



REVIEW

Formation of Communicative Competence of Students Based on the Use of Digital Technologies

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ABSTRACT

Rapid advancements in digital technology have transformed the way education is delivered, especially by strengthening students' communication abilities. This is an important capability in today's global digital economy. This study systematically reviews and analyzes existing research on the role of digital furniture in promoting communication competence in educational environments. The aim is to highlight key trends, issues and challenges related to digital integration in learning environments. It uses bibliometric analysis to synthesize results from 300 publications from major academic databases. The research study used the VosViewer platform for bibliographic mapping. This reveals key trends in the adoption of digital platforms such as Google Classroom and Zoom, which have been shown to facilitate engagement, working together and communicating in the virtual classroom. The results indicate that these technologies play an important role in improving language and communication abilities. This is especially true in the context of higher education. Key issues identified

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include: student engagement; personalized learning and policy implications of digital transformation. However, the results also point to challenges, such as reduced face-to-face interactions. And digital workload may occur. This emphasizes the need for a balanced approach to digital and traditional teaching. In conclusion, digital tools provide great benefits to communication training. Therefore, the integration of digital tools into the educational curriculum must be carefully planned to address the pedagogical, technical, and psychological dimensions. The findings from this study offer valuable information for educators and policymakers who want to balance between digital and traditional methods of support in the final analysis of students.

Keywords: Communicative Competence; Competence; Communication; Digital Technology; High School Students; Formation; Higher Education; Digitalization in Education; Bibliometric Analysis

1. Introduction

With the rapid development of digital technologies, education is undergoing significant changes that require new approaches to learning and developing students' competencies. One of the key competencies that receives special attention in the process of digitalization of education is communicative competence, especially when learning foreign languages. Modern educational systems face the challenge of integrating digital technologies into the learning process to ensure effective student interaction and prepare students for the demands of the digital economy. As noted by Nykitina^[1] and Dzhusubalieva, D.^[2], digital communication technologies play an important role in improving language proficiency, which is especially relevant in the context of developing competencies required for professional activities in a globalized digital environment.

The use of educational platforms such as Google Classroom has been shown to be effective in improving language training and developing communicative skills^[3]. However, despite the benefits of digital learning, there is a problem of reduced face-to-face interaction between students, which may negatively affect the development of interpersonal communication skills. At the same time, students often prefer digital forms of learning due to their flexibility and convenience^[4]. This emphasizes the importance of finding a balance between digital and traditional methods, and the need to adapt educational programs to meet the needs of today's digital society.

The digitalization of education is also relevant in the context of building the communicative culture of adolescents, who, although having high levels of digital literacy, may face difficulties in intergenerational communication^[5].

Thus, there is a need to develop educational strategies to support students' communicative competence in the digital space.

Digital technologies, according to many studies^[6, 7], contribute to the creation of innovative educational environments where students can interact, collaborate and self-actualize. These tools make the educational process more flexible and accessible, which is especially important in distance learning environments. At the same time, digital technologies contribute not only to learning but also to the formation of professional culture, developing students' skills necessary for their future professional activities in the digital economy^[8].

In addition, digital technologies have the potential to achieve sustainable development goals by promoting inclusive and quality education^[9]. In the Russian education system, they also contribute to the development of personalized learning paths and reduce the workload of teachers^[10]. However, the digital literacy of teachers and their readiness to adapt to new teaching conditions remains an important aspect of the successful implementation of digital technologies in the educational process^[11].

Finally, recent research emphasizes the importance of digital technologies in increasing student engagement in the learning process^[12]. Despite the progress already made in the use of tools such as blogs, mobile learning and assessment platforms, further research is needed to develop effective strategies for online interaction and intercultural learning, which is particularly important in the context of globalization and the increasing role of digital education^[13, 14].

Thus, the relevance of the formation of students' communicative competence based on the use of digital technologies lies in the need to adapt the educational process to the

new requirements of the digital economy and the formation of students' skills that contribute to their successful professional activity.

The purpose of this study is to conduct a systematic review and analysis of scientific publications devoted to the formation of students' communicative competence through the use of digital technologies. In the context of the global digitalization of education and the rapid development of technologies, there is an increasing need to assess their impact on the educational process, as well as to identify the most effective approaches and tools to improve students' communicative skills.

