</td>
</tr>
<tr>
<td>Gender</td>
<td>Complexity</td>
<td>0.024</td>
<td>0.786</td>
<td>0.378</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>46.619</td>
<td>2.185</td>
<td>0.144</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>6.796</td>
<td>0.316</td>
<td>0.576</td>
</tr>
<tr>
<td>GPA in Kazakh</td>
<td>Complexity</td>
<td>0.005</td>
<td>0.170</td>
<td>0.681</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>3.855</td>
<td>0.181</td>
<td>0.672</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>0.136</td>
<td>0.006</td>
<td>0.937</td>
</tr>
<tr>
<td>Grade</td>
<td>Complexity</td>
<td>0.052</td>
<td>1.673</td>
<td>0.200</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>0.041</td>
<td>0.002</td>
<td>0.965</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>4.879</td>
<td>0.227</td>
<td>0.635</td>
</tr>
</tbody>
</table>
5.2. Research Question 2. "Does voice blogging improve L2 Kazakh speaking fluency among upper secondary school students?"

The impact of voice blogging on the number of syllables per minute of Kazakh speech was explored through a univariate test for post-test speaking fluency. The data in Table 2 shows that post-test fluency was attributable to the participants’ age ($F(1) = 6.860, p = 0.011$) and the group variable ($F(1) = 12.200, p < 0.001$). The independent t-test (see Figure 2) signifies that after the experiment, L2 speaking fluency among the audio blogging group ($M = 112.214, SD = 5.757$) significantly exceeded the control group ($M = 108.693, SD = 3.327$) ($t = 3.4, p = 0.001$, Cohen’s $d = 0.749$).

![Figure 1](image_url)  
*Figure 1. Unpaired t-test on upper secondary students' L2 Kazakh speaking complexity (n = 84). Mean is represented by horizontal bars. Error bars depict standard deviation.*

![Figure 2](image_url)  
*Figure 2. Unpaired t-test on upper secondary students' L2 Kazakh speaking fluency (n = 84). Mean is represented by horizontal bars. Error bars depict standard deviation.*
5.3. Research Question 3. "Does voice logging improve L2 Kazakh speaking accuracy among upper secondary school students?"

The univariate test for learners' post-test Kazakh speaking accuracy was carried out to evaluate how weekly voice sharing influenced the number of grammatical and lexical errors per 100 words of oral output. The results (see Table 2) indicated that there was no significant effect of the experimental condition or covariates on the accuracy of students' Kazakh speech. As presented in Figure 3, the rate of errors in the bloggers' oral language (M = 81.928, SD = 4.852) at the end of the research was lower relative to the non-bloggers (M = 83.526, SD = 4.092), but this difference was statistically irrelevant (t = 1.6, p = 0.11, Cohen's d = 0.356).

5.4. Research Question 4. "What are the students' perceptions of the voice logging course?"

Table 3 displays the means and standard deviations of the participants' responses to the feedback questionnaire. It was deduced from the data that learners chiefly reported a positive attitude toward their voice-sharing experience in this study. The most favorable points of the educational blogging were its potential to catalyze Russian-speaking students' zest for learning Kazakh (M = 4.584), encourage course recommendation to other students (M = 4.648), and general satisfaction with the course (M = 4.539). The least favorable side of voice blogging was reportedly its difficulty in self-pacing (M = 3.715), as some participants may have struggled to manage their own learning process through this method.

However, on average, the course received high ratings in terms of its contribution to the students' progress in learning Kazakh, as opposed to what it might have been if they had not participated in it (M = 4.170). Furthermore, the blogging partakers mostly got what they expected from the course (M = 4.452). Regarding future engagement,
the upper secondary school students expressed a positive inclination toward further involvement in similar learning opportunities (M = 4.306).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I found it easy to pace myself successfully through this course.</td>
<td>3.715</td>
<td>0.660</td>
</tr>
<tr>
<td>This course met my learning expectations.</td>
<td>4.452</td>
<td>0.391</td>
</tr>
<tr>
<td>I gained more interest in the Kazakh language in this course.</td>
<td>4.584</td>
<td>0.252</td>
</tr>
<tr>
<td>The voice blogging course helped me make more progress in learning Kazakh than if I had not taken it.</td>
<td>4.170</td>
<td>0.543</td>
</tr>
<tr>
<td>Overall, I was satisfied with this voice blogging course.</td>
<td>4.539</td>
<td>0.310</td>
</tr>
<tr>
<td>As a result of my experience with this course, I would like to take another voice blogging course in the future.</td>
<td>4.306</td>
<td>0.287</td>
</tr>
<tr>
<td>I would recommend voice blogging to other students.</td>
<td>4.648</td>
<td>0.192</td>
</tr>
</tbody>
</table>

