

# A Modern Approach to the Development of Information Competence in Future Primary Class Teachers Based on Virtual Educational Tools

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## Abstract:

This article is about the content of developing information competence in future primary school teachers based on virtual educational tools and opinions about the Top 20 virtual educational tools that serve to accelerate virtual education in today's information age and Internet flow. held.

**Keywords:** primary education, teacher, virtual educational technology, virtual educational environment, interactivity, Pear Deck , Learning management systems, Flipgrid, Funbrain, Prodigy Math Game, Edmodo, Canva, Zoom, Microsoft Teams, Nearpod, Buncee, Hapara, Bloomz, Khan Academy, Arra, Kahoot, Sustlik, Habits.

In recent years, in our republic, the normative basis for the introduction of digital technologies for the training of future primary school teachers and the free use of modern information technologies has been created and implemented in the system of training future teachers. "Improving the system of personnel training in the field of information technologies is one of the important conditions for the successful implementation of the "Digital Uzbekistan - 2030" strategy, the development of digital technologies and ensuring their widespread introduction into the daily life of the population." This means that changes related to information in society will seriously affect the educational system, and will expand the possibility of designing new educational practices that meet the needs of the development of society.

Decree of the President of the Republic of Uzbekistan No. PF-60 of January 28, 2022 "On the new development strategy of Uzbekistan for 2022-2026", No. PF-4947 of February 7, 2017 " On the strategy of actions for the further development of the Republic of Uzbekistan", Decree No. PF-5847 of October 8, 2019 "Higher education of the Republic of Uzbekistan

on approval of the concept of development of the higher education system until 2030", Resolution No. PQ-2909 dated April 20, 2017 "On measures for further development of the higher education system", Resolution No. PQ-2909 dated June 5, 2018 Presidential decree No. 3775 dated July 27, 2017 "On additional measures to improve the quality of education in higher education institutions and ensure their active participation in comprehensive reforms implemented in the country" - Decision No. 3151 "On measures to further expand the participation of economic sectors and branches in improving the quality of training of highly educated specialists" and related to this activity.

The processes of reforming the education system are also evident in the higher education system. It is required to continuously introduce new pedagogical and innovative technologies in the teaching process in order to improve the quality of education. It is very important that the implementation of advanced foreign experiences remains one of the priority tasks in ensuring the quality of higher education. The introduction of modern information and communication technologies into life with the introduction of electronic information educational resources, video and audio lessons, electronic tests, virtual laboratory work and small educational resources, that is, the technology of teaching without a teacher and developing them day by day. is developing a related field of activity.

The increasing use of modern computer, mobile and various technologies among students in our country means that there is a growing need to educate students using virtual technologies. This article is aimed at improving the quality and effectiveness of education by developing and implementing the methodology of preparing and using educational materials using virtual technologies in the educational process, and the above means that the research topic is relevant.

Over the past few years, virtual learning tools have changed the way teachers teach. It is no exaggeration to say that these tools not only simplify lesson planning, but also facilitate communication and social interaction between your students.

Distance learning technology continues to grow at a rapid pace to help educators like you and us teach effectively online. Some tools make it easier for us and our students to stay connected, create interactive lessons, and build safe campuses. No matter what we teach, there are several tools that fit our individual needs.

One of today's modern forms of education is distance education, which includes any type of education in which a student receives education without being in a classroom. Whether it's classes, online lectures, or asynchronous learning activities, distance learning helps students and teachers stay connected through digital tools and virtual learning platforms..

Since the start of the pandemic, online education has helped limit the spread of COVID-19. It has also given students an easy access to their classes or courses from their homes while saving them time to go to school. In this situation, virtual educational tools began to serve as the main tool for students and teachers.

We have a question, what are natural virtual educational tools? What are their tasks in the educational process?

Virtual learning tools for teachers include a combination of utility software and online learning platforms. For example, learning platforms like Zoom or Google Classroom and apps like HYPERLINK make learning anywhere an effective and enjoyable experience.

1. Both "virtual learning tools" and "distance learning tools" are interchangeable terms.
2. Not all distance learning tools are created equal, and that's a good thing! Each of them has its own quality to improve learning. Some tools facilitate communication better than others, and games are great for increasing students' understanding of certain subjects. Each tool helps make learning easy and fun.

