

FORMATION OF CONNECTIONS BETWEEN THE INVOLVEMENT OF STUDENTS IN LEARNING AND THE DEVELOPMENT OF COMPETENCIES

Vitalii Honcharuk

Pavlo Tychyna Uman State Pedagogical University, Ukraine
<https://orcid.org/0000-0002-8099-1566>
E-mail: gvitalii1975@gmail.com

Olena Pavlyshynets

Vasyl Stefanyk Precarpathian National University, Ukraine
<https://orcid.org/0000-0002-6368-6535>
E-mail: alenapavlyshynets@gmail.com

Bohdana Petryshak

Vasyl Stefanyk Precarpathian National University, Ukraine
<https://orcid.org/0000-0002-5154-2403>
E-mail: danapet@ukr.net

Tetiana Monolatii

Vasyl Stefanyk Precarpathian National University, Ukraine
<https://orcid.org/0000-0002-9336-0819>
E-mail: tanja.monolattij@gmail.com

Nadiia Boichuk

Vasyl Stefanyk Precarpathian National University, Ukraine
<https://orcid.org/0000-0002-6555-0404>
E-mail: nadboy82@gmail.com

ABSTRACT

Objective: This article investigates the interplay among students' academic engagement, extracurricular participation, and the development of critical thinking skills in university settings. The study assesses the relationship between students' extracurricular involvement and their capacity for effective teamwork. Additionally, it examines the correlation between academic engagement among university students and the timely completion of bachelor's degree programs. The explanatory potential of applying the theory of involvement in higher education is explored through a comparative analysis with the American educational context.

Methods: The research employs a systematic examination of the relationships between academic engagement, extracurricular involvement, and the cultivation of critical thinking skills among university students. Verification of the connections between students' extracurricular participation and teamwork skills, as well as the relationship between academic engagement and timely completion of bachelor's programs, forms a crucial part of the study. **Results:** The study provides evidence for the existence of relationships between students' extracurricular involvement and their ability to engage effectively in university team collaborations. Additionally, it verifies the correlation between the academic engagement of university students and the timely



completion of their bachelor's educational programs. The article draws on the theory of involvement in higher education to shed light on these relationships, particularly through comparisons with the American educational context.

Conclusion: The research contributes to understanding the nuanced relationships between students' academic engagement, extracurricular involvement, and the formation of critical thinking skills within university environments. The findings emphasize the importance of exploring these connections for a comprehensive understanding of the educational experience. Moreover, the application of the theory of involvement in higher education offers a valuable lens for interpreting these relationships, particularly when juxtaposed with experiences in the American educational landscape.

Keywords: Education; Management; Sociocultural Context; Managing Innovation; System.



FORMAÇÃO DE LIGAÇÕES ENTRE O ENVOLVIMENTO DOS ALUNOS NA APRENDIZAGEM E O DESENVOLVIMENTO DE COMPETÊNCIAS

RESUMO

Objetivo: Este artigo investiga a interação entre o envolvimento acadêmico dos alunos, a participação extracurricular e o desenvolvimento de habilidades de pensamento crítico em ambientes universitários. O estudo avalia a relação entre o envolvimento extracurricular dos alunos e a sua capacidade para um trabalho em equipa eficaz. Além disso, examina a correlação entre o envolvimento acadêmico entre estudantes universitários e a conclusão oportuna dos programas de bacharelado. O potencial explicativo da aplicação da teoria do envolvimento no ensino superior é explorado através de uma análise comparativa com o contexto educacional americano. **Métodos:** A pesquisa emprega um exame sistemático das relações entre o envolvimento acadêmico, o envolvimento extracurricular e o cultivo de habilidades de pensamento crítico entre estudantes universitários. A verificação das conexões entre a participação extracurricular dos alunos e as habilidades de trabalho em equipe, bem como a relação entre o envolvimento acadêmico e a conclusão oportuna dos programas de bacharelado, constitui uma parte crucial do estudo. **Resultados:** O estudo fornece evidências da existência de relações entre o envolvimento extracurricular dos alunos e a sua capacidade de se envolverem eficazmente em colaborações de equipas universitárias. Além disso, verifica a correlação entre o engajamento acadêmico dos estudantes universitários e a conclusão oportuna dos programas educacionais de bacharelado. O artigo baseia-se na teoria do envolvimento no ensino superior para esclarecer estas relações, particularmente através de comparações com o contexto educacional americano.

Conclusão: A pesquisa contribui para a compreensão das relações diferenciadas entre o envolvimento acadêmico dos alunos, o envolvimento extracurricular e a formação de habilidades de pensamento crítico em ambientes universitários. As descobertas enfatizam a importância de explorar essas conexões para uma compreensão abrangente da experiência educacional. Além disso, a aplicação da teoria do envolvimento no ensino superior oferece uma lente valiosa para a interpretação destas relações, particularmente quando juxtaposta com experiências no panorama educacional americano.