The study intends to:

- to generalize the existing scientific approaches to the use of digital technologies for the formation of students' communicative competence. This includes the study of both theoretical foundations and practical aspects of applying digital platforms, tools and techniques in the educational environment.
- to evaluate the role of digital technologies in the development of the main components of communicative competence, such as oral and written communication skills, the ability to interact in a multimodal environment, and intercultural communication. Modern educational technologies such as online platforms, gamification, and distance learning can significantly change the traditional ways of student communication and interaction, which requires careful consideration.
- identify the most effective digital tools and technologies to improve communication skills. An important aspect is to analyze successful cases of using such tools as Google Classroom, Zoom, and other educational platforms, as well as their impact on student engagement and the quality of the educational process.
- explore possible problems and challenges associated with the integration of digital technologies into the educational process. This may include difficulties encountered in distance learning, such as lack of face-to-face interaction, student information overload, and the need to improve the digital literacy of instructors.
- to identify perspectives for further research on building communicative competence through digital technologies, given the rapid development of new technologies and their potential to improve educational outcomes.

- This objective aims not only to systematize the accumulated knowledge in this area but also to offer recommendations for further improvement of educational practice with a focus on the formation of communicative competence in students.

The hypothesis of this study is as follows: the use of digital technologies in the educational process contributes to a more effective formation of students' communicative competence compared to traditional teaching methods, provided that digital tools are integrated taking into account pedagogical approaches and specifics of educational content.

2. Literature Review

Recent research highlights a growing interest in using technology to enhance student engagement in higher education. Studies have found that educational technology can support various dimensions of engagement, with behavioral engagement being the most prevalent^[15]. Tools such as blogs, mobile learning, and assessment platforms have shown effectiveness in promoting engagement^[16].

Modern education is faced with the need to introduce digital technologies to increase student engagement, especially in the field of humanities, where communicative competencies play an important role. Bedenlier shows that the use of educational technologies such as blogs, mobile learning and assessment tools contributes to the active participation of students in the educational process, which is confirmed by an analysis of 42 peer-reviewed articles published from 2007 to 2016 and indexed in four international databases^[12]. Most of the research focuses on language teaching and has been conducted in East Asian countries, where there is a high degree of technology implementation in the educational process, but there is a lack of theoretical justification for their application in the literature. Digital technologies have the most significant effect on students' behavioral involvement, manifested in their activity and participation in educational activities, whereas affective involvement, reflecting an emotional attitude to learning, turns out to be minimal, and a high level of affective alienation indicates possible negative consequences when using technologies without proper pedagogical support^[17, 18]. Therefore, it is important to ensure that teachers are trained to use technology to avoid overloading and reducing student motivation.

Further research is needed aimed at studying online collaborations and intercultural interaction, as well as expanding the use of qualitative research methods, which will allow a deeper understanding of the mechanisms of formation of students' communicative competence using digital technologies.

Greener^[13] records a significant increase in interest in the topic of student engagement in the educational process, especially in the context of the digitalization of education caused by the COVID-19 pandemic, which underlines the relevance of a comprehensive analysis of this phenomenon. There are three main components of engagement in the literature—behavioral, cognitive and affective, which reflects the versatility of this concept and the need to study it in various contexts. The Zhoc model^[19] expands this concept to include factors such as academic engagement, cognitive and social interaction with peers and teachers, as well as emotional engagement, which indicates the importance of studying interpersonal interactions in an educational environment. At the same time, many studies have noted that the use of the term “engagement” often occurs without proper theoretical justification, which reduces its significance and leads to confusion between students' efforts and factors contributing to their involvement, such as the educational environment and technology^[20, 21]. Educational institutions play a key role in creating conditions for increased engagement, especially through the introduction of technologies such as artificial intelligence and data analytics that can optimize the choice of educational platforms, courses and tools.

However, traditional approaches to assessing engagement, such as observing students' attention in the classroom, are becoming less effective, since digital devices and applications can facilitate students' active participation in the learning process, even with visually passive behavior^[22, 23]. This requires the development of new methodologies for assessing engagement, taking into account changes in the educational environment and student behavior, which will allow for a deeper understanding of the mechanisms of formation of their communicative competence using digital technologies and will make it possible to increase the effectiveness of the educational process.

