

A SYSTEMATIC REVIEW ON PODCASTING AS A PEDAGOGICAL TOOL: ENHANCING SPEAKING CONFIDENCE THROUGH DIGITAL AUDIO PRODUCTION

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Abstract. *This systematic review assesses the impact of using podcasts as an instructional tool to increase the ability of English as a Second/Foreign Language (ESL/EFL) students to speak clearly and feel confident speaking English at universities. While the review includes a large body of research globally, it will include research specifically related to Uzbekistan. Overall, the results demonstrate that the use of digital media such as podcasting can be used to reduce Foreign Language Anxiety (FLA) for ESL/EFL students at the university level. Additionally, the findings show that through its iterative cycle (scripting, recording, editing, and self-evaluation), podcasting provides students with a "safe" space where they can take risks and experiment with new forms of expression. In addition, the review discusses various pedagogical models that have been applied to teaching English at international and national universities including the use of AI-assisted speech analysis, collaborative digital projects and other emerging technologies. The overall results of this review indicate that the use of podcasts improve the quality of students' speech segments and suprasegmental, however, they most importantly increase learner's sense of control over what they do in class, motivation and confidence. Based upon the work of Milimo Mundia (2025), this study advocates for a technologically based model for teaching English that focuses on increasing student's agency in learning, reducing their psychological discomfort with communicating in English and increasing their communicative competency. Overall, the studies reviewed support the idea that podcasting is one way in which technology is changing English language education.*

Key words: *Podcasting, English as a second/foreign language, Speaking Confidence, Digital audio production, Educational Technology, Learner Autonomy, Technology-Enhanced Language Learning.*

СИСТЕМАТИЧЕСКИЙ ОБЗОР ПОДКАСТИНГА КАК ПЕДАГОГИЧЕСКОГО ИНСТРУМЕНТА: ПОВЫШЕНИЕ УВЕРЕННОСТИ В УСТНОЙ РЕЧИ ЧЕРЕЗ ЦИФРОВОЕ АУДИОПРОИЗВОДСТВО

Аннотация: *Данный систематический обзор оценивает влияние использования подкастов в качестве учебного инструмента на развитие навыков устной речи и уверенности у студентов, изучающих английский язык как второй/иностраный (ESL/EFL), в университетах. Несмотря на широкий охват*

международных исследований, в обзор также включены работы, относящиеся к Узбекистану. В целом результаты показывают, что использование цифровых медиа, таких как подкастинг, способствует снижению уровня тревожности при изучении иностранного языка (*Foreign Language Anxiety — FLA*) у студентов вузов. Кроме того, установлено, что благодаря циклическому процессу (написание сценария, запись, редактирование и самооценка) подкастинг предоставляет студентам «безопасное» пространство, в котором они могут экспериментировать и пробовать новые формы выражения. В статье также рассматриваются различные педагогические модели преподавания английского языка в международных и национальных университетах, включая использование анализа речи с применением искусственного интеллекта, совместные цифровые проекты и другие современные технологии. Общие результаты показывают, что подкастинг улучшает качество речевых сегментов и супrasegmentных характеристик речи, а также повышает мотивацию, уверенность и чувство контроля студентов над процессом обучения. На основе работ *Milimo Mundia (2025)* в исследовании предлагается технологически ориентированная модель обучения английскому языку, направленная на развитие автономии учащихся, снижение психологического дискомфорта при общении и повышение коммуникативной компетенции. В целом рассмотренные исследования подтверждают, что подкастинг является одним из способов трансформации преподавания английского языка под влиянием технологий.

Ключевые слова: подкастинг, английский как второй/иностраный язык, уверенность в устной речи, цифровое аудиопроизводство, образовательные технологии, автономия обучающихся, технологии в обучении языкам.

