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DIDACTIC FUNCTIONS OF SELECTING AND UTILIZING EDUCATIONAL TOOLS IN THE INSTRUCTIONAL PROCESS: A PERSPECTIVE FROM HIGHER EDUCATION IN HUMANITIES

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Annotation: *This article explores the theoretical and practical dimensions of selecting and implementing educational tools within the framework of university-level humanities education. As higher education shifts toward student-centered and digital paradigms, the didactic role of instructional media undergoes significant transformation. The study analyzes the criteria for selecting tools that align with the specific epistemological nature of the humanities, emphasizing critical thinking, hermeneutic analysis, and cultural literacy. Key didactic functions—such as informational, motivational, compensatory, and evaluative—are discussed in the context of fostering high-level cognitive engagement. The author argues that in a university setting, educational tools are not merely supplementary aids but essential components that shape the dialectical relationship between the lecturer and the student. The article concludes with methodological recommendations for university instructors to optimize the selection process based on academic rigor and pedagogical efficiency.*

Keywords: *higher education, didactics, educational tools, humanities, instructional design, pedagogical technology, critical thinking, university teaching.*

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INTRODUCTION

In the contemporary landscape of global higher education, the effectiveness of the instructional process is no longer determined solely by the depth of the professor's knowledge, but rather by the strategic orchestration of pedagogical environments. For the humanities—disciplines such as history, philology, philosophy, and cultural studies—the challenge is unique. Unlike the hard sciences, which often rely on empirical demonstration and laboratory equipment, the humanities deal with abstract concepts, textual interpretations, and socio-cultural values. Consequently, the selection and utilization of educational tools in this field must transcend basic visualization and serve as catalysts for deep intellectual inquiry.

At the university level, the didactic process assumes a high degree of student autonomy and critical engagement. Therefore, educational tools are not just "teaching aids" (visual posters or simple slides) but are sophisticated "instruments of cognition." This article aims to investigate the didactic functions of these tools and establish a framework for their selection in the humanities classroom.

1. CONCEPTUAL FRAMEWORK: DEFINING EDUCATIONAL TOOLS IN UNIVERSITY DIDACTICS

Educational tools, often referred to in pedagogical literature as "instructional media" or "pedagogical instruments," encompass the entire spectrum of material and digital objects used to facilitate learning. In a university context, these tools can be categorized into:

1. Material-Technical Tools: Traditional textbooks, primary historical documents, artifacts, and library archives.
2. Digital and Multimedia Tools: Online databases (e.g., JSTOR, EBSCO), linguistic corpora, digital archives, and interactive platforms.

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3. Ideational Tools: Conceptual models, theories, and philosophical frameworks that serve as mental "tools" for analyzing information.

The didactic task for a university lecturer is to integrate these tools into a coherent methodological system where the tool serves the objective, rather than the objective being restricted by the tool.

2. CORE DIDACTIC FUNCTIONS OF EDUCATIONAL TOOLS

In the humanities, educational tools fulfill several critical didactic functions that move beyond the mere presentation of data:

2.1. The Informational-Cognitive Function

In the university lecture, the volume of information is vast. Educational tools help in structuring this information. For example, using a digital timeline in a history seminar or a semantic map in a linguistics lecture allows students to see the systemic nature of the knowledge. The tool provides the "skeleton" upon which complex academic arguments are built.

2.2. The Heuristic and Analytical Function

Humanities are built on interpretation. A primary source document (a 16th-century manuscript or a philosophical treatise) is a tool that forces the student to engage in the "act of discovery." Instead of hearing about the Enlightenment, the student uses the tool—the text itself—to perform a hermeneutic analysis. This develops what we call "academic independence."

2.3. The Motivational and Transformative Function

At the university level, motivation is driven by relevance and intellectual challenge. Utilizing modern digital tools, such as virtual museum tours or interactive linguistic maps, can transform a dry theoretical session into a dynamic research environment. This stimulates the "affective" domain of learning, making the subject matter personally significant to the student.

2.4. The Evaluative and Reflective Function

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Modern pedagogical tools allow for immediate feedback. In a humanities seminar, collaborative tools like shared digital boards (Padlet or Miro) allow students to visualize their collective thinking process. This facilitates "metacognition"—the ability of students to reflect on how they are learning and how their interpretations are evolving.