Palavras-chave: Educação; Gerenciamento; Contexto Sociocultural; Gestão da Inovação; Sistema.

1 INTRODUCTION

The modern world is undergoing an era of rapid development and transformation, where the creation of competitive, adaptable, and creative professionals becomes one of the most crucial demands for realizing society's innovative potential. Higher education, as a key segment of preparing young individuals for professional careers, bears the responsibility of providing students not only with necessary knowledge but also with developed competencies that enable them to function successfully in the complex conditions of the contemporary world.

The contemporary student is not merely a consumer of knowledge but an active participant in the educational process, capable of influencing its direction and outcomes.



Engaging students in learning and creating conditions for their personal development have become pressing tasks for higher education. Active engagement in learning fosters the unfolding of students' potential, the development of their abilities and competencies, and cultivates critical thinking, a creative approach to problem-solving, self-directed learning, and teamwork skills—all of which become crucial for their future success in their professional careers.

The aim of this scientific article is to provide a detailed examination of the mechanisms establishing the connections between student engagement in learning and the development of their competencies. We strive to unravel the theoretical approaches to this issue, analyze the results of contemporary research, and offer practical recommendations for higher educational institutions and educators.

It's crucial to note that active student engagement in learning goes beyond classroom activities. It encompasses various extracurricular activities such as participation in projects, research, student self-governing bodies, sports, and cultural events. Thus, when considering student engagement in learning, we take into account a wide range of activities aimed at developing their intellectual, personal, and social potential.

Despite the fact that the results of current studies conducted primarily on samples of American students indicate a positive relationship between student engagement, skill development (Strauss and Terenzini, 2007; Roulin and Bangerter, 2013; Kilgo et al., 2015), (Arum, R. & Roksa, J., 2011) and successful completion learning (Kuh et al., 2008; Wang & Degol, 2014), (Fredricks, J.A., Filsecker, M., & Lawson, M.A., 2016), a number of studies in other countries (Hsieh, 2014; Choi & Rhee, 2014) do not find a positive relationship between student engagement and educational outcomes. For example, Hsieh's (2014) study conducted on a sample of students at a university in Taiwan found no relationship between student engagement and grades when controlling for demographic characteristics, socioeconomic status, and motivation. Another study (Choi, Rhee, 2014), (Epstein, J., Santob, R.M., & Guillemina, F., 2015), (Foreman, E. A. & Retallick, M. S., 2012), based on a sample of Korean students, indicates that the educational experience of Korean students is very different from the experience of students in other countries.

2 METHODS

The novelty of this study lies in the fact that it is the first systematic attempt to study the relationship between student engagement (curricular and extracurricular) and



educational outcomes in the educational context. In addition, it has important methodological advantages compared to similar studies conducted in foreign countries. First, to measure educational outcomes, not only student self-reports based on survey data are used, but also standardized tests, along with which administrative data are also analyzed. Secondly, the quantitative data analysis is complemented by materials from interviews with students. The use of mixed methods makes it possible to clarify the identified quantitative relationships, as well as assess the consistency of the results.

3 RESULTS AND DISCUSSIONS

Research shows that students' academic engagement is positively related to their academic outcomes (grades) (Kuh et al., 2008). Kuh and colleagues note the positive contribution of student engagement to completion of a bachelor's degree, which in turn is associated with long-term social and economic benefits that are passed on to future generations, improving the quality of life not only for an individual family, but also for society as a whole (Kuh et al. al., 2008). Some work suggests a positive relationship between student participation in collaborative projects, interactions with students from different cultures, and gains in critical thinking skills (Tsui, 2008), (Kim, J. & Bastedo, M. N., 2016). Special attention is paid to the interaction between teachers and students, not only in the classroom, but also outside. Faculty-student interactions can occur through faculty-led research and application projects (Hand et al., 2011). Student involvement in scientific/project activities develops independent thinking skills and stimulates the processes of synthesis and evaluation of ideas (Kilgo et al., 2015).

Thus, student engagement is associated with educational success, which is defined as the development of skills and completion of the educational program on time. In this regard, surveys of students about what and with what frequency they do at the university, and how they evaluate the educational and extracurricular activities existing at universities have become popular at universities in the USA, Canada, and Australia (Pascarella et al., 2010; Johnstone et al., 2018), (Douglass, J. A., Thomson, G. & Zhao, C.-M., 2012).

Principles of involvement:

1. Involvement is understood as the totality of time resources and mental efforts spent by students on acquiring academic experience. In other words, the more time



and energy students spend on participating in educational and targeted activities, the higher the result.