3. Methodology

This study employed a bibliometric analysis to systematically examine the research landscape surrounding the formation of students' communicative competence through digital technologies. Bibliometric analysis is a quantitative method for evaluating scientific literature. This includes publications, references, authors, and institutions^[24]. It has become an important part of research evaluation. Particularly in the scientific and applied fields^[25], this technique has shown considerable growth. With a remarkable increase in bibliometric publications over the last decade^[24], bibliometrics demonstrates interdisciplinary applications in different knowledge domains^[26]. Recent studies have used bibliometric analysis to examine specific research topics, such as scientific inquiry. Revealing trends in publication years, keywords, influential journals, languages and countries of participation^[27], the impact of bibliometric studies increases. This is especially true in non-information librarian science classes. There are articles in various fields of study. that has shown the greatest impact^[25]. This method plays an important role in the evaluation and dissemination of scientific work. which contributes to the development of science^[26]. The research was conducted using the VosViewer, a powerful software tool for bibliographic analysis and visualization of scientific research. It is used to monitor research trends. Create new avenues for investigation and map scientific issues^[28, 29]. The software allows users to create and display bibliographic relationships between variables, such as co-occurring data in publications^[28]. VOSviewer's functionality has been extended to text mining and visualization of large amounts of text data^[30]. Its uses include collaborative analysis of researchers. Publication of research topics and support for topic coordination services and archiving activities^[30]. The impact of VOSviewer can be studied using a link-based webometric method, which examines mentions of the software across platforms. This includes academic literature, websites, and social media. This online guide - demonstrates the importance of VOSviewer as both a research resource and a subject of interest in various online contexts^[31].

4. Data Collection

The study started by selecting articles from the Web of Science database, which is an important scientific reference

database. It is widely used in research and review papers in various knowledge fields^[32], providing comprehensive information on research publications and references. It supports a wide range of use cases, from daily searches to providing analytics^[33]. Although WoS prevails, Scopus has emerged as a strong competitor. Both databases are increasingly used in academic papers^[34]. They are of great value for meta-analyses and are used by researchers in both developed and developing countries. The data from the Web of Science database was collected in July 2024^[34].

After the preliminary selection of articles, graphical representations of the data, such as cloud clusters, were built on the VosViewer platform, which allowed visualizing the relationships between the studied topics and keywords. The following criteria were established to ensure the relevance and representativeness of the collected data:

- Period of publication: selection of literature published in the last 5 years, thus reflecting current trends in digital technology and education.
- Types of work: inclusion of empirical studies, theoretical reviews and applied research to ensure the diversity of approaches and results presented.
- Keywords searched: keywords such as “digital technologies”, “active learning”, “digital education”, “student engagement”, “higher education”, “future skills”, “communication competence”, “digitalization of foreign language education” were used to ensure that a wide range of research related to the topic was covered.

The collected literature was analyzed using two main methods:

Quantitative analysis: evaluation of the number of publications on the topic in recent years, which allows visualizing the dynamics of researchers’ interest in the field and identifying the main trends.

Qualitative analysis: research key directions of research and approaches, presented in the literature, using graphs from VosViewer for generalization and synthesis of information about the existing methods, theory and successful practice of digital technology for the formation of communication skills of students.

In the query “digital technologies,” using filters such as “Educational Research” and specifying publication periods from 2020 to 2024, 15,341 results were found. The queries were expanded with additional keywords: “communicative

competence,” “active learning,” “digital pedagogy,” “digital learning,” and others. Each keyword was chosen because it was directly related to the main topic of the study, such as the development of communication abilities and active learning methods. This ensures that the research addresses important issues that contribute to understanding the impact of digital technologies on education. Keyword selection was also informed by a preliminary literature review. It identifies common terms and concepts used in recent studies. This helps limit the focus to issues that are actively discussed in the academic community.

This demonstrates the active interest of researchers in the use of digital technologies in education and their impact on the formation of students’ competencies, including communicative competence.