6. DISCUSSION

This study aimed to investigate the effect of a 12-week-long voice blogging course on L2 Kazakh speaking performance among upper secondary students whose native language is Russian. The learners in the experimental group demonstrated a significantly higher level of complexity in their post-test speaking in relation to the non-blogging comparison group. This is in consonance with what was reported in earlier research on blogging activities among EFL learners (Jin, 2024). The results suggest that regular practice of recording and sharing voicemails helps students enhance their ability to construct more complex sentences and express their thoughts in a more sophisticated manner. Furthermore, the study revealed that voice blogging contributed to improved L2 Kazakh oral fluency. The experimental group exhibited a higher number of syllables per minute in their post-test narrations compared to the control group. This might mean that continuous engagement in voice blogging, where students had to record and share their spoken messages, fostered a more fluent and natural production of Kazakh speech. However, no significant effect of the verbal practice on L2 Kazakh speaking accuracy was found. Although the bloggers’ oral language contained a slightly lower rate of grammatical and lexical errors in comparison to their counterparts, the difference was not statistically significant. One possible explanation for this could be the limited duration of the intervention. The 12-week-long voice blogging course might have provided sufficient time for students to improve complexity and fluency, but it may not have been long enough to significantly impact accuracy.

On average, the participants had a positive attitude toward this L2 experience. They perceived audio blogging as a beneficial tool for learning Kazakh, with high satisfaction levels and the intention to recommend it to other students. However, some respondents reported difficulties in self-pacing, suggesting the need for additional support and guidance to help them manage their learning processes effectively. Several possible explanations can be offered for the effects of voice blogging on the L2 speaking strands observed in this study. Concerning reasons why audio blogging improved the treated individuals’ oral complexity and fluency in Kazakh, voice blogging allegedly provided them with extensive speaking practice on a variety of topics with a low-anxiety and supportive environment to practice their L2 speaking, which could, in turn, increase their confidence to express themselves more freely and use more complex sentence structures. This is somewhat supported by the fact that the meld of cooperative learning and tasks outside of class time was shown to increase L2 enjoyment and reduce foreign language anxiety (Toyama & Yamazaki, 2021). Also, lowered anxiety helps individuals experience fewer challenges in locating their words while speaking a second language compared to those who feel more anxious (Zuniga & Simard, 2022).

A possible explanation for why the intervention failed to boost the accuracy of participants’ speech is that there was not enough corrective feedback on the blog entries, which might have prevented students from noticing and
correcting their errors. The efficacy of educators’ corrective feedback on L2 oral accuracy has not yet been extensively researched. In a study by Nha (2021) corrective feedback had a positive impact on EFL learners’ oral accuracy. Another reason could be that the voice blogging involved a relatively short period of time (12 weeks) for students to improve their accuracy, which might have been insufficient for them to consolidate their knowledge of Kazakh grammar and vocabulary.

Additionally, these findings can be explained from the perspective of the trade-off effect. According to the limited attentional capacity model Skehan (2009) L2 learners have limited cognitive resources to allocate to different dimensions of language performance when speaking. Therefore, they may prioritize one aspect over another depending on their goals, tasks, or contexts. This has been further substantiated by empirical investigations (Garcia-Ponce, Lengeling, Mora-Pablo, & Conaway Arroyo, 2023; Xu, Zhang, & Gaffney, 2023). In the current study, the participants may have perceived linguistic complexity and fluency as more important or challenging than the accuracy of expressing their ideas in Kazakh.

In terms of Kazakh oral complexity, the between-group difference could be attributed to the nature of voice blogging, which requires students to express their thoughts and ideas using more complex sentence structures and vocabulary. By regularly practicing their language use in voicemail recordings, the students were likely motivated to experiment with more complex linguistic structures and patterns. This trade-off effect implies that, by prioritizing complexity, students might have focused less on accuracy, resulting in more errors and more emphasis on the creative elements of their speech.

Regarding L2 Kazakh speaking fluency, overperformance was observed in the experimental group over their counterparts. This could be explained by the relatively continuous and regular engagement in voice blogging activities, which gave students a platform to develop their oral fluency skills, allowing them to speak at a more natural pace and rhythm. The trade-off effect in this case suggests that while the audio bloggers may have achieved greater fluency, they may have sacrificed some accuracy in their spoken language due to the focus on maintaining a smooth flow of speech.

The lack of a significant effect of voice blogging on speaking accuracy implies that, while focusing on complexity and fluency, learners may have paid less attention to the accuracy of their Kazakh oral output. They may have concentrated more on uttering their ideas and communicating their messages effectively, which could have resulted in a higher number of grammatical and lexical errors. This trade-off between fluency and accuracy stresses the need for a balanced approach in language instruction, where explicit instruction and targeted error-correction exercises are incorporated alongside audio blogging activities.

