POLICY FOR SUPPORTING CREATIVITY
IN THE ACADEMIC ENVIRONMENT

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Abstract

The focus of the article is a detailed examination of supporting creativity in the academic environment. It aims to propose recommendations for policymaking to promote creativity in this environment so that its impact on the future state of social policy is taken into account. To fulfill the article's aim, the authors carried out research at several Slovak universities in 2020. The purpose of this research was to identify the key elements, factors, and methods that are being used in promoting creativity at universities. The researchers used a questionnaire survey on students' academic motivation and creativity. The survey sample comprised 123 students, of whom 39% were male and 61% were female. Based on the data collected and the analysis performed, it was possible to determine (1) which factors influence students' creativity the most, (2) which factors are most important for them in terms of creativity, and (3) which methods for supporting creativity are most often used in the academic environment. Subsequently, it was possible to design a set of recommendations for potential policymaking focused on the support of creativity in the academic environment. A policy set this way would affect not only the state of the university's social policy but also the country's social policy.

Key words: motivation, creativity, policy, academic environment.

JEL Code: I23, J24, M12

Introduction

Creativity is an important personal competence that determines the progress of each country. It is important not only for the market environment but also for *university graduates,* and thus for teachers and other members of the academic environment too. It is they who should create, apply, and develop policies to promote creativity in this environment, so they prepare graduates for the requirements of potential employers.

The World Economic Forum survey, focused on future trends in the demand for skills in the labor market, also confirms the key importance of creativity. The ranking of required skills includes *"creativity, originality, and initiative",* while the prediction for 2022 states that

creativity will reach a third place in terms of the applicability of university graduates (World Economic Forum, 2018, p. 12).

Based on a synthesis of historical and current sources, Papaleontiou-Louca, et al. (2014) suggested the following areas of interest that will lead to an atmosphere of creativity at the university: (1) promotion of creativity at the individual level; (2) promotion of creativity at the group level; (3) the use of competition and cooperation; (4) environment supporting creativity in universities - creation and application of policy supporting creativity (pp. 140–142).

To determine the ***current state of policy-making regarding the support of creativity in Slovakia,*** it is appropriate to analyze the documents created by the Ministry of Education, Science, Research and Sport of the Slovak Republic (the Ministry of Education). The initial analysis of the official website of the Ministry of Education (ME SR – Thematically Focused Documents, 2020, online) revealed that there is *no thematically focused document* that would comment on the promotion of creativity.

The *"Long-term Intention of the Ministry of Education in Educational, Research, Development and Other Creative Activities for Universities for the Years 2016–2021"* sets out four major priorities. Although one of these priorities is the "Creation of an Attractive Creative Environment", the document elaborates on this section only briefly (ME SR – Long-term Intention of the Ministry, 2016, online). In addition, it does not relate to policy-making to promote creativity in the academic area. Another of the examined documents, the *Annual Report on the State of Higher Education for 2018,* contains mainly factual information, such as the share of creative workers in the total number of employees of public universities, which is 53.54% (ME SR – Annual Reports on the State of Higher Education, 2018, online). However, it does not discuss the possibilities of policy-making to support creativity in the academic environment, its content, or the creativity of the environment itself.

The *"Strategy of the Slovak Republic for Youth for the Years 2014–2020"* (ME SR – Interdepartmental Working Group for State Policy in the Field of Youth, 2014, online) presented several programs for youth (ME SR – Youth Programs, 2014, online). Again, however, none of them in fact focused directly on promoting creativity. Although the mentioned Strategy also contains "Creativity and Entrepreneurship" (ME SR – Strategy of the Slovak Republic for Youth, 2014, online), it mainly concentrates on employment and entrepreneurship, not on the academic environment. The *"2018 Youth Report"* contains several sections, the elaboration of which has been delegated by an independent expert. The author focused on global implications that describe the impact of creative activities on manufacturing industry and technology. Even though the author mentions inner motivation or creativity, the document

concentrates on the field of technology (ME SR – The quality of life of young people, 2017, online), and does not capture the needs of the academic environment at all.

