

## DEVELOPMENT OF STUDENTS' DIGITAL COMPETENCE IN THE PROCESS OF INDEPENDENT STUDY

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### ABSTRACT

Improving independent learning activities to develop digital competencies in students allows them to take ownership of their education and develop their digital skills. Some strategies for enhancing independent learning activities to develop digital competence:

1. **Digital Research Projects:** Assign students research projects that require them to study specific topics using digital tools and resources. Encourage them to critically evaluate and analyze online information, properly cite sources, and synthesize findings into well-structured presentations or reports.
2. **Online Courses and Tutorials:** Guide students in identifying reputable online courses and tutorials related to digital skills development. Recommend platforms like Coursera, Udemy or Khan Academy where they can access independent courses in areas such as coding, graphic design, data analytics or digital marketing.
3. **Personal Learning Networks:** Encourage students to create personal learning networks by following influential people, industry experts or organizations in their chosen field on social media platforms such as Twitter, LinkedIn or Instagram. By following relevant hashtags and participating in online discussions, students can keep up with the latest trends and engage in continuous learning.
4. **Digital Portfolios:** Create digital portfolios for students to document their digital projects, achievements, and feedback. Encourage them to demonstrate their growth in specific digital skills and link their portfolio to work or college programs. Digital portfolios can be created using website builders such as Wix or Google Sites.
5. **Online Coding Platforms:** Introduce students to coding platforms like Scratch, Code.org, or Codecademy. These platforms offer interactive coding tutorials and exercises that allow students to learn programming concepts at their own pace and apply them creatively.
6. **Problem Solving Challenges:** Set students real-world problems or challenges that require them to find numerical solutions. These challenges can include designing a website, developing an app, or finding innovative ways to solve social or environmental problems using digital tools and technology.
7. **Reflective Journals:** Encourage students to keep reflective journals documenting their experiences, observations, and reflections on their digital learning journey. It helps to track their progress, identify areas for improvement, and set goals for further development.
8. **Peer Learning Communities:** Foster a supportive peer learning community where students can collaborate on their digital projects, share resources, and provide feedback. Encourage group discussions, online forums, or virtual study groups to facilitate knowledge sharing and collaboration.
9. **Self-Assessment and Goal Setting:** Teach students the importance of self-assessment and goal setting in developing digital competence. Encourage them to assess their existing skills,

identify areas for improvement, and set specific goals to increase their digital competence. Review goals regularly and evaluate progress.

10. Digital Citizenship Activities: Engage students in activities that promote responsible digital citizenship. Assign tasks that require you to research and create presentations on digital ethics, online safety, or digital health. Discuss current issues related to digital privacy, cyberbullying, or misinformation to develop critical thinking and ethical decision-making skills.

Through these independent learning activities, students can develop digital competencies in a self-directed and meaningful way. Providing guidance, resources and opportunities for reflection is important to ensure the successful development of students' digital skills and competencies.

The types of digital resources and tools available to students include:

1. Online Research Databases: These are digital libraries that provide access to a wide range of academic materials such as journals, articles and books.
2. Educational applications: These are software applications designed to provide educational content and activities to students.
3. Digital textbooks: These are electronic versions of traditional textbooks that can be accessed through a computer or mobile device.
4. Multimedia Tools: These are digital tools that allow students to create and edit video, image and audio files.

Some potential extracurricular activities for developing digital competencies in students include:

1. Coding Courses: These courses can teach students how to code and develop software applications.
2. Robotics Courses: These clubs can teach students how to build and program robots using digital tools.
3. Digital Media Courses: These courses can teach students how to create and edit digital media such as videos, images, and audio files.
4. Social Media Courses: These courses can teach students how to use social media platforms for communication and marketing purposes.

The methods used to develop digital competencies in students are as follows:

1. Providing access to digital resources and tools.
2. Assignment of projects requiring the use of digital tools and resources.
3. Encourage students to explore and experiment with different technologies.

