Pedagogical Erothetics or the Logic of Asking Questions in the Context of Digital Pedagogy

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Abstract: The paper addresses a topical issue regarding the intelligent use of pedagogical erothetics as an essential component in digital pedagogy that can significantly contribute to increasing the effectiveness of online learning and teaching. By formulating and using relevant and challenging questions, educators can improve student engagement and enhance the quality of the educational experience in the digital environment. Pedagogical erothetics, or the logic of asking questions in the context of digital pedagogy, are essential aspects of practical and interactive education in the digital age. In digital environments, where information can be accessed quickly and from diverse sources, the logic of questions becomes crucial to assess students' knowledge and skills correctly.

Keywords: question; answer; learning; pedagogical erothetics; logic; digital pedagogy

1. Introduction

Pedagogical erothetics, or the logic of asking questions in the context of digital pedagogy, is an essential aspect of practical and interactive education in the digital age. In digital environments, where information can be accessed quickly and from diverse sources, the logic of questions becomes crucial to assess students' knowledge and skills correctly. The questions must be objective and require clearly defined answers to allow a fair performance assessment.

Starting of the principles of erothetics, digital pedagogy can use engaging and relevant questions to engage students in active and interactive learning. Posting

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open-ended questions that stimulate critical thinking and analysis can encourage deep discussion and the development of cognitive skills.

Digital Pedagogy also offers multiple ways to place questions in different contexts, such as quizzes, online discussions, interactive platforms, and collaboration tools. Using pedagogical erothetics and the logic of asking questions in these contexts can significantly improve the quality of the learning-teaching-evaluation process in the digital environment.

2. Conceptual Delimitations

Erothetics is a term derived from the ancient Greek language, coming from the word "erotan", which means "to ask." In general, erothetics refers to asking questions or engaging someone in a dialogue through questions.

Erothetics is a communication technique that involves asking appropriate and intelligent questions to elicit information, initiate deeper dialogue, or provoke critical thinking. It can be used in various contexts, including everyday conversations, interviews, debates, and learning and teaching.

A well-formed erothetics question can open opportunities to explore topics more deeply, bring new ideas to light, or arrive at more relevant and conclusive answers. *Erothetic* can also help stimulate critical thinking and develop practical communication skills.

In a broader sense, erothetics also refers to the theoretical study of questions, types of questions, and how they can influence communication and thought processes. In this sense, *erothetic* becomes a branch of philosophy that deals with the nature and meaning of questions. Therefore, *erothetics* is essential in communication and exploring knowledge, providing tools and strategies to ask relevant questions and initiate productive dialogues and debates.

The *erothetics* and the logic of questions are two different fields but interconnected to a certain extent. Thus, erothetics plays a significant role in pedagogy and the learning and teaching process. Using appropriate questions in a lesson can stimulate critical thinking, active student engagement, and a better understanding of the topic covered.

Here are some relevant aspects of *erothetics* in pedagogy:

Student Engagement: Teachers can capture students' interests and actively engage them in the learning process by asking relevant and engaging questions. Open-ended questions requiring elaborate answers challenge students to use critical thinking and express their ideas.

Stimulating critical thinking: Well-formulated questions can train students to analyze, evaluate, and synthesize information. They challenge them to think critically, connect concepts, and develop their problem-solving skills.

*Reinforcement of knowledge***:** Through questions, teachers can assess students' level of understanding and reinforce the acquired knowledge. Questions can be used to recap the studied material, to check the assimilation of information, and to strengthen its retention.

Directing learning: Questions can guide the learning process and direct students to learning objectives. They can help steer discussions in a specific direction and focus on relevant aspects of the topic.

Developing communication skills: By asking questions and encouraging students to express their ideas, communication and oral expression skills are developed. This helps improve students' ability to formulate their ideas coherently and communicate effectively with others.

Exploring topics in depth: Through questions, students are encouraged to explore topics in-depth and develop a more complex and complete understanding. Questions can help challenge preconceptions or preconceived ideas and encourage critical and open thinking.

Thus, *erothetics* in pedagogy refers to using appropriate questions to stimulate active learning, develop critical thinking, and improve students' communication skills. This approach allows teachers to create an enabling environment where students can explore topics in-depth and build their knowledge and understanding interactively and engagingly.

Digital pedagogy, in a complex approach to O. Istrate[1]*, is part of the pedagogy that studies the design, conduct, and evaluation of educational situations with a significant component of digital technologies, as well as the necessary conditions for their conduct-synchronous and asynchronous interactions in virtual and mixed learning, academic and educational instruments educational of various digital*

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[1] https://educatia-digitala.ro/pedagogia-digitala-definitie-si-arie-conceptuala/.

applications and tools, virtual assistants for learning and teaching, digital skills of teachers, educational policies and specific programs.

Digital pedagogy is an approach to learning and teaching that integrates digital technology into the educational process. This pedagogical method uses technology and digital resources to improve student's learning experience and increase the efficiency of the teaching process.

Key features of digital pedagogy include:

Using technology in teaching, such as mobile devices, tablets, computers, educational software, and online platforms, to deliver learning content more interactively and engagingly.

