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LEVERAGING BLOOM'S TAXONOMY OF EDUCATIONAL OBJECTIVES TO ENHANCE STUDENTS' CREATIVE POTENTIAL.

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Abstract: This article analyzes the methodological foundations of developing students' creative potential in the higher education system through the prism of a digital axiological approach. The study highlights the integration of Bloom's taxonomy of educational objectives with value-oriented education in a digital environment. The author substantiates the interconnection between the higher levels of Bloom's taxonomy (analysis, evaluation, creation) and digital ethics in transforming students from passive consumers of information into active creative agents. The findings of the article hold practical significance for designing creative activities in a digital learning environment that foster not only technical skills but also spiritual and moral values.

Keywords: digital axiology, creative potential, Bloom's taxonomy, higher education, values, digital ethics, creative agent.

INTRODUCTION

In the context of the global digitalization of the higher education system, developing students' creative potential has become a strategic priority. Contemporary society demands professionals who not only possess technical skills but are also capable of making creative decisions based on clear ethical and value-oriented criteria. This shifts the digital axiological approach to the center of pedagogical research, as it harmonizes the utilization of innovative technologies with the preservation and enrichment of humanistic values.

To realize this potential, Bloom’s Taxonomy of Educational Objectives serves as one of the most effective methodological frameworks. The relevance of integrating the capabilities of Bloom’s taxonomy with a digital axiological approach is determined by the following factors:

Cognitive Transformation in the Digital Era: In a digital learning environment, merely remembering information is insufficient. The higher-order thinking skills of Bloom’s taxonomy—Analysis, Evaluation, and Creation—provide a systematic pathway to transform the student from a passive consumer into an active "creative agent" who generates meaningful digital products.

Value-oriented cognitive development: While the traditional taxonomy primarily focuses on the cognitive domain, its digital axiological interpretation allows for the incorporation of value-based criteria. This ensures that the stage of "Creation" is not merely a technical process, but a process of "meaning-making," where students align their creative output with ethical norms and social responsibility.

Pedagogical design and hierarchical structure: Bloom’s taxonomy provides a hierarchical model that allows for the step-by-step design of digital educational activities from simple to complex. This serves as a roadmap for transitioning from fundamental knowledge to complex, value-based innovations in the development of creative potential.

Bridging the technological and ethical gap: There is a growing need to eliminate the disproportion between digital capabilities and moral-ethical consciousness. Applying the Bloom

model through an axiological prism guarantees that digitalization serves not merely technical efficiency, but the spiritual and intellectual maturity of the individual.

LITERATURE REVIEW AND METHOD

...was further developed by Richard Ryan and Edward Deci, professors at the University of Rochester in the USA. According to this theory, the formation of intrinsic motivation in an individual is closely linked to the satisfaction of three basic psychological needs: autonomy (independent choice), competence, and relatedness (social connection). In a digital learning environment, these needs are effectively met through socio-cultural projects, collaborative online creativity, and digital content creation [1].

Within the system of developing students' creative potential in socio-cultural activities, the cognitive-content component serves as a leading structural element. It represents the synthesis of a student's knowledge content, conceptual apparatus, creative thinking processes, and intellectual-practical information processing strategies. Acting as the theoretical knowledge base necessary for the conscious and purposeful organization of creative activity, this component encompasses culture, social issues, media texts, digital ethics, arts and aesthetics, and communication. In terms of cognitive operations, it comprises analysis, synthesis, interpretation, evaluation, and the generation of new ideas. The progressive complexity of educational objectives in the cognitive domain—moving sequentially from remembering to "creating"—is also emphasized in the revised version of Bloom's Taxonomy [2].

Creative tasks within socio-cultural activities—specifically digital storytelling, video clips, podcasts, infographics, blogs, and social project presentations—require students to possess:

- a firm grasp of socio-cultural concepts such as heritage, citizenship, tolerance, and cultural dialogue;
- skills in media and information analysis, source credibility assessment, and fact-checking;
- theoretical training in digital communication and ethical standards.

In the absence of such training, the likelihood increases that the creative product, while visually appealing in terms of "format," will remain superficial in content.

Cognitive processes demand divergent thinking and higher-order cognitive operations. At the core of the cognitive-content component lies divergent thinking—the ability to generate multiple, non-standard solutions to a single issue or problem.

