BG Pulse Journal USA
ISSN:1947-2536 http://www.bgpulseusa.com/index.php/bg

METHODS AND TECHNOLOGIES FOR DEVELOPING COMPETENCE IN WORKING WITH INFORMATION

Kilichov Akobir Kodirovich
Independent researcher at the Nizami
Uzbek National Pedagogical University
e-mail: akobirkilichov05@gmail.com
doi:https://doi.org/10.5281/zenodo.22841045

Abstract: In the digital age, the ability to effectively work with information is increasingly important. This competence extends beyond simply being able to find information - it involves understanding, interpreting, and applying information in a variety of contexts. It also necessitates a working knowledge of various technologies used to manage and manipulate information. This article explores the methods and technologies that can aid in developing this crucial competence.
Keywords: information competence, critical thinking, online learning, data analysis, artificial intelligence (AI), machine learning (ML).

Information competence refers to the ability to recognize when information is needed and have the capacity to locate, evaluate, and use it effectively. It involves skills like critical thinking, problem-solving, and digital literacy. Information competence has become a vital skill in the 21st century, due to the exponential growth of information and the proliferation of digital technologies.

Methods for Developing Information Competence

1. Critical Thinking Exercises

Critical thinking is a fundamental skill for working with information. It involves analyzing and interpreting information to make informed decisions or solve problems. Activities that promote critical thinking, like debates, group discussions, and problem-solving scenarios, can help develop this skill.

2. Information Literacy Training

Information literacy is the ability to identify, locate, evaluate, and use information effectively. Training programs that focus on these skills can be a powerful method for developing information competence. These programs often cover topics like determining the credibility of sources, understanding biases, and interpreting data.

3. Continuous Learning and Practice

The landscape of information is constantly changing, as is the technology used to manage it. As such, continuous learning and practice are essential for maintaining and improving information competence. This can involve staying updated on the latest research, attending workshops or webinars, and regularly using and exploring different information sources.

Technologies for Developing Information Competence

1. Digital Libraries and Databases

Digital libraries and databases offer a wealth of information in various formats. Learning to navigate these resources can enhance one's ability to locate and use information. Many of these platforms also provide tools for organizing and managing information, further aiding in the development of information competence.

2. Data Analysis Tools

Data analysis tools, such as Microsoft Excel, Python can be used to manipulate, analyze, and interpret data. Understanding how to use these tools can significantly improve one's ability to work with information, especially quantitative information.

3. AI and Machine Learning

Artificial Intelligence (AI) and Machine Learning (ML) technologies can help manage and interpret large amounts of data. Learning to use these technologies can be beneficial for developing information competence, as they can aid in identifying patterns, making predictions, and making sense of complex data sets.

4. Online Learning Platforms

Online learning platforms like Khan Academy offer courses on a wide range of topics, including information competence and related skills. These platforms provide an accessible way to learn and practice these skills at your own pace.

In conclusion, developing competence in working with information is a multifaceted process that involves building a range of skills and understanding various technologies. By incorporating critical thinking exercises, information literacy training, and continuous learning into one's routine, and by learning to use technologies like digital libraries, data analysis tools, AI, and online learning platforms, one can significantly enhance their information competence— a skill set that is invaluable in the information-rich world of the 21st century.

References

1. Shen, L., & Khalifa, M. The impact of online learning on students' information literacy: A systematic literature review. Education and Information Technologies, (2021) 26(1), 107-125
2. Skrypnyk, L. V., & Voloshchuk, L. O. Information competence of students as a necessary condition for the development of modern education. Scientific Bulletin of the Mykolayiv State University named after V. O. Sukhomlynsky. Pedagogical Sciences, (2019). 1(10), 23-29.
3. Козлова, Л. Е., & Шевелева, М. В. Информационно-педагогические технологии формирования информационной компетентности в современной школе. Инновационное развитие образования, (2019). 1, 45-50.
4. Мамаева, В. И., & Степанова, С. А. Формирование информационной компетентности школьников в процессе обучения информатике. Инновации в образовании, (2018).4(24), 104-107.
5. Шарапова, Г. А. Формирование информационной компетентности студентов-психологов в процессе обучения. Сибирский педагогический журнал, (2017). 6, 68-75.
6. Лаптев, В. Г. Информационная компетентность будущих специалистов в области туризма. Вестник ТвГУ. Серия: Гуманитарные науки, (2017).2(39), 240-244.

7. Краева, Л. А. Формирование информационной компетентности учащихся в условиях использования современных информационных технологий. Вестник Томского государственного педагогического университета, (2016).4(171), 74-79.