The graph of publications from 2020 to 2024 shows the dynamics of interest in the topic over the period (**Figure 1**). In 2020, the number of publications is around 3200, followed by a slight increase to a peak of close to 3500 publications in 2021. In 2022, the number of publications remains at a high level over 3400. However, in 2023 there is a decline to a level slightly below the 3200 publications mark. In 2024, there is a marked decrease in activity, with the number of publications dropping to around 2000, which is the lowest value for the entire period considered. The data for 2024 is incomplete as the year has not yet been finalized, which explains the decrease in the number of publications compared to previous years. The increase in the number of publications in 2020 and 2021 can be attributed to the coronavirus pandemic and the global lockdown, which led to a surge in interest in the digitalization of learning. During these years, many educational institutions were forced to switch to distance learning, which triggered a wave of research aimed at adapting learning processes to the new conditions and finding effective methods of implementing digital technologies in the educational environment. However, after the end of the lockdown and the gradual return to traditional forms of education, researchers’ interest in this topic began to decline. Nevertheless, despite the decrease in the number of publications in 2023 and 2024, the relevance of the topic of digitalization and the use of digital technologies in learning remains, as evidenced by the stable level of publication activity. This indicates that the issues of integrating digital technologies into the educational process continue to be important and require further research,

especially in the context of improving the effectiveness of learning and developing students' competencies.

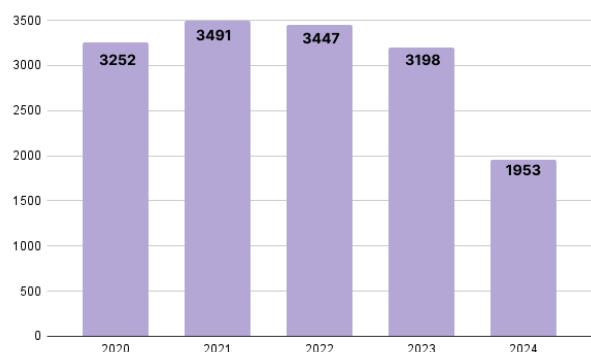


Figure 1. The number of publications on the subject from the Web of Science database from 2020 to 2024.

Note – screen from Web of Science Core Collection database (available at <https://clarivate.com/>).

Based on this data, further processing can be done, including visualization of keyword clusters, which will help to highlight the main trends and research directions.

Figure 2 shows the distribution of different types of scientific publications on the research topic that were identified using the VosViewer program. The treemap shows the number of publications of each type and their relative share.



Figure 2. Distribution of publications by document type in the Web of Science Core Collection database.

Note – screen from Web of Science Core Collection database (available at <https://clarivate.com/>).

Scientific Articles (Article) - 13,517: The main and largest category. This indicates that most research on the topic of communicative competence and digital technologies has been published as scholarly journal articles. This category occupies most of the space in the graph, indicating its significant dominance among all types of publications.

Conference Proceedings (Proceeding Paper) - 1,026: The second largest category. Conference proceedings re-

flect active discussion of a topic at scientific meetings and symposia.

Early Access - 1,095: The Early Access category indicates the number of publications that are not yet fully released but are already available for reading. It shows that the topic is still relevant and research is ongoing.

Review Articles - 624: Review articles also have a significant number, which confirms active research and synthesis of existing literature on the topic.

Book Chapters 163: Book Chapters may indicate deeper and more extensive research integrating the topic of digital technology and communicative competence in a pedagogical context.

Editorial Material - 126: This may include opinions and analyses by editors of scholarly journals about trends and relevance of the research topic.

Book Review - 34: A small number of book reviews may indicate the presence of published monographs or collections that are being reviewed in the academic community.

Corrections - 33: A relatively small category indicating that a number of articles have undergone changes or additions since publication.

Retracted Publication - 19: Cases of retracted publications may indicate identified problems with research quality or methodology.

Reprint and Retraction - 1 each: Very rare cases that represent a small number in the overall context.

Based on all of the above, the authors came to the conclusion that the large number of publications on the topic of the formation of communicative competence of students using digital technologies indicates that this issue is relevant in demand in the pedagogical and academic community. The variety of forms of publications, from scientific articles and conference proceedings to book chapters, testifies to the interdisciplinary nature of the topic. It covers pedagogical, psychological and technological aspects, which makes it attractive to researchers from different fields. It has also been observed that there is a significant number of review articles and conference proceedings, indicating the need for a systematic approach to the study of the topic. This creates prerequisites for the development of new theoretical and practical models for the formation of communicative competence using digital technologies.