Personalization of learning: Digital technology allows learning content to be customized according to each student's needs and pace of learning. Teachers can adapt and differentiate learning activities through digital tools to match students' learning styles and levels.

Access to educational information and resources: Students can access a wide range of online educational resources and materials, including e-books, videos, simulations, and other interactive tools that allow them to learn independently and delve into topics of interest.

Communication and collaboration: Digital technology facilitates communication and collaboration between students and teachers, allowing them to work together on projects, participate in online discussions, and provide real-time feedback.

Assessment and monitoring: Through digital assessment platforms, teachers can monitor student progress, provide rapid feedback and assess performance more objectively and accurately.

The benefits of digital pedagogy include:

☐ Improving students' motivation and commitment to the learning process.

☐ Development of essential digital skills for today's society.

☐ Expanding access to education and educational resources in less favored environments.

☐ Streamlining the teaching and evaluation process.

☐ Developing critical thinking and problem-solving skills through the use of interactive tools.

However, digital pedagogy requires careful planning and a balanced approach to ensure technology's correct and responsible use in learning and teaching. In addition, providing equal access to technology and digital resources for all students is an essential aspect of avoiding discrimination from this digital point of view in education.

3. Erothetics in Digital Pedagogy

Pedagogical erothetics refers to the intelligent and strategic use of questions in learning and teaching. This aspect becomes crucial in digital pedagogy, as digital environments offer new opportunities for interaction and engagement.

The logic of asking questions in digital pedagogy:

Logical questioning uses logical principles to formulate coherent, clear, and relevant questions. In digital pedagogy, the sense of questions becomes essential to ensure the effectiveness of learning and assessment.

Combining pedagogical erothetics with the logic of questions in digital pedagogy can:

☐ Stimulate students' interest and motivation for learning.

☐ Develop critical thinking, problem-solving, and analytical skills.

☐ Provide valuable and relevant feedback for students.

☐ Accurately assess the knowledge and skills acquired by students.

Digital pedagogy was defined starting from the concept of Open Pedagogy as an educational approach in an open world that has been talked about for a long time.

Bronwyn Hegarty[1] (2015) proposes a model with eight interrelated characteristics for open pedagogy: (1) participatory technologies, (2) innovation and creativity, (3) sharing of ideas and resources, (4) reflective practice, (5) people, openness and trust, (6) interconnected community, (7) learner-driven, (8) peer review.

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[1] https://educatia-digitala.ro/pedagogia-digitala-definitie-si-arie-conceptuala/.

Figure 1. Image: © Bronwyn Hegarty, 2015

Digital pedagogy refers to the use of digital technology in education, while pedagogical erothetics refers to the art of asking relevant and engaging questions in the learning process.

Digital pedagogy involves using digital devices, platforms, and resources to support learning and teaching, while pedagogy erotics focuses on questioning techniques and strategies to facilitate communication and understanding.

However, digital pedagogy and pedagogical erotics can interact and complement each other. Thus, integrating digital pedagogy and pedagogical eroticism can lead to a more engaging and practical educational experience for students.

4. Question Methodology

Question methodology refers to the approach and strategies used in formulating and using questions in various contexts. It includes techniques and principles that help create and use questions effectively and productively. Here are some critical aspects of the question methodology:

☐ *Clarity and consistency*. Questions must be formulated clearly and coherently so that the addressees easily understand them. Avoid using ambiguous or confusing terms, and make sure the questions have a logical and coherent structure.

☐ *Purpose and Objectives:* Clearly define the purpose and objectives of the questions. Questions can elicit information, stimulate critical thinking, initiate

dialogue, or assess a person's knowledge and skills. Ensure the questions align with the intended objectives and support the specific process or goal.

☐ *Relevance and appropriateness:* Make sure the questions are relevant to the context and the topic being addressed. They should be adapted to the recipients' level of knowledge and experience and cover the subject's essential aspects. Questions should provide opportunities for deepening knowledge and critical thinking.

☐ *Types and variety:* Use various question types to achieve various goals and stimulate different levels of thinking. These may include open-ended, closed-ended, multiple-choice, fill-in-the-blank, or questions that ask for justifications and arguments. Using a variety of question types can support audience engagement and active participation.

☐ *Challenge and Stimulate:* Formulate questions that provoke thought and stimulate reflection and analysis. Questions can be designed to ask for justifications, examples, and comparisons or to explore different implications and perspectives on a topic. They should challenge the recipients to think deeply and develop their analysis and synthesis skills.

☐ *Feedback and assessment:* Questions can be used to provide feedback and assess knowledge and skills. Formulate questions that allow accurate and objective evaluation of the recipients' performance or understanding. Questions can give clues on the need to deepen or improve knowledge and help identify gaps or errors.

Therefore, the question methodology involves a strategic and conscious approach to formulating and using questions. By applying the correct principles and techniques, questions can be powerful tools to facilitate effective learning, assessment, and communication.