Finally, regarding the students’ perceptions of the voice blogging course, it seems that they mostly had a positive attitude toward it and appreciated its benefits for their Kazakh speaking performance. This could be explained by the fact that voice blogging offered them a novel, interactive, and engaging way of learning Kazakh, which increased their interest and enjoyment in the language. Audio blogging may have given them an opportunity to practice their Kazakh speaking skills in a flexible, convenient, and personalized manner, which suited their learning needs and preferences.

6.1. Implications and Recommendations

This study’s findings have several implications for research and practice in foreign language teaching and learning. First, the results emphasize the potential of audio blogging as an effective method for enhancing L2 Kazakh speaking complexity and fluency. Voice blogging can be seen as more than just an avenue for monologic talk; it can foster learners’ desire to communicate in the target language and encourage self-expression.

The evidence lends some support to a surmise that Kazakh language teachers can integrate voice blogging into their out-of-class instructional practices in order to provide students with opportunities to practice and improve their speaking abilities in a meaningful and authentic way. Provided that this verbal activity is supported by a
mentor or an interest-based community, L2 students can receive personalized feedback and reflect on their language use.

However, teachers should be aware that voice blogging may not improve all aspects of L2 speaking performance equally, so they should consider how to design and implement audio blogging activities that can address students' specific needs and goals. In particular, teachers could combine voice blogging with other types of tasks, such as role-play or debates.

For instance, Qiu and Cheng (2022) examined the influence of opinion exchange and storytelling tasks on the speaking performance of 20 EFL learners and discovered that during the co-construction of stories, the learners spent more time, engaged in more turn-taking, and more frequently addressed language-related issues compared to opinion exchange tasks.

These findings underscore the significance of considering task type in L2 speaking instruction. With the lack of any prior research on the fluency, accuracy, and complexity of spoken Kazakh, this study could serve as a starting point for investigating the impact of recurrent speech practices on these aspects, as well as for further exploration of the interactions between these dimensions.

6.2. Limitations and Further Research

This study has some limitations that can be addressed in future research. First, it was conducted in a single school with a relatively small sample size (n = 84), which may limit the generalizability of the findings to similar populations and settings. In addition, the study was restricted to upper secondary school students who were native Russian speakers.

Replication studies involving more diverse participant pools and multiple schools would strengthen the external validity of the findings obtained here. Further investigations should include a wider range of participants, such as different age groups and language backgrounds, to explore potential variations in the impact of voice blogging.

In addition, comparing the influence of audio blogging across different learner groups could help identify the factors that moderate its effectiveness and provide tailored recommendations for specific learner populations.

Second, the duration of the intervention was limited to 12 weeks, which may have constrained the extent of the observed effects; therefore, it would be worthwhile investigating the outcomes from a long-term perspective.

Lastly, the tool for evaluating oral production in this study was monologic in nature, and it remains unclear whether the tested indices would have been the same in the conversational context. Further advancement in researching the quantitative changes in oral foreign language skills through out-of-class speaking activities could be facilitated by later works that assess whether the gains from such interventions actually transfer to face-to-face communication scenarios.

7. CONCLUSION

This scholarly work examined the influence of a 12-week-long voice blogging course on L2 Kazakh speaking proficiency among upper secondary school students who were native Russian speakers. The findings revealed that voice blogging had a positive influence on L2 Kazakh speaking complexity and fluency but did not significantly impact speaking accuracy.

Retrospective perception survey findings showed that the learners who participated in the experimental voice recording and posting mainly found the course manageable, felt that it met their learning expectations, and elevated their interest in the Kazakh language along with their success in its acquisition as opposed to what it might have been if they had not engaged in it. On the whole, they expressed a rather high level of satisfaction with the course, as well as an inclination for future engagement and a willingness to recommend voice blogging to other students, which further validates the value of audio blogging as an engaging and effective educational approach. By regularly
recording and sharing voicemail messages, the students had the opportunity to practice using more complex sentence structures and vocabulary, which led to improved complexity of their speech. Voice blogging also fostered more fluent and natural production of Kazakh speech, as students in the experimental group exhibited a higher number of syllables per minute in their post-test narrations.

However, the lack of a significant influence on speaking accuracy indicates that voice blogging may not have prioritized accuracy in students’ oral output. The focus on complexity and fluency may have resulted in a higher number of grammatical and lexical errors.

The findings advocate the promise of voice blogging as a helpful approach for enhancing L2 oral skills. Hence, it is recommended that foreign language teachers consider incorporating audio blogging activities into their students’ learning outside of the classroom.

Educators are likely to amplify learners’ oral performance by providing L2 students with opportunities for voice-based communication and feedback. However, to this end, teachers should adopt holistic pedagogical strategies encompassing interrelated but competing components of speaking proficiency. Future research could evaluate the long-term effects of audio blogging beyond the intervention period employed in this study and the transferability of the gains to face-to-face communication scenarios. Also, exploring the impact of this extracurricular activity on different learner groups and settings and the factors that moderate its effectiveness would be an interesting and beneficial approach for future research.

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