Based on the information obtained from **Figure 3**, a

number of significant conclusions can be drawn regarding the formation of students' communicative competence using digital technologies. Studies covering various scientific disciplines demonstrate a high level of interest in this topic and emphasize the importance of an interdisciplinary approach. The largest number of publications comes from the field of education and educational research (15,341 publications), indicating the central role of this discipline in the study of the issue. This confirms the relevance of the issue for the pedagogical community and emphasizes the need to develop and implement innovative educational methods based on the application of digital technologies.

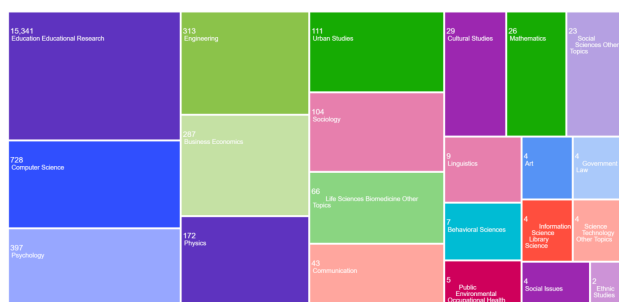


Figure 3. Distribution of publications by scientific fields in the Web of Science Core Collection database.

Note – screen from Web of Science Core Collection database (available at <https://clarivate.com/>).

Informatics and engineering sciences (728 and 313 publications, respectively) also have a significant impact on the research, which indicates the importance of digital tools and software solutions in the process of forming communicative competencies. The participation of disciplines related to technical aspects indicates the need to integrate pedagogical and technical approaches to create more effective educational programs. The role of psychology (397 publications) deserves special attention in this context, as understanding the cognitive and emotional factors that influence the learning process is key to the successful formation of communicative competencies.

Disciplines such as sociology and business economics (104 and 287 publications respectively) also make significant contributions to research. This emphasizes the importance of analyzing not only the educational and technological aspects but also the social and economic impact of the development of communicative competencies on students. The inclusion of these disciplines indicates the need to consider a wide range of issues related to social interactions, professional fit,

and the economic implications of developing communication skills in students. Communication studies (43 publications) complete this picture by highlighting the characteristics of interpersonal and group interaction in the digital environment.

The results of the bibliometric analysis demonstrate a high level of interest in the interdisciplinary research on the formation of students' communicative competencies in the context of digital technologies. This indicates the need for further research and development of integrated educational programs that will take into account pedagogical, technical and psychological aspects. The importance of psychological factors and the impact of digital technologies on cognitive processes require in-depth research to create more effective teaching methodologies. The inclusion of socio-economic and cultural aspects will allow for a comprehensive assessment of the impact of digital technologies on the educational system and the professional development of students.

In the presented cluster graph (Figure 4), based on the bibliometric analysis, it is possible to observe the key themes and the interrelationships between them in the field of developing students' communicative competence using digital technologies. The clusters are indicated by different colors and group-related key terms.

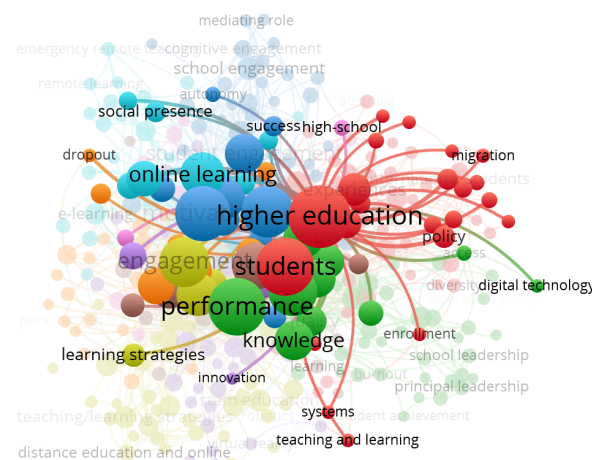


Figure 4. Clustering of concepts in the field of formation of students' communicative competence using digital technologies: results of bibliometric analysis.

Note – compiled by authors based on the VosViewer platform (available at <https://www.vosviewer.com/>).