Overall, it is possible to state that out of all the activities and projects implemented under of the Ministry of Education of the Slovak Republic, only a minimal number focuses on the support of creativity at universities. The most important finding is that there is *no policy in place to support creativity in the academic environment and neither any supporting activities*.

These facts lead to a logical conclusion that, in contrast to Slovakia, abroad, higher education policy receives substantial attention, documented by several scientific articles and studies. E.g. a separate scientific journal called Higher Education Policy, under the auspices of the International Association of Universities and Palgrave Macmillan, is worth a mention (www.palgrave.com/fr/journal/41307).

Thereto, the *aim of the article* is to search the creativity in higher education, and especially, the theme of higher education policy, focused on development of student creativity in Slovakia. Based on analysis, synthesis and generalization of theoretical knowledge, relevant governmental documents and results of sociological questioning performed on the sample of 123 university students, conclusive part contains a set of recommendations intended to improve an existing situation in the Slovak higher education.

1   University student creativity

Creative activity is any research, development, artistic, or other creative activity of a university, which is relevant from the perspective of its mission, especially in connection with the goals and outputs of education (SAAVS – Standards, 2020, online). Creativity is the unique ability to create either all-new and still undiscovered things, thoughts and solutions, or the synthesizing ability to combine existing objects and ideas in an absolutely new, still unused and unknown, manner. It calls-up the thinking and motivates students to be more interested in their studies. Providing students with the chance of discovering, testing and demonstrating their creativity directly at seminars, in the presence of the other colleagues, invigorates and directly engages students in the educational process (Blašková, 2014).

Applied creativity increases self-confidence, the value of one's 'self' and brings valuable outcomes that benefit other classmates, the study group, the faculty, the university, and the entire society. For many students it is the culmination of their accumulated intellectual potency and efforts to generate bold solutions, to realize their 'master dreams'. Like any other unique personality characteristic, it must be purposefully and systematically rehearsed,

strengthened, developed, trained, ergo cultivated. All proven (older) and new (progressive) tools or techniques, implanted into education, can be suitable in this direction. For example, learning from exemplary practitioners (Sammons et al., 2016) or introducing students to a recent scientific discovery (Marquis & Vajoczki, 2012). Or one of the more powerful and complex tools, i.e. 'STEAM' of which the primary goal is to create an authentic and interdisciplinary experience by using the principles of joint teaching and planning. Critical milestones are not only scientific methods but also iterative, creative processes and artistic creation that support the experience and self-direction of teaching in students (Allina, 2018).

One of the biggest *downfalls* regarding creativity is a situation in which a higher body forces the creativity of individuals or groups, but this body does not provide any technical, personal, material, or procedural help to develop it. This is also a reality of Slovak higher education: "The Methodology for the Evaluation of Standards", developed by SAAVS, includes methods and techniques that can assess the level of outputs of creative activity of teachers. It also contains criteria and assessment procedures for recognizing the level of creative activity (SAAVS – Standards, 2020, online), but does not contain any methods that would help to increase the creativity of the academic environment.

2   Higher education policies supporting the creativity

The success or failure of higher education policy initiatives ultimately depends on the actions of academic staff belonging to variety of departments and disciplines (Meek, 1994, p. 34). In addition, changes in government policy toward higher education often have the stated intention of creating higher education systems that are more flexible, adaptive, and responsible (Goedegebuure et al., 1994, pp. 316–317).

Higher education policy should represent a comprehensive system of principles, priorities, recommendations, warnings, procedures, and explanations aimed at substantial growth, continuous improvement, and generation of progressive solutions in higher education. This system should include both gradual (systematic) and sufficiently dynamic (based on the challenges of a modern and sustainable society) progress, enhancement, and betterment. It should generate innovative strengths, intellectual competencies, and potential multiplicative effects of thinking and work of all students, experts, scientists, lecturers, managers, and administrative staff of higher education.

Inspired by Shepard & Betof (2004), in order to build creative atmosphere that sustains *talent, creativeness, invention and excellency,* the managers, lecturers, and mainly students,

should enter into an agreement on what steps each will take to make the environment more creative. This new 'contract' might take the necessary steps to address the needs of students and support them. The students' portion of the 'contract' is that they will be responsible for their own growth and take advantage of the opportunities provided by their lecturers in order to be more satisfied (Shepard & Betof, 2004).

