TECHNOLOGIES FOR DEVELOPING STUDENTS' COMPETENCE IN WORKING WITH INFORMATION

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Abstract: The article provides information about the concept of information processing competence, its importance, application, model and methods, tools, forms, evaluation criteria and results.

Key words: competence, information, model, methods, tools, evaluation criteria.

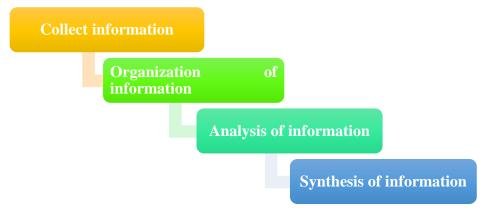
Introduction:

In today's digital age, the flow of information is very high. However, this abundance of data has also created new challenges, including how to effectively find, evaluate, and use data from different sources. This is where informational competence comes into play. Information competence refers to the ability to effectively manage information resources to find, evaluate and use information for a specific purpose.

In professional education, information competence is essential for identifying relevant literature, synthesizing information, and drawing valid conclusions. Students should be able to effectively search databases, evaluate the quality of sources, and apply information to their work[1].

The development of information competence of students in the process of learning is necessary for making informed decisions, obtaining quality knowledge in the educational process, conducting modern scientific research and being aware of innovative educational technologies. In the organization of the learning process, teachers and students must be able to use and effectively use information to identify learning opportunities, develop plans for subjects and modules, and make strategic decisions.

In today's information age, it is very important to have a clear model of working with information. This model should cover all aspects of the process, from data collection and organization to analysis and synthesis for use in decision making. In this article, we discuss a comprehensive model of data handling that can be used in a variety of contexts.



Data Collection – The first step in any information model is data collection. This can be done in a variety of ways, including online research, surveys, interviews and observations. It is important

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to document all sources in order to identify and cite the most relevant and reliable sources of information.

Organize Information – Once information is collected, it should be organized in a way that makes it easy to access and use. This can be done by creating a database, using spreadsheets, or creating a folder structure that is intuitive and easy to navigate. It is important to keep information organized and up-to-date so that it remains useful over time.

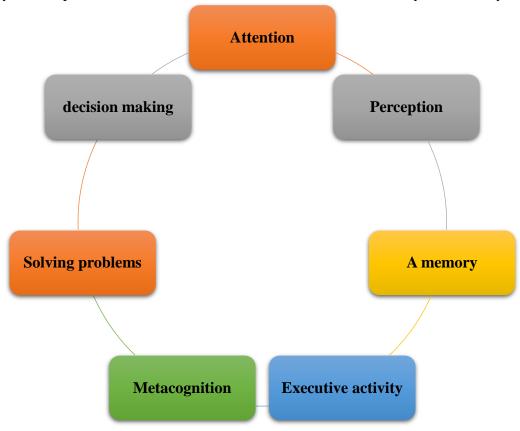
Analyzing the Information – Once the information has been collected and organized, it's time to analyze it. This can be done by identifying patterns, trends and correlations within the data. It is important to use appropriate statistical methods to ensure that the analysis is accurate and meaningful. This step can be performed using special software or by manual analysis.

Synthesizing Information – The final step in the information model is synthesizing information into actionable concepts. This involves taking the analysis and using it to make decisions or communicate the findings to others. This step may involve creating visualizations, presentations, or reports to share data in an easy-to-understand way.

A comprehensive information management model should include all steps from gathering information to synthesizing it into actionable insights. Following this model, individuals and organizations can make decisions based on accurate and reliable information. It is important to remember that working with information is a continuous process, and information must be constantly updated and analyzed to remain useful over time.[4]

Information literacy refers to the ability to effectively process information to solve problems, make decisions, and learn new information. It includes several main pedagogical and psychological components, including:

Attention - the ability to ignore distractions and focus on relevant information; Perception - the ability to interpret emotional information and understand it; Memory - the ability to store and

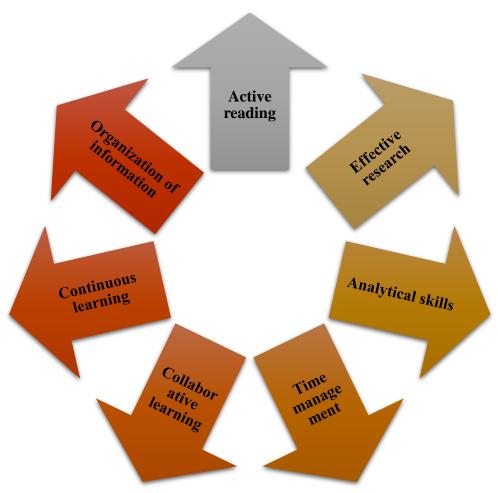


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retrieve information; Executive activity - the ability to plan, organize and manage cognitive tasks; Metacognition is the ability to monitor and regulate one's cognitive processes; Problem solving – the ability to analyze and solve problems using logical thinking and critical thinking; Decision-making is the ability to make choices based on available information and personal values.