3. There are four main types of online learning platforms today:
  4. Communication tools- here are several tools available to teachers such as email, discussion boards, chats, classroom websites and video conferencing. Many learning platforms have many of these features, such as Zoom and Google Classroom.
- Learning management systems (LMS)— LMS are software programs designed to produce functional and engaging online courses. Create, manage, and monitor student performance while delivering course content. An LMS is a cost-effective and consistent way to teach students regardless of class size.
  - Digital Learning Games- Kids love to play games, so why not give them education to support their love of learning? National Geographic Kids offers fun science, geography and adventure quizzes and games to entertain and educate children. If you want your students to read books and play educational games online, Funbrain is one of the platforms with countless goodies for them to enjoy. If our student has a little difficulty in learning math, or if math is not interesting to him, then we can help him improve his math knowledge with the help of Prodigy Math Game and open up opportunities for him to enjoy math.
  - Online Learning Resources- As the pandemic forced students to stay home, teachers began using a variety of online resources to engage and focus children. Some of these tools include online classes and activities such as Sesame Street and PBS Kids.

No matter which tool we choose, students will be interested in and highly benefit from using each virtual tool effectively.

Here are today's Top 20 virtual learning tools to speed up virtual learning, and many of them integrate seamlessly with other apps. But which means we choose to achieve educational effectiveness depends on us and our educational goal.

Our list below should help educators make the right decisions for a variety of online topics.

**1. Google Classroom.** Built for teaching and learning, Google Classroom is an all-in-one tool that makes learning from anywhere in the world flexible and convenient. Teachers save time creating lesson plans, tracking student performance, and using several creative tools to make lesson materials more engaging. There is currently a free version of Google Classroom. However, the paid version can be easily integrated with add-ons and other educational tools.

**2. Prodigy math game.** Prodigy Math Game is a flexible learning platform for grades 1-8. With curriculum tailored across the United States and around the world, we can make sure students are engaged and learning no matter where they are. We can use our free teacher dashboard to easily differentiate math practice, send home assessments, and get real-time insight into how students are learning, all without any hassle.

**3. Pear Deck or Pear Deck** is a Google Slides add-on that helps teachers create engaging slides and support student interaction. Teachers can create presentations from scratch or add interactive questions to existing presentations. Pear Deck has great features, including a toolbar available on a phone or tablet, the ability to show or hide student responses, features that allow individual students to send personal notes, and the ability to make fun audio files to add to presentations.

**4. Flipgrid.** Flipgrid is a fun way to start a conversation. Just post a topic and we'll foster discussion in your learning community. It's a great way to get students interested in new ideas, excited about learning, and interacting with their peers!

**5. Edmodo.** A number of Edmodo tools allow teachers to share lesson content, inspire collaboration, and build an energetic and positive classroom. Parents can also get updates on their child's progress. Edmodo has free teacher accounts for quick and easy signup.