3   Methods

To get current data from the academic environment, researchers conducted a questionnaire survey in 2020 that focused on the motivation and creativity of students of Slovak universities.

3.1   Survey sample and results

The total number of respondents who took part in the survey is $n = 123$. Authors chose several basic characteristics for a more detailed specification of the respondents (Table 1).

Tab. 1: Identification of respondents

Gender	Frequency ($n = 123$)	Level of study		
		Bachelor	Master	PhD.
Male	48	24	19	5
Female	75	34	38	3

The first important researched area was **motivating students towards creativity.** Examination comprised two questions. The first was focused on finding out whether *teachers motivate students to be creative.* Based on the analysis of the answers (Table 2), it is possible to state that the respondents' opinions on the motivation to be creative and the appreciation of creative ideas are mostly positive. However, up to 13.01% of respondents said that teachers mostly do not motivate them to be creative.

Tab. 2: Opinions on motivation to creativity and appreciation of creative ideas

Answer	Teachers generally motivate student to be creative		Teachers value student creative ideas and solutions	
	Frequency	[%]	Frequency	[%]
Yes	5	4.07%	16	13.01%
Rather yes	41	33.33%	53	43.09%
Yes and no	56	45.53%	41	33.33%
Rather no	16	13.01%	12	9.76%
No	5	4.07%	1	0.81%

The second question was focused on the ***appreciation of creative ideas by teachers.*** 43.09% of respondents answered "mostly yes" and 33.33% "yes and no". Only less than 10% of respondents selected "mostly no".

For the needs of exploring the **possibilities of influencing creativity,** authors defined 20 elements that could have contributed the most to a positive or negative change in the student's creativity. Table 3 shows these elements together with the number of their occurrence. The most common were "good friends", "pleasant study environment" and "good team and interaction at school". However, in the fourth place is "long-term fatigue, stress" (45.53%). It is therefore important to monitor this phenomenon, eliminate and prevent its negative consequences.

Tab. 3: Opinions on elements causing the change of creativity

	Elements influencing the creativity	Frequency	[%]
1	Good friends	75	60.98%
2	Pleasant study environment	72	58.54%
3	Great teamwork and interaction in school	61	49.59%
4	Long-term fatigue, stress	56	45.53%
5	An important person (parent, teacher, friend, etc.)	55	44.72%
6	Significant success in the field of study	52	42.28%
7	Lack of free time	49	39.84%
8	Harmonious family life	47	38.21%
9	Studying at the university	44	35.77%
10	Plenty of free time	39	31.71%
11	Happy childhood	28	22.76%
12	Inappropriate / unsuitable study environment	26	21.14%
13	Health problems	26	21.14%
14	Art school, course, training, etc.	24	19.51%
15	Unpleasant atmosphere (stuffy) at school	22	17.89%
16	Problems in family life	20	16.26%
17	Extraordinary/remarkable experience in the past	18	14.63%
18	Problems in the studying	17	13.82%
19	Previous study failure	14	11.38%
20	Significant success in family life	13	10.57%

The last question examined the initiative of students in supporting their own creativity. Researchers asked respondents to select which **techniques or methods of supporting creativity** from the list presented they were currently using (Table 4). Authors prepared the list comprising nine techniques, based on the previous analysis of primary and secondary data. In terms of numbers, the "Positive Questions" technique came first (74.80%). In second place was "Brainstorming" (65.04%). It is possible to conclude that the respondents referred mainly to simple methods, which they knew well and have had previous experience with.

Subsequently, researchers examined the techniques/methods of supporting creativity from the point of view of ***mutual relations with the gender*** of the respondents. Based on the Chi-square Test (z-score; yes = z> c; c = 1.96), authors found a statistically significant dependence on gender regarding "Drawing and mind maps" and "NPL" techniques. 65.33% of women reported using "Drawing and mind maps" as opposed to 39.58% of men. However, only 1.33% of women apply "NLP", which men apply more often (10.42%).

Tab. 4: Application of techniques/methods for creativity support and gender view

	Techniques for support of creativity	Frequency	[%]	Z-score	Significant
1	Positive questions (Why is this so? What