Information competence involves the integration of these various components to effectively process and use information in a variety of contexts.[6]

As a result of our scientific research, we will consider several effective methods of developing the competence of working with information:



Active Reading - Active reading involves actively engaging with the material you are reading, highlighting important points, taking notes, and asking questions to deepen your understanding of the material; Effective Research – Effective research involves using reliable sources, using a variety of search strategies, and critically evaluating the information you find. It's also important to track your sources and organize the data you collect; Analytical Skills – Developing analytical skills involves breaking down complex data into manageable chunks, identifying patterns, and developing insights that can be applied to real-world situations; Time Management – Effective time management is essential when working with information. It includes prioritizing tasks, breaking large projects into smaller, manageable tasks, and using productivity tools to stay organized. Collaborative Learning – Collaborative learning involves working with others to share knowledge, ideas and concepts. This can be done through group projects, discussions or online forums; Continuous Learning – Continuous learning involves regularly seeking out new information, learning new skills, and staying abreast of

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the latest trends and technologies in your field; Information Organization – Effective information organization involves using tools such as databases, spreadsheets, and mind maps to make information easier to track, access, and analyze.

By using these methods, a person can develop their information skills and be more effective at work or study.

We can divide the means of developing the competence of working with information into two types[5]

Didactic tools

Technical tools

Didactic tools are teaching and learning strategies aimed at developing the knowledge, skills and attitudes necessary to work effectively with information. Some didactic tools include:

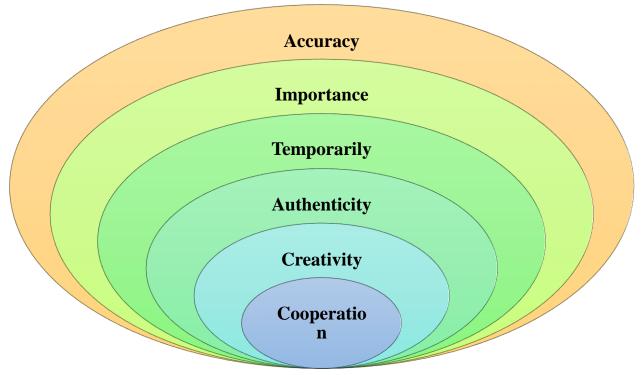
Lectures - Lectures allow teachers to present information to students in a structured and organized manner. The lecture can be used to introduce new concepts, theories or practices related to working with information[6]; Workshops – Workshops are designed to provide hands-on training and practice on specific information management topics. They can be used to teach specific skills, such as how to search the literature or how to use certain software; Case Studies – Case Studies provide students with the opportunity to apply their knowledge and skills to real-world scenarios related to working with information. Case studies can be used to develop critical thinking, problem-solving and decision-making skills; Group Discussions - Group discussions provide an opportunity for students to share their knowledge and experiences in working with information. They can be used to develop cooperation, communication and teamwork skills.

Technical means of information competence development - tools and technologies used to facilitate information access, search, processing and distribution. Some technical tools include:

Information systems are software that provide information management and organization. They can be used to store, retrieve and analyze information; Search Engines – Search engines are tools used to find information on the Internet. They can be used to find websites, articles, videos and other resources related to a particular topic; Bibliographic Management Software – Bibliographic management software is used to manage and organize references and citations. It can be used to create bibliographies and reference lists; Electronic Databases – Electronic databases are searchable and retrievable collections of digital information. They can be used to find scholarly articles, books, and other resources on a particular topic.[3]

Didactic and technical means of information competence development can be used together to provide a comprehensive learning experience for students. Using these tools, people can develop the knowledge, skills, and attitudes needed to work effectively with information in a variety of contexts. Competency in working with information is evaluated based on several criteria, which we considered to be the following:

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Accuracy - the ability to accurately collect, analyze and interpret information is an important aspect of working with information. A person's competence can be assessed based on the accuracy of information gathering and analysis; Importance - The ability to identify and select relevant information for a specific task or problem is another important criterion for assessing information literacy. A person's competence can be assessed based on the ability to identify and select relevant information for a given task; Temporality - The ability to collect and process information in a timely manner is another criterion for evaluating the competence of working with information. A person's competence can be assessed based on the ability to gather and process information in a certain period of time; Authenticity - The ability to critically assess the quality and reliability of information sources is another important criterion for evaluating information literacy. A person's competence can be assessed based on the ability to determine and evaluate the validity and reliability of various information sources; Creativity - the ability to create new and innovative ideas based on information and data analysis is another criterion for evaluating competence in working with information. A person's competence can be assessed based on the ability to create new ideas and concepts based on information analysis; Collaboration - The ability to work effectively with others in gathering and analyzing information is another important criterion for assessing information literacy. An individual's ability to collaborate with others to gather and analyze information can be assessed.

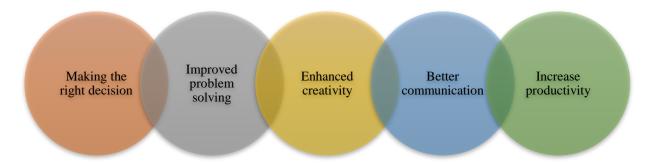
Competence for working with information is mastered by summarizing the ability to effectively process, evaluate, analyze and apply information in a certain field or process, as well as generalize knowledge, skills, qualifications, and personal qualities. we will be able to determine.

Sound decision-making: With the necessary skills to process and evaluate information, informed and accurate decisions can be made based on the analyzed information.

Improved problem-solving: Information-handling competence allows you to identify and solve problems more effectively and efficiently.

Enhanced creativity: When you have a deep understanding of information and knowledge in a specific field, you can generate innovative and creative ideas that can add value to your work.

Better communication: Being proficient with information can clearly articulate complex ideas and



concepts, making it easier for others to understand and engage with the work.

Improved efficiency: If information can be processed and analyzed effectively, tasks can be completed faster and more accurately, leading to increased productivity.

In short, information literacy can lead to more efficient and effective work processes, improved decision-making, and better results in a wide range of processes.

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