3. CRITERIA FOR SELECTING TOOLS IN THE HUMANITIES

A university lecturer must be rigorous in the selection process. The "technological for the sake of technology" approach often degrades the academic quality of a lecture. The following criteria are essential:

A. Scientific Rigor and Authenticity: In humanities, the source is everything. Digital tools must provide access to peer-reviewed, high-quality academic content. The tool should expose students to the "frontiers" of the discipline.

B. Cognitive Load Management: Based on Richard Mayer's Cognitive Theory of Multimedia Learning, tools should not overwhelm the student. In a complex philosophy lecture, excessive animations or irrelevant visuals can hinder the processing of abstract ideas. The tool should simplify the complex, not complicate the simple.

C. Appropriateness to the Subject Matter: A tool used for teaching phonetics (like acoustic analysis software) is fundamentally different from a tool used for teaching literature (like a digital concordance). The lecturer must match the tool to the specific "logic" of the discipline.

D. Promotion of Dialogue: The humanities are inherently dialogic. Tools should facilitate communication—between student and professor, student and text, and student and peer.

4. THE SHIFT FROM MACRO-TOOLS TO MICRO-TOOLS: DIGITAL REVOLUTION

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We are witnessing a shift from "macro-tools" (the massive textbook) to "micro-tools" (targeted digital resources). For a university lecturer, this means the ability to curate "learning objects." In a literature course, instead of just reading a novel, the lecturer uses a micro-tool like a "Word Cloud" generator to analyze recurring themes or uses a digital database to compare different translations of the same text.

This "digital curation" is a new didactic task. It requires the lecturer to act as an architect of the information space, selecting only those tools that contribute to the "unfolding" of the student's intellectual potential.

5. PRACTICAL APPLICATION: A CASE STUDY IN CULTURAL STUDIES

Consider a module on "Renaissance Art and Society." A traditional approach might use a standard PowerPoint presentation. However, an advanced didactic approach involving a university-level selection of tools would involve:

- Tool 1: High-resolution digital imaging tools (Gigapixel images) to analyze brushwork—stimulating visual analysis skills.
- Tool 2: Access to the digital correspondence of the artists—facilitating primary source research.
- Tool 3: A collaborative digital map to track the movement of artistic styles across Europe—developing spatial-historical thinking.

Here, the tools perform the didactic task of shifting the student from a "consumer of art history" to a "researcher of cultural processes."

6. CHALLENGES AND ETHICAL CONSIDERATIONS

The use of educational tools in universities is not without its pitfalls. One major challenge is "digital distraction." Furthermore, the "algorithmic bias" of search engines and digital databases can narrow the student's perspective—a dangerous outcome in the humanities where plurality of thought is vital.

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As university lecturers, we must teach students not only how to use the tool but how to critique the tool. This is the "critical didactic" function: understanding the limitations and biases of the mediums through which knowledge is accessed.

CONCLUSION

The selection and utilization of educational tools in the instructional process of a university is a sophisticated didactic art. In the humanities, these tools must serve the higher goals of academic education: the development of critical thinking, the ability to synthesize complex information, and the cultivation of a deep, interpretive understanding of the human condition.

Educational tools are the bridges between abstract theory and concrete understanding. When selected with pedagogical foresight and academic rigor, they do not replace the lecturer but rather amplify the lecturer's ability to engage students in the noble pursuit of knowledge. The future of university teaching lies in the harmonious integration of classical academic traditions with innovative didactic instruments, ensuring that the humanities remain a vibrant and essential part of the 21st-century intellectual landscape.

REFERENCES

1. Bates, A. W. (2019). Teaching in a Digital Age: Guidelines for designing teaching and learning. Tony Bates Associates Ltd.
2. Laurillard, D. (2012). Teaching as a Design Science: Building Pedagogical Patterns for Learning and Technology. Routledge.
3. Mayer, R. E. (2001). Multimedia Learning. Cambridge University Press.
4. Selwyn, N. (2016). Education and Technology: Key Issues and Debates. Bloomsbury Academic.
5. Shulman, L. S. (1987). "Knowledge and Teaching: Foundations of the New Reform." Harvard Educational Review, 57(1), 1-23.



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6. Biggs, J., & Tang, C. (2011). Teaching for Quality Learning at University. McGraw-Hill Education.
7. Beetham, H., & Sharpe, R. (2013). Rethinking Pedagogy for a Digital Age: Designing for 21st Century Learning. Routledge.