PODKASTNI PEDAGOGIK VOSITA SIFATIDA QO'LLASH BO'YICHA TIZIMLI TAHLIL: RAQAMLI AUDIO ISHLAB CHIQISH ORQALI NUTQDAGI ISHONCHNI OSHIRISH

Annotatsiya: Mazkur tizimli tahlilda podkastlardan ta'lim vositasi sifatida foydalanishning ingliz tilini ikkinchi/xorijiy til (*ESL/EFL*) sifatida o'rganayotgan talabalar nutq ravonligi va o'ziga bo'lgan ishonchini oshirishga ta'siri baholanadi. Tadqiqot global miqyosdagi ilmiy ishlarni qamrab olgan holda, O'zbekistonga oid tadqiqotlarni ham o'z ichiga oladi. Umuman olganda, natijalar podkast kabi raqamli media vositalari talabalar orasida xorijiy tilni o'rganishdagi tashvish (*FLA*) darajasini kamaytirishga xizmat qilishini ko'rsatadi. Shuningdek, podkast yaratishning bosqichma-bosqich jarayoni (ssenariy yozish, yozib olish, tahrirlash va o'z-o'zini baholash) talabalarga yangi ifoda shakllarini sinab ko'rish va tajriba qilish imkonini beruvchi "xavfsiz" muhit yaratadi. Bundan tashqari, maqolada xalqaro va milliy universitetlarda ingliz tilini o'qitishda qo'llanilayotgan turli pedagogik modellarga, jumladan, sun'iy intellekt yordamida nutqni tahlil qilish, hamkorlikdagi raqamli loyihalar va boshqa zamonaviy texnologiyalarga e'tibor qaratilgan. Tahlil natijalari podkastlardan foydalanish talabalarning nutq sifati, ayniqsa segment va suprasegment xususiyatlarini yaxshilash bilan birga, ularning motivatsiyasi, o'zini boshqarish hissi va ishonchini oshirishini ko'rsatadi. *Milimo Mundia (2025)* ishlariga

asoslanib, ushbu tadqiqot ingliz tilini o'qitishda texnologiyaga asoslangan, o'quvchilarning mustaqilligini oshiruvchi, psixologik noqulaylikni kamaytiruvchi va kommunikativ kompetensiyani rivojlantiruvchi modelni ilgari suradi. Umuman olganda, ko'rib chiqilgan tadqiqotlar podkast texnologiyasi ingliz tili ta'limini zamonaviylashtirishda muhim omillardan biri ekanini tasdiqlaydi.

Kalit so'zlar: *podkast, ingliz tili (ikkinchi/xorijiy til), nutqdagi ishonch, raqamli audio ishlab chiqish, ta'lim texnologiyalari, o'quvchi mustaqilligi, texnologiyalar asosida til o'rganish.*

INTRODUCTION

The rapid development of technology has changed many aspects of higher education. Most notably, in terms of how we teach languages. Over the past decade, there has been a movement toward Technology-Enhanced Language Learning (TELL) which combines traditional methods with new digital tools to enhance student performance. The TELL paradigm has altered the traditional classroom structure of English as a foreign language (EFL) to make it more interactive, dynamic and multimodal. One of the newer tools that has been developed and researched as part of the TELL paradigm is podcasting. This innovative tool enables teachers to create opportunities for students to engage with each other during spoken communication. It also increases learner involvement and builds learner confidence.

Although some oral communication techniques traditionally called speaking practice may occur once or twice in a semester for a short period of time, podcasting offers students the opportunity to complete a cyclical process of creating spoken content. Students produce scripts, record them, edit them and reflect on their own performances in order to build their linguistic competencies in a flexible environment. Beyond improving students' abilities to communicate fluently and correctly, this process-based approach also fosters creative thinking, autonomous learning and critical thinking.

One of the challenges facing university students especially those majoring in fields outside linguistics is the emotional obstacle known as speaking anxiety. For example, many students studying business administration, engineering and computer science are hesitant to express themselves in English because they fear being ridiculed or corrected for their mispronunciation or incorrect grammar.