- 6. Canva.** Canva's online graphics and publishing tool allows educators to create stunning, professional-quality presentations, posters, infographics, social media banners, videos, zoom virtual backgrounds, and more. Canva easily integrates with our preferred learning management system, including Google Classroom and Microsoft Teams.
- 7. Zoom.** Zoom has gained popularity during the pandemic for its versatility as a presentation tool and webinar platform, while students learn online. Its security, live video classroom functionality, and chat feature for social interaction make Zoom a useful distance learning tool.
- 8. Blackboard.** Blackboard is an advanced LMS tool perfect for kindergarten through high school. This platform works on any device and it is easy for all students. Blackboard Learn also gives teachers access to several third-party tools.
- 9. ClassDojo.** ClassDojo is a communication tool that brings families, students, and teachers together to create a supportive online community. Teachers can develop engaging learning experiences with downloadable resource packs and ideas. They can also find resources to help them integrate ClassDojo with their preferred learning management system.
- 10. Microsoft Teams.** Microsoft Teams brings the best of several worlds together under one roof. You can share your screen or notes, make presentations, promote conversation and bring everyone together through video conferencing.
- 11. Nearpod.** Nearpod is a great add-on for Google Slides and Powerpoint presentations. Teachers can use their own presentations or choose from an impressive library of lessons and videos. Create quizzes, games, and collaboration boards to get your students excited about learning. Nearpod fosters healthy social interaction among students.
- 12. Buncee.** Buncee makes it easy to create interactive course content that students will love. Buncee's Ideas Lab creates presentations, lessons and many customized virtual school activities from a library of templates. Teachers can easily share links, downloads, and group projects with students. The Buncee dashboard is accessible from Microsoft Teams, making it easy to open discussions, share resources, and communicate with kids and their parents.
- 13. Hapara.** Hapara is an organizational tool that allows teachers to explore workflows in Google Workspace. You can also use other edtech tools like Pear Deck, HYPERLINK. Pear Deck, and EDpuzzle EDpuzzle with Hapara to improve the quality of course content. It's no surprise that teachers are adopting Hapara for curriculum-aligned lessons, access to privacy and security features.
- 14. Explain** everything on the board. The Explain Everything whiteboard app is one of the best digital whiteboards out there. It's a great offline and online tool that's perfect for traditional and hybrid classroom environments. It also encourages collaboration between teachers and students.
- 15. Bloomz.** Bloomz is a one-stop platform that eliminates the need for multiple applications and security concerns. Bloomz allows teachers to connect, organize and stay in touch with students and parents. Parents and teachers don't have to open and close multiple apps, making it simple and stress-free to communicate and share information with you.
- 16. Khan Academy.** As a non-profit organization, Khan Academy has a list of subjects for teachers and students to choose from in math, science, reading, language and life skills. All courses are suitable for students in grades 1 to 8 and beyond. Khan Academy is free for students and teachers.
- 17. Saw.** Saw provides a great alternative to creating a learning street that connects teachers, students and parents. It provides a meaningful way for teachers to track student performance and encourages the use of creative tools such as draw + writing, video, creative Canvas, and more.

**18. Kahoot!** Kahoot!online game quizzes have gained popularity among students and teachers during the pandemic. Kids can access countless games from the kahoot! library or they can even make their own games.

Teachers can also distribute Kahoot! challenges for students to study outside the classroom. Sooo! challenges integrate with Google Classroom, making it easy to track missed questions and scores to determine where students may need more help.

**19. Slowness.** Slack combines organization and communication into one platform. It's easy for instructors to deliver course content related to specific topics, connect with students one-on-one or in groups, and send relevant class materials. Slack helps students stay engaged and engaged in online learning.

**20. Habits.** A mother who understands what it means to limit the time children spend on social media created Habits. This platform allows teachers to monitor screen time, ensuring that children are motivated and focused. Habits helps teachers and parents promote fun activities and limit excessive screen time for children's learning.

Methods of effective monitoring of student activity in distance education.

When students are learning online, it can be difficult to find meaningful ways to monitor student progress. The good news is that most online software tools allow teachers to monitor and measure student responses.

There are three constructive ways to assess and monitor student performance:

Keep the lines of communication open. Unlike traditional school settings where students can interact with teachers in person, online communication is essential to encourage kids to turn in assignments on time and stay on track. Also, having daily office hours with email, phone and chat options can help prevent children from falling behind in their studies.

Syllabus based test. Teachers may find that curriculum-based tests are a good way to ensure that students apply what they have learned. Frequent evaluations help teachers determine where students struggle with lessons and make plans to solve the bridge. Formative assessments Formative assessments such as quizzes, short assessments and interviews with students help them correct their mistakes.

Set learning objectives. Learning objectives help students achieve specific goals in each lesson. For example, if a student struggles with subject-verb agreement, teachers may consider breaking lessons into smaller objectives to make it easier for the student to use correct grammar in their writing.

Virtual learning is not a one-size-fits-all solution—for some students, there are challenges due to technological limitations and accessibility. School districts must anticipate and develop plans to avoid these challenges and continue equity in the classroom (and beyond) during school closures.

While online learning benefits students' learning experience, most children prefer a traditional school environment for social interaction with other students and direct contact with teachers. The wealth of educational tools makes it easy for teachers to solve many of the challenges associated with virtual learning. Each tool includes benefits and solutions for challenges students and teachers face, so we can make sure learning is effective no matter where we are.

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