(1) Higher Education cluster (blue color): This cluster includes terms such as higher education, students, online learning, social presence, and student engagement. It indicates a significant interest in the use of digital technologies in

higher education. Student interaction, engagement, and social presence in the online environment are important aspects of the study. The terms “engagement” and “collaborative learning” presented in the cloud clusters demonstrate the relationship between digital technologies and students’ behavioral engagement. It is hypothesized that the active use of digital technologies increases student engagement, which is an important factor for the successful development of communicative competencies. The bibliometric analysis shows that researchers increasingly point to the positive impact of digital tools, such as online platforms and interactive applications, on the development of students’ language and communication skills. VosViewer visualized these themes through key terms such as “higher education”, “students”, “online learning”, and “performance”, which highlights the importance of digital learning for communication. The high number of links suggests that higher education is a central theme connected to many other topics. This cluster has a high TLS as it connects concepts that are central to the digital education landscape. High TLS means higher education is not only a popular topic but also essential in tying together other themes, as it co-occurs with diverse educational topics. Since “higher education” is a widely researched and cited area, this cluster likely has a high citation count, highlighting its academic significance. This means that studies within this cluster are often referenced, emphasizing the relevance of higher education across various academic fields.

(2) Performance and Learning Strategies cluster (green and yellow): This cluster contains terms such as performance, learning strategies, knowledge, and innovation. This indicates the research focuses on learning strategies that enhance academic performance and effective learning in digital environments. Innovation and new approaches to learning also play a significant role in this theme.

(3) Policy and Digital Technology cluster (red): This cluster includes the terms policy, digital technology, diversity, and migration. Research related to this cluster focuses on regulation, digital technology adoption, and its impact on educational policies. The study of diversity and migration in the context of digital learning is also an important aspect. It is important to take into account that in the bibliometric analysis there are also terms related to possible negative aspects of digital learning, such as “dropout” and “burnout”. Consequently, the hypothesis suggests that a balanced use of

digital technologies in combination with traditional teaching methods is necessary to achieve a positive outcome.

(4) Teaching and School Leadership cluster (green): This cluster includes terms such as teaching and learning, school leadership, and enrollment. Topics related to teaching and leadership in school settings are addressed here. The organization of the learning process and the interaction of school leaders with teaching staff and students are important.

(5) Engagement and Social Presence cluster (orange): includes terms such as engagement, social presence, and e-learning. Important aspects are students’ engagement in online learning and their social presence in the virtual environment, which has a direct impact on learning effectiveness and the development of communication skills. In the graphs built in VosViewer, terms such as “collaborative learning”, “personalized learning” and “gamification” are highlighted, which indicates a significant interest in adaptive and interactive learning methods. These methods allow to take into account individual characteristics of students, which is assumed to improve communication skills. The Engagement and Social Presence cluster appears to connect strongly with terms like “learning strategies,” “innovation,” and “knowledge.” This cluster focuses on the conditions that drive student success, examining how engagement affects performance.

This cluster analysis identifies the main areas of research and the relationship between key topics related to the formation of students’ communicative competence based on the use of digital technologies. The most significant aspects are issues of higher education, learning strategies, educational policy and innovation, as well as social interaction in the digital environment. This highlights the need to integrate digital technologies into the educational process, develop new teaching methods and strategies, and create policies that support the effective use of digital resources in education.

5. Discussion

The conducted bibliometric analysis demonstrated the interdisciplinary nature of research in the field of the formation of students’ communicative competence using digital technologies, covering such disciplines as education, pedagogy, sociology and psychology. It is revealed that the main focus is on online learning and student engagement, which emphasizes the importance of using flexible educa-

tional models for active learning and communication skills development. The developed conceptual model combines digital tools and active learning methods, such as project activities, which contribute to the formation of students' skills of independent information retrieval and analysis, critical thinking and effective communication. An important contribution of the research was the identification of social factors influencing the development of communicative competence in the digital environment, including issues of digital inequality and cultural diversity. Creating conditions for social interaction in an online environment increases the effectiveness of learning, developing students not only communicative but also personal qualities such as self-confidence and the ability to express themselves. The research results can be used to improve educational strategies and programs that promote the development of key competencies in the context of digital transformation, which opens up new prospects for the development of innovative educational models that meet modern challenges and requirements.