According to Mundia (2025), integrating technology-enhanced instruction is key to developing oral competence for management students whose ability to effectively communicate is vital to achieving professional success. Digital tools like podcasting offer a comfortable environment for students to interact without feeling anxious about being judged while allowing them to become increasingly confident in their communicative abilities.

This systematic review aims to narrow the gap between theoretical applications of instructional methods worldwide and their practical implementations in different educational environments particularly focusing on Uzbekistan. This study reviews existing literature on both global scholarship and local research to investigate how podcasting facilitates improved speaking proficiency, decreases anxiety and promotes learner autonomy in post-secondary education.

LITERATURE ANALYSIS

The literature analysis establishes the connection to Swain's Output Hypothesis and the value of having students create digital audio productions. The transformation described in Thorne & Payne (2011) affords learners with the opportunity to communicate in ways that traditional classrooms can't. Thorne and Payne state "that online platforms afford unique possibilities for communication that cannot be replicated in the traditional classroom" (p. 15). Furthermore, there are many differences between passively consuming media and actively creating your own content. Creating one's own content provides a level of motivation and accountability for students to produce accurate and fluent oral presentations. Additionally, recent studies in North America and Europe have shown that student generated podcasts not only contribute to improved speaking proficiency but also facilitate other important learning outcomes such as critical thinking, collaboration, and research. Further, because student generated podcasts function as audible portfolios of student development over time, teachers are able to assess not only linguistic development but also intellectual development of their students. Thus, by participating in these types of authentic communicative activities, students are gaining real world competency which will help them succeed academically and professionally in today's fast changing world.

Podcasting allows for a type of multimodal learning that involves using all three of the senses, hearing, cognition, and technology. Students who learn through podcasting gain the ability to become digitally literate alongside improving their linguistic proficiency. This will enable them to compete and thrive in today's global economy. In addition to being recognized as an innovative methodology that addresses the needs of today's world, podcasting offers a way for institutions to meet educational standards.

As stated previously, in Uzbekistan, foreign language instruction has been modified to respond to globalization and reform efforts in education. The increased emphasis on using digital technologies at universities demonstrates a national interest in producing graduates that are linguistically competent and technologically savvy. As a result of this focus on digital education, podcasting has emerged as an attractive option for use as a pedagogical tool in Uzbekistan. Research conducted by scholars such as Kudratov (2022) and Ruzmetova (2023), demonstrate how blended learning models utilizing digital platforms are becoming increasingly prevalent within universities throughout Uzbekistan. In particular, Kudratov and Ruzmetova found that mobile technology enhanced student engagement, especially given the high percentage of university students that utilize smartphones within the country. For example, the fact that most students' first access to digital content occurs via their mobile devices creates a viable means for implementing mobile based pedagogies such as podcasting.

Additional contributions made by Mundia (2024) include the application of AI assisted tools to support the use of digital learning environments. Using AI enabled tools provides students with immediate feedback regarding their pronunciation, fluency and phonological accuracy. Therefore, AI supported digital learning environments can be used as a means of supporting individualized learning and the acceleration of language acquisition. The use of AI to evaluate student produced podcasts will allow students to view examples of their speech patterns, identify areas in need of improvement, and increase their confidence in communicating orally. Uzbekistan's national plan to digitize higher education and encourage innovations in teaching and learning also supports the increasing adoption of technology-based

methods. Universities in Central Asia will be well-positioned to graduate students who will be prepared for employment globally. Therefore, podcasting may represent an area where pedagogical innovation meets national educational development.

METHODOLOGY

A systematic review was completed according to PRISMA guidelines for methodological clarity, transparency and reproducibility. The primary database search included Google Scholar, ERIC, Science Direct etc. Studies searched dated back to 2015-2026. This date range was selected due to its alignment with current trends in language learning with digital technologies and educational technology. To establish inclusion criteria for determining relevant studies for consideration, selected studies needed to focus exclusively on university level EFL/English for Specific Purposes (ESP) learners; investigate student-created podcasts as pedagogical tools; and report empirical data related to improvements in speaking confidence, fluency or pronunciation. Qualitative and quantitative research design were considered for selection including experimental, quasi-experimental and mixed-method studies. In order to provide contextual information about the Uzbek educational environment, studies from Central Asia were also included. Studies were excluded if they did not address oral proficiency; lacked empirical evidence; or were limited to investigating listening comprehension without examining speaking performance. All data collected were synthesized thematically to determine patterns or trends associated with speaking confidence; learner autonomy; and integration of technology into the learning experience.