The goals of developing digital competencies in students include:

1. Preparing students for success in today's digital world.
2. Strengthen students' ownership of their knowledge.
3. Develop the skills needed to succeed in the 21st century workplace.

Entities that can benefit from developing digital competencies include:

1. Students at all levels of education.
2. Teachers and educators who need to use digital tools and resources to support teaching.
3. Professionals who need to use technology in their work.

Search engines that students can use in the digital age include:

1. Google Scholar: A search engine that provides access to academic literature.
2. JSTOR: A digital library that provides access to academic journals, books, and primary sources.
3. Khan Academy: An educational platform that provides access to video lessons and interactive exercises in a wide range of subjects.

There are various foreign methods and approaches to develop digital competencies in students. Here are a few worth noting:

1. Digital Citizenship Initiatives: Many countries have digital citizenship initiatives that aim to educate students about responsible and ethical behavior in the digital world. These initiatives focus on topics such as online security, privacy, digital footprint management and critical evaluation of online information.
2. Coding and Computer Science Education: Several countries have included coding and computer science education in their curricula starting at the elementary school level. These programs introduce students to coding languages, algorithms, problem solving, and computational thinking to enhance their digital competencies.
3. Project-based learning with technology: Project-based learning approaches are often combined with the integration of technology tools and resources. Students will work on meaningful projects that require the use of digital tools, collaboration, research, and presentation of findings using digital media.
4. Blended learning and online platforms: Blended learning models that combine online and face-to-face learning are widely used to develop digital competencies. Online platforms and learning management systems such as Google Classroom, Moodle or Schoology facilitate digital content delivery, interactive activities and collaboration between students.
5. Gamification and game-based learning: Using gamification and game-based learning methods can help develop digital competencies. Educational games, simulations, and gamified learning experiences engage students, develop problem-solving skills, and improve their digital literacy and technology proficiency.
6. Mobile Learning and Ubiquitous Technologies: The integration of mobile devices and ubiquitous technologies such as smartphones and tablets into the learning process allows students to access educational content and resources anytime, anywhere. Mobile learning promotes independent learning, collaboration and problem solving using digital tools and applications.
7. Creating digital stories and multimedia: Encouraging students to create multimedia content such as digital stories, videos, podcasts or animations can help develop their digital competencies. These activities include research, content creation, digital media manipulation, and effective communication using technology tools.
8. Data Literacy and Data Science Education: In some countries, data literacy and data science education initiatives teach students to analyze, interpret, and communicate effectively with data. aimed at developing abilities. These programs focus on data visualization, statistical analysis, data-driven decision making, and ethical use of data.
9. Teacher training programs: Many countries provide training programs for teachers to improve their digital competence and teaching practice. These programs offer training in

technology integration, digital resources, effective use of educational programs, and pedagogical strategies for using technology in the classroom.

Each of these foreign methods provides valuable approaches to developing digital competencies in students. Countries around the world are using these methods to equip students with the skills they need to succeed in the digital age.

Independent work is a great way for students to develop digital competencies. When students work independently, they have the freedom to choose the digital tools and resources that work best for them. This allows them to explore different technologies and develop their digital skills in a way that is personalized and tailored to their needs.

One way to encourage independent work is to provide students with a list of digital resources and tools they can use to complete their assignments. This includes online research databases, educational programs, and digital textbooks. By giving students access to these resources, they can explore and experiment with different tools and learn how to use them effectively.

Another way to develop independent work is to assign projects that require students to use digital tools and resources. For example, you can ask students to create a multimedia presentation using PowerPoint or Prezi, or create a digital portfolio using Google Sites. By giving students these types of assignments, you encourage them to develop their digital competencies while giving them the opportunity to demonstrate their knowledge in creative ways.

Overall, developing digital competencies through independent work is a great way to prepare students for success in today's digital world. By providing them with the tools and resources they need to learn independently, you empower them to take ownership of their education and develop the skills they need to succeed in the 21st century.