2. Involvement has a dynamic nature. That is, different students can show different degrees of involvement in some practice (event), and the same student can be involved in different practices (events) with different intensity.

3. Involvement has both quantitative and qualitative indicators. For example, the degree of student participation in academic work can be measured quantitatively (how much time the student spends on preparing for classes) and qualitatively (whether the student understood the material or simply reviewed the material without understanding it).

4. The degree of development of skills and personal development of students is directly proportional to the quality and quantity of efforts that students invest in obtaining educational experience.

5. Students' educational involvement (students' activity in the classroom, which can be manifested as: participation in class discussions; application of knowledge, ideas, and concepts from different courses; time spent on tasks) is positively associated with the development of critical thinking skills.

6. Extracurricular involvement of students (active participation in student organizations) is positively related to teamwork skills and critical thinking of university students.

7. Academic disengagement of students – violation of academic requirements (failure to complete the assignment, missed pass) – is a key barrier to completing the educational program on time for university students.

8. The nature of academic involvement of American students differs. Students spend a significantly larger proportion of time attending classes and completing assignments compared to American students. In turn, extracurricular activities in the current format are weakly related to the formation of students' educational results.

The presented study is the first systematic attempt to study the relationship between student involvement and educational outcomes of students in higher education. In addition to other works (e.g., Hsieh, 2014; Choi, Rhee, 2014), (Creswell, J. W., 2014), (Hand, J., Betters, C., McKenzie, M., & Gopalan, H., 2011), it demonstrates the limitations of engagement theory (originally developed as applied to American higher education) in educational contexts where students have significantly limited opportunities to build their educational trajectory and space for involvement. The inflexibility of educational plans of universities and the high classroom load limit



opportunities for both academic involvement within the framework of a specific course (for example, opportunities to read additional literature or a deeper discussion of topics of interest to students) and extracurricular involvement (Axelson, R. D., & Flick, A., 2011), (Bers, T.H., & Smith, K.E., 1991), (Chesnut, C. E., Hitchcock, J. H. & Onwuegbuzie, A. J., 2018), (Cole, M. S., Rubin, R. S., Feild, H. S. & Giles, W. F., 2007). As a result, participation in additional activities that go beyond the formal requirements of the educational process is associated with higher costs for students than for students at American universities and does not always translate into higher educational results (Astin, A., 1984, 1993), (Chia, Y.M., 2005).

Today in Ukraine, there are active discussions about how to improve the educational results of students. In this regard, the conducted research can be useful in the development of measures to increase students' readiness to complete their studies and in the formation of the student curriculum, the distribution of the educational load, and the planning of new student initiatives at the university. The obtained results are important for understanding how universities organize and structure the educational experience of students. Most students are not involved in informal education (participation in student organizations, volunteer projects).

Based on the results of the research, it is possible to formulate the following proposals that can be used by universities as possible tools for improving the educational results of students. Due to the fact that this paper did not set the task of checking the effectiveness of the proposed initiatives, they require preliminary testing in pilot projects:

1. Skills of critical thinking and teamwork can be developed due to the involvement of students in extracurricular activities on the basis of the university. The following possible steps may be required for this:

- Redistribution of students' academic load and expansion educational formats involving extracurricular work of students: for example, within the framework of student organizations or project work.

- Formation of accessible platforms and open formats of extracurricular activities on the basis of the university, as well as the creation of a department that coordinates extracurricular activities of students.

- Expanding the practice of accounting for extracurricular achievements (for example, holding a conference/festival, implementation of a charity project, etc.) in special scholarships/incentives of the university.



2. The following tools and initiatives may be needed to increase the share of students who complete the educational program within the regulatory period:

- Monitoring of student involvement (attendance, completed assignments) at the institutional level and provision of targeted assistance to students from the risk group, for example, referrals for attending busy and face-to-face consultations.
- Supporting courses for students who cannot master the learning material.
- Accommodation of first-year students in dormitories located at a short distance from academic buildings in order to reduce travel time. This will allow them to spend more time at the university and participate in extracurricular activities.

4 CONCLUSIONS

Thus:

1. Determination of the mechanisms of the formation of the connection between the involvement of students in academic and extracurricular activities and the development of students' skills. In the future, it is necessary to study the specifics of curricular and extracurricular activities in more detail in order to understand which formats can make the greatest contribution to the development of critical thinking, teamwork, and which elements of activity should be developed centrally by universities.

2. Analyze the nature of the relationship between academic and extracurricular involvement. Is there a limit when excessive extracurricular involvement will have a negative effect on academic involvement and educational results? What are the conditions for maintaining a balance between the extracurricular and academic load of students?

3. Conducting a more detailed cross-cultural analysis of the concept of student involvement, which would include not only American, but also European and Asian universities.

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