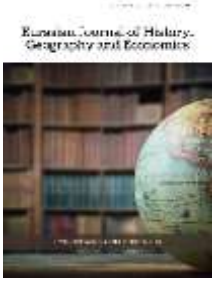

Formation of critical and creative thinking in cadets

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ABSTRACT

Creative approaches and achievements have advanced human civilization worldwide in fields ranging from science and technology to philosophy, arts, and humanities (Hennessey and Amabile, 2010 [1]). So, creative thinking is more than just coming up with random ideas.

Keywords:

All over the world, societies and organizations increasingly need innovative knowledge and creativity to solve problems (Organization for Economic Co-operation and Development

Creative approaches and achievements have advanced human civilization worldwide in fields ranging from science and technology to philosophy, arts, and humanities (Hennessey and Amabile, 2010 [1]). So, creative thinking is more than just coming up with random ideas. It is a real skill based on knowledge and experience that allows a person to achieve better results in sometimes difficult conditions. Societies and organizations around the world increasingly need innovative knowledge and creativity to solve problems (Organization for Economic Co-operation and Development (IECD), 2010 [2]), which in turn reinforces the importance of teamwork innovation and creative thinking. PISA focuses on the creative thinking processes that can reasonably be expected of fifteen-year-old students. Its purpose is not to identify highly creative individuals, but to analyze how creatively students can think in expressing and identifying ideas, and how this skill, in turn, is related to the learning process, school activities, and other aspects of the educational system. "Science and Education" Scientific Journal / ISSN 2181-0842 May 2022 / Volume 3 Issue 5 www.openscience.uz 1174 The main goal of the PISA study is to provide internationally comparable information on students' creative thinking with clear results for the educational policy and system. . The process of creative thinking under the task should tend to improve through education; the various supporting factors of this thinking process in the context of the educational process must be clearly defined and depend on the indicators in the assessment; the content of the field used in the evaluation must be closely related to the subjects taught in regular high school; In order for assessments to have predictive value for creative achievement in school and life, tests need to be similar to real activities that students engage in in their everyday lives, both in and out of the classroom. Collecting data on the complex array of facilitators of creative thinking in PISA is a difficult but doable task. PISA consists of two parts: a test and a questionnaire. The test part provides information on how well students can use their creative approach cognitive processes in tasks related to ideation, analysis and improvement. The questionnaire complements this information with information on other

supporting factors of student creative thinking, including information on creative approach (openness, goal-oriented enthusiasm and confidence), perceptions of the school environment, and activities involved in school and outside it. Some contributing factors are better covered than others in the assessment. For example, although collaborative skills are an important contributor to creative thinking, they are not directly measured in PISA due to organizational and technical challenges. However, this methodology recognizes the ability to work collaboratively as an important personal enabler. The literature suggests that the more domains that are included in the assessment of creative thinking, the better the coverage of the construct. However, some practical and logistical limitations of the PISA study affect the possible domains to be included in the PISA program. The first of these is related to the age of those being tested. Given that the target audience of the PISA study (15-year-old students) has limited knowledge and life experiences, the domains chosen for assessment should be based on knowledge and experiences common to all students in the world (such as drawing, writing or problem solving). The domain being tested (and related tasks) should also reflect a realistic representation of the creative thinking that a 15-year-old student can demonstrate in this context. The second limitation is related to the time allotted for testing. According to the structure of the current PISA assessment, one hour is allocated to the test to assess students' creative thinking. This means that the number of possible domains should be limited in order to collect enough information on each domain . Since the purpose of the PISA study is to provide benchmarks of test results at the country level rather than individual test results, different forms of tests can be used interchangeably. In this, students solve a diverse mix of tasks (with some accidental overlap) within the domain. However, ensuring that students obtain reliable indicators of national test performance in each domain requires that sufficient time be allocated to each domain's task and limits the number of tasks that can be covered in an assessment. A third limitation is related to the obligation to implement the test of creative thinking in the standard PISA test-taking platform. PISA tests are performed on a standard computer, which does not have a touchscreen or an Internet connection. The platform currently supports various forms of response input, including multiple choice, text input, drag-and-drop, hot-spot (clicking on an area within a text or image), chat interface, interactive charts, and graphics. Although it is possible to add new functionality to the platform during the development of this assessment, such as a drawing tool, selection of assessment areas , the technical limitations of the platform should be taken into account when developing the same tasks. Given these key limitations and drawing on the literature discussing different domains of creativity, the assessment of creative thinking in the PISA test focuses on broad content areas: 'creative expression' and 'knowledge creation and creative problem solving'. Creative activity in this field is characterized by originality, aesthetics, imagination, emotional content and reaction. On the contrary, creative activity in the field of "creating knowledge and creative problem solving" includes practical manifestations of creative thinking related to researching open questions and problems (without a single correct answer). This field, in turn, is divided into "scientific problem solving" and "social problem solving" fields (domains). In these areas, creative activity is a means to a better outcome and can therefore be defined as offering unique, innovative, impactful and effective solutions. These four assessment areas reflect the nature of real-life and everyday creative thinking, and relatively cover the creative thinking activities that 15-year-old students are likely to engage in. Although they do not capture all possible expressions of creative thinking in school, they adequately capture the construct of creative thinking and take into account the various logistical and technical limitations of the PISA assessment. As a conclusion, we can say that there are differences in cultural norms for some forms of creative activity, existing in education "Science and Education" Scientific Journal / ISSN 2181-0842 May 2022 / Volume 3 Issue 5