In a digital learning environment, divergent thinking is enhanced through:

- the perception of diverse formats of information, including text, audio, video, and visuals;
- rapid prototyping of ideas, such as draft posts, storyboards, and sketching;
- collaborative editing and feedback exchange, including online discussions and peer reviews.

Furthermore, according to the revised model of Bloom's Taxonomy, cognitive processes should be developed through the sequence of "remembering–understanding–applying–analyzing–evaluating–creating." In socio-cultural digital projects, the levels of analysis, evaluation, and creation take priority. This approach establishes the necessary pedagogical conditions for students to interpret, evaluate, and generate new meaning, rather than merely reproducing existing content.

DISCUSSION AND RESULTS

In the process of teaching General Pedagogy, it is highly expedient to design practical sessions in accordance with the sequence of the Digital Bloom's Taxonomy. Bloom's Taxonomy is a hierarchical model that systematizes educational objectives from simple to complex. It was

originally developed in 1956 by Benjamin Bloom and subsequently refined in 2001 by Lorin Anderson and David Krathwohl.

Benjamin Bloom (1913–1999) was an American psychologist and educator who created the taxonomy of objectives in the cognitive and affective domains. The term "taxonomy" originates from the Greek words taxis (meaning arrangement or order) and nomos (meaning law), signifying the sequential arrangement of learning objectives according to their increasing complexity.

Teaching the topic of "Teaching Methods" in General Pedagogy based on Digital Bloom's Taxonomy implies not merely requiring students to memorize the names of methods, but rather equipping them with the skills to apply these methods practically within a digital environment. During practical sessions, it is advisable to organize several task-oriented methods with students.

Specifically, the "Virtual Whiteboard" method unlocks opportunities for students to understand and analyze. They are assigned a task to access a Padlet board via a link. In the "Interactive Methods" column, they must list the methods they know, attaching an appropriate image or a brief video explanation (link). Consequently, students comprehend and analytically select the content of various interactive methods.

Another approach, the "Interactive Survey" method, fosters the cognitive level of evaluation. A live poll is conducted using Mentimeter, presenting questions such as: "In your opinion, which teaching method has lost its relevance in the era of Artificial Intelligence?" Students justify their responses, evaluate the potential of interactive methods, and collectively generate a "word cloud" on the screen.

To cultivate the level of creation regarding teaching methods, the "Methodological Remix" task is highly applicable. Students are given the challenge: "How can a traditional lecture method be transformed into a 100% digital and engaging format?" To achieve this, they are required to design a presentation in Canva or produce a 60-second methodological life-hack video. As a result, this process forms another digital action skill that enhances students' creative potential.

Furthermore, while delivering theoretical information, the educator can utilize didactic video lessons via YouTube, propose problem-based scenarios in Telegram groups to facilitate student discussions, and administer engaging competitive quizzes using Kahoot for assessment. Generally speaking, the core emphasis in Digital Bloom's Taxonomy must be placed not on the technology itself, but on the extent to which that technology drives the cognitive growth of the students. Students must realize that technology is not the ultimate goal, but rather a tool to deepen thinking and ascend to higher levels of Bloom's Taxonomy.

CONCLUSION

Through the application of this method, we have determined that students' cognitive processing is systematically structured into six distinct levels. The Digital Bloom's Taxonomy is not merely a static classification scheme; rather, as a hierarchy, it represents an active progression of various thinking processes. Success at each hierarchical level is contingent upon the student's capacity to operate effectively at that specific stage or its preceding baselines. For instance, in order for a student to apply knowledge, they must first possess that knowledge and comprehensively understand it .

In conclusion, investigating the capabilities of Bloom's taxonomy through the lens of a digital axiological approach enables the creation of a scientifically grounded system for nurturing a new generation of creative professionals. This framework guarantees the cultivation of individuals who possess not only high-level intellectual potential but also firmly embedded national and universal human values.

REFERENCES

1. Ponomarev, Ya. A. (1976). Psikhologiya tvorchestva [Psychology of creativity]. Nauka.
2. Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. Theory Into Practice, 41(4), 212–218. https://doi.org/10.1207/s15430421tip4104_2
3. Amabile, T. M. (2012). Componential theory of creativity (Working Paper No. 12-096). Harvard Business School. https://doi.org/10.2139/ssrn.2450410
4. Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press.
5. Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge University Press. https://doi.org/10.1017/CBO9780511803932