## REFERENCES

1. Krumsvik, R. J. (2008). Situated learning and teachers' digital competence. *Education and Information Technologies*, 13(4), 279-290..]
2. Хонбобоев, Хакимжон Икромович, and Дилшод Улугбекович Султанов. "РУКОВОДСТВО НАУЧНО-ИССЛЕДОВАТЕЛЬСКОЙ ДЕЯТЕЛЬНОСТЬЮ СТУДЕНТОВ ПРИ ОБУЧЕНИИ ПРЕДМЕТАМ ИНФОРМАТИКИ И ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ." *Актуальные научные исследования в современном мире* 12-1 (2016): 63-65.
3. Маматов Д.Н. Formation of corporate competitiveness of future vocational training teachers in the social partnership of the university and innovative enterprises // *European international journal of multidisciplinary research and management studies* ISSN: 2750-8587 DOI: <https://doi.org/10.55640/eijmrms-02-04-17> <https://eipublication.com/index.php/eijmrms> Vol. 02.Issue: 04. April 2022. PublishedDate: 20-04-2022. – P. 112-120.
4. Ханбобоев, Х.И. Umumiy o'rta ta'lim maktablarida informatikadan bilimlarni nazorat qilish usullari. Section modern methods of teaching computer science in higher and general secondary education. Uzb. Andijan 2020.
5. Mamatov D.N., Bekchanova Sh.B., Saidova B.N., Abdullaeva D.N., Fayzieva G.U. Enhancing the participation of students and faculty in distance learning using blender

- learning and flipped classroom technologies in the development of pedagogy through digital technology // Psychology and education. 2021. – 58(2). – P. 4910-4917. Америка (Scopus).
6. ХАКИМЖОНОВИЧ ИКРОМОВ. "Tasviriy san'atni oqitishda interfaol metodlardan foydalanish." Молодой ученый 3-1 (2016): 22-23.
  7. Ikromovich, Honboboyev Hakimjon. "THEORETICAL AND PRACTICAL ISSUES OF USING INDUSTRIAL ROBOTS IN SECTORS OF THE ECONOMY." Galaxy International Interdisciplinary Research Journal 10.12 (2022): 181-184.
  8. Ikromovich, Honboboyev Hakimjon, et al. "MATHEMATICAL MODEL OF CHECKING THE BEHAVIOR OF AN INDUSTRIAL ROBOT IN THE STRUCTURE OF A TECHNOLOGICAL MODULE FOR STAGNATION." International Journal of Early Childhood Special Education 14.7 (2022).
  9. Хонбобоев, ХАКИМЖОН Октамович, Мубина ХАКИМЖОНОВНА Икромова, and Мухаммад-Анаسخон ХАКИМЖОНОВИЧ Икромов. "Ta'limda axborot texnologiyalarni qollashning oziga xos xususiyatlari." Молодой ученый 3-1 (2016): 21-22.
  10. MUBINAKHON, IKRAMOVA, and IKRAMOV MUHAMMAD ANASKHON. "The Importance of Using the Ict to Increase the Efficiency of Education." JournalNX 7.1: 106-108.
  11. Ikromov, Muhammadanasxon Hakimjon Ogli, and Zulhayoxon Muhtorjon Qizi. "MARKAZIY OSIYODA GRAFIKANING RIVOJLANISHIGA HISSA QO'SHGAN BUYUK OLIMLAR." Central Asian Academic Journal of Scientific Research 2.5 (2022): 627-630.
  12. Makhmudovich, Gulyamov Komiljon, and Ikromov Muhammad Anasxon Hakimjon o'g. "DEVELOPMENT OF CHILDREN'S ARTISTIC AND CREATIVE ABILITIES IN THE PROCESS OF TEACHING UZBEK FOLK APPLIED DECORATIVE ARTS." Web of Scientist: International Scientific Research Journal 3.5 (2022): 957-963.
  13. Gulyamov, K. M., and M. H. Ikromov. "Development of artistic and creative abilities of future teachers of fine arts through computer graphics." JournalNX 7.06 (2021): 95-99.