RESULTS

The results and discussion section of this study examines the findings in regards to speaking confidence and phonological/prosodic gains due to podcasting. Many studies have shown that podcasting has had a positive influence on student's speaking confidence. The "shielding" effect of the microphone allows students to communicate orally in a safe and supportive environment. Students who experience a great deal of anxiety when communicating verbally with others tend to feel more comfortable and empowered while creating podcasts. Mundia's (2026) quasi-experimental study using digital speech tools with management students in

Uzbekistan found that students showed statistically significant improvements in oral competency over students taught traditionally. Additionally, the ability to edit and record again affords students a psychological safety net. Thus, they are able to be creative and risk taking with language in an area where they may previously have been afraid of being embarrassed. Furthermore, podcasting supports reflective learning by giving students opportunities to assess their own development. This back-and-forth process builds self-confidence, fosters a growth mentality, and supports long-term development of communicative abilities.

Additionally, the creation of podcasts produces measurable improvements in pronunciation, intonation, and fluency. To create intelligible and understandable audio requires students to pay attention to the phonological and prosodic characteristics of spoken English. With repeated attempts at producing audio and listening to previous recordings students develop increased sensitivity to the rhythmic qualities of speech such as stress patterns, rhythm, and intonation. Recording software used in the Uzbek context provides visual and auditory evidence to help students address interference from their native languages. The added benefit of using AI-based speech analysis software provides immediate feedback and suggestions for correction based upon individualized analyses. Research conducted globally indicates that digital audio production improves both segmental aspects (vowel and consonant sounds) and suprasegmental aspects (pitch, stress, and intonation). Therefore, podcasting is a very effective tool for developing students' total oral proficiency.

RECOMMENDATIONS

Several recommendations can be made to stakeholders based upon the findings of this systematic review. For example, university administration should provide low-cost digital recording stations throughout campus, and ensure reliable access to internet services. University administrators should also provide incentives to faculty members who incorporate podcasting into their courses. Faculty members should employ a process-based pedagogy that incorporates scripting, rehearsing, recording, and reflecting when working with students on podcasts. When teaching students how to script, rehearse, and record, faculty members can encourage students to

demonstrate linguistic accuracy, creativity, and confidence. Faculty members can also provide additional opportunities for students to learn from one another by engaging them in peer evaluation and cooperative activities. Curriculum developers are recommended to make digital communication a major objective within all EFL and ESP programs. By embedding podcasting into program curricula, universities can assure that students develop important 21st century skills such as critical thinking, digital literacy, and professional communication. Policymakers and educational institutions in Uzbekistan are urged to continue supporting innovation in language education through technology-related initiatives. Strategically integrating AI-supported tools and digital platforms will increase Uzbekistan's position in the global academic and professional communities.

CONCLUSION

Based upon the findings of this systematic review of research related to podcasting in EFL settings, podcasting is much more than simply a new technological application. Podcasting is a well-established and powerful pedagogical tool for satisfying both the cognitive and affective needs of today's EFL learners. Podcasting changes the emphasis from performance to production. Consequently, it reduces the affective barrier for many students enabling them to build confidence and communicative abilities. The synthesis of research from around the globe and from regional sources clearly indicate that digital audio production increases pronunciation, fluency, learner autonomy, and critical thinking. In addition, since podcasting has aligned itself with the current national educational reform efforts toward digital transformation and global competition in Uzbekistan, it is a logical component of the country's education system. The inclusion of artificial intelligence adds even greater potential to improve effectiveness by providing feedback tailored to the individual learner and supporting ongoing improvement.

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