Based on the results of the bibliometric analysis performed using the VosViewer platform, the following conclusions were obtained:

Digital technologies improve language and communication training due to the multimodality of communication tools (texts, audio, video, and interactive platforms). Students using digital educational resources have the opportunity to immerse themselves in a multimedia environment that better corresponds to the real conditions of communication in the modern world. This statement is also accepted by^[3] in their research. For example, platforms like Google Classroom and Zoom provide learning flexibility by allowing students to interact through video, text chats and collaborative assignments, which stimulates the development of communication skills^[3].

Digital educational platforms promote engagement and active interaction, which is an important condition for the development of communicative competence. Research shows that technologies such as blogs, mobile learning, and online assessments increase student behavioral engagement and encourage their active participation in the learning process. Therefore, it is assumed that students who actively use digital platforms for communication and collaboration demonstrate better results in the development of communication skills. We share this statement with Bedenlier^[12].

Digital technologies provide a personalized approach

to learning, which contributes to the more effective development of communicative competencies among students with different levels of training. The personalization of the educational process, possible thanks to intelligent content and adaptive educational platforms, allows you to create learning routes that meet the individual needs and interests of students^[10].

The integration of digital technologies can solve the problems of intergenerational and intercultural communication. In the context of globalization and the increasing diversity of students (for example, students of different nationalities), digital tools can contribute to the development of intercultural communication and the elimination of barriers to communication. Thus, it is assumed that digital platforms create conditions for the development of flexible and adaptive communication skills, which is important in today's multicultural world^[4].

The problems of insufficient personal communication and digital overload can be compensated through the balanced use of digital technologies and their combination with face-to-face educational methods. The hypothesis suggests that a well-chosen combination of digital and traditional teaching methods can minimize the risks of loss of personal communication and prevent information overload of students, which will have a positive impact on their communicative competence^[12, 13].

6. Conclusions

The findings of this study highlight the sizeable function that digital technology plays in improving students' communicative competence, in particular inside the context of an unexpectedly digitalizing academic environment. The bibliometric analysis underscores the interdisciplinary nature of this discipline, integrating insights from training, psychology, and sociology to observe how virtual equipment affects conversation ability improvement. The consequences help the hypothesis that digital technology, when successfully included in the academic manner, can provide wonderful benefits over conventional techniques by offering multimodal conversation environments and growing scholar engagement.

Key conclusions encompass the high-quality impact of digital structures, along with Google Classroom and Zoom, which foster flexible, interactive getting-to-know environ-

ments that promote collaboration and active participation. This multiplied engagement is intently connected to stepped forward communicate capabilities, as college students practice language and interpersonal interplay in digital codecs that reflect actual global verbal exchange. Furthermore, the capability of virtual systems to offer personalised getting-to-know reviews allows for the tailored improvement of communicative abilities, making it extra powerful for numerous pupil populations.

However, the study also highlights demanding situations, including the reduction of face-to-face interaction and the chance of digital overload, which could prevent the development of interpersonal verbal exchange talents. A balanced technique that integrates digital tools with traditional teaching techniques is recommended to mitigate those risks and maximize the blessings of both tactics. This balance is especially essential for fostering intercultural and intergenerational communicate, which virtual technologies can beautify but may additionally complicate due to the lack of direct personal interplay. In the end, at the same time as digital technology presents possibilities for improving communicative competence, their hit integration requires a complete strategy that addresses pedagogical, psychological, and socio-cultural factors. Future studies ought to discover innovative teaching techniques that integrate virtual and traditional gear, with a focal point on overcoming the limitations of virtual learning and improving its potential to put together students for conversation inside the modern virtual economic system.

Author Contributions

Conceptualization, A.B. (Aknur Baimakhan) and G.B.; methodology, A.S.; software, A.B. (Aigerim Baimakhanova); validation, A.B. (Aknur Baimakhan), G.B. and P.I.; formal analysis, G.B.; investigation, A.B. (Aigerim Baimakhanova); resources, A.B. (Aigerim Baimakhanova); data curation, A.B. (Aknur Baimakhan); writing—original draft preparation, A.B. (Aknur Baimakhan); writing—review and editing, A.S.; visualization, A.B. (Aigerim Baimakhanova); supervision, G.B.; project administration, P.I. All authors have read and agreed to the published version of the manuscript.

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Data Availability Statement

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Conflicts of Interest

The authors declare no conflict of interest.

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