In the student assessment process, some everyday things could be improved in formulating questions that affect the objectivity and clarity of the assessment. Some of these common mistakes can be:

☐ *Ambiguity of questions:* Some questions may be vaguely worded or contain ambiguous terms, which may lead to misinterpretations. It is essential to avoid using vague words or phrases and ensure that questions are phrased precisely and coherently.

☐ *Subjective Answer Questions*: Some questions may ask for subjective opinions or evaluations, making objectively assessing students difficult. It is recommended

that you avoid questions that ask for personal opinions and focus on questions that can be evaluated objectively.

☐ *Inserting additional information into questions:* Some questions may contain other information or details that may influence students' answers. It is essential to be careful not to include information that may lead to wrong answers or mislead students.

☐ *Questions with negative wording or double negatives:* Questions that use negative wording or double negatives can create confusion and make it difficult to understand the question correctly. It is recommended that you avoid using these constructions and ensure that questions are phrased clearly and affirmatively.

☐ *Lack of accuracy or relevance:* Sometimes, questions may need to be more accurate or irrelevant to the subject being assessed. It is essential to ensure the questions are valid and relevant to the material or skills you wish to evaluate.

☐ *Questions with more than one idea or requirement:* Questions containing more than one idea or need can confuse students and make it difficult to answer correctly. Formulate straightforward, concise questions focused on a single idea or requirement to ensure an accurate and consistent assessment.

☐ *Lack of diversity in question types:* Exclusive use of more than one type of question (e.g., multiple choice questions) may limit assessment and may not provide a complete view of student's knowledge and skills. It is recommended that you use various question types to assess different levels of knowledge and skills.

It is essential to pay attention to these common mistakes in question formulation and for trainers to ensure that questions are clear, precise, and objective. Reviewing and testing questions before use can help identify and correct potential problems and ensure fair and accurate assessment.

5. Conclusions

For the period that we are going through, after all the implications that this innovative approach to digital pedagogy brings, the teaching staff becomes the reflective and creative teacher in continuous development and adaptation of design, teaching, and evaluation skills as they appear developed at the level of the European Union in the Competence Framework of the professional in education

DigCompEdu which formulates the operational aspects of digital pedagogy, organized in 21 elementary pedagogical skills, organized in 6 areas[1].

The "Education Professional Competence Framework - DigCompEdu" was developed by the European Commission to define the digital competencies required for education professionals. This is a valuable tool to identify and assess the level of digital training of teachers and other teaching staff and promote the development of digital skills in education.

DigCompEdu is based on the "European Digital Competence Framework for Citizens" (DigComp), adapting it to the specific educational context. It includes six domains of digital skills, each of which is divided into sub-domains:

☐ Digital information and data;

☐ Communication and collaboration;

☐ Creation of digital content;

☐ Safety;

☐ Designing learning activities;

☐ Professional skills.

Thus, DigCompEdu offers a standard and flexible framework that can be adapted at national and institutional levels to support the development of digital skills among education professionals. Therefore, it is a vital tool to promote a qualitative and innovative digital education that prepares students for the demands of contemporary digital society.

From the same perspective, in the United States, *digital pedagogy* is one of the eight indicators in the national standards for quality in online[2] education, which target the same pedagogical concerns: communication, collaboration, interaction between learners, their motivation, individualization and customization of learning paths, learning assessment, etc.

In this context of digitization, we come to the conclusion that digital pedagogy means much more than the use of digital technologies for teaching, but *Hybrid Pedagogy (2012): Digital Pedagogy (...) about approaching those tools from a critical pedagogical perspective. So, it is as much about using digital tools*

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[1] https://joint-research-centre.ec.europa.eu/digcomp_en.

[2] https://joint-research-centre.ec.europa.eu/digcomp_en.

thoughtfully as it is about deciding when not to use digital tools, and about paying attention to the impact of digital tools on learning.[1]

Thus, *pedagogical erothetics* becomes an essential component of the teaching-learning-evaluation process, which requires careful concern regarding:

*Stimulate student interest and engagemen*t by posing challenging and interesting questions. Thus, teachers can captivate students' attention and stimulate their interest in study topics. Intriguing questions can motivate students to engage more actively in learning and explore in-depth issues.

Development of critical thinking. Well-formulated questions can stimulate critical thinking and analysis. By approaching topics from multiple perspectives and challenging students to provide justifications and explanations, teachers help students develop necessary thinking skills.

Encouraging participation and collaboration. In digital pedagogy, there are multiple ways for students to respond to questions, including through discussion forums and online survey applications. This allows for active student engagement and encourages collaboration with classmates.

Assessment of knowledge and skills. Using questions in online reviews can provide teachers with essential information about students' understanding and skills. Well-constructed and distributed questions can provide comprehensive insight into each student's progress.

In conclusion, the intelligent use of pedagogical erothetics in digital pedagogy can significantly contribute to increasing the effectiveness of online learning and teaching. By formulating and using relevant and challenging questions, educators can improve student engagement and engagement and enhance the quality of educational knowledge in the digital environment.

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[1] https://www.nsqol.org/wp-content/uploads/2019/02/National-Standards-for-Quality-Online-Teaching.pdf.

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