www.openscience.uz 1176 Given that there are differences in values and subject teaching around the world, it is to be expected that student outcomes in these areas will vary. When students are assessed in more than one domain, we can make predictions about the strengths and weaknesses of the creative thinking domain at the national level. This data also reveals differences in the extent to which students are encouraged to find their own solutions and ways of expressing their ideas. This makes us see the importance of how creative thinking in different areas should be taught in school.

Biographical information:

1. Toxir , T. , Arabboy , Y. , Zuxriddin , G. , & Abdurauf , G. (2022). Theoretical And Practical Pedagogical Bases of Formation of Professional Culture of Students of Military Education. *Periodic Journal of Modern Philosophy, Social Sciences and Humanities* , *2* , 19-20.
2. Abdugani , B. , Arabboy , Y. , & Mashrabboy , M. (2021). General characteristics of the military committees of the Armed Forces of the Republic of Uzbekistan. *ACADEMIC: An International Multidisciplinary Research Journal* , *11* (4), 1062-1065.
3. Bakhodir, P., Bakhruddin, A., Ilhomjon, T., & Arabboy, Y. (2022). The Concept of Patriotism in the Mind of Youth. *Zien Journal of Social Sciences and Humanities* , *5* , 82-83.
4. Muhiddin, H., Arabboy, Y., Botirjon, O., & Oybek, T. (2022). The Role of Legal Culture in Youth Education. *Journal of Pedagogical Inventions and Practices* , *4* , 47-48.
5. Muzaffar, T. (2022). PROBLEMS OF FORMING THE PROFESSIONAL CULTURE OF THE STUDENTS OF MILITARY EDUCATION PRIOR TO THE DRAFT. *CREATIVE TEACHER* , *2* (23), 158-160.
6. Ogli, Y. A. B., Ogli, A. I. N., & Abdulaev, A. (2021). The Main Directions of Military Patriotic Education. *Journal of Pedagogical Inventions and Practices*, *1*(1), 99-100.
7. Abdugafurovich, T. T., & Shokhmukhammad, M. (2021). THE ROLE OF EDUCATING STUDENTS IN THE SPIRIT OF MILITARY PATRIOTISM IN EDUCATIONAL INSTITUTIONS. *Galaxy International Interdisciplinary Research Journal*, *9*(9), 126-130.
8. Utkirbek, K., Shoxmuxammad, M., & Paxlavonjon, X. (2021). Innovative Methods of Teaching. *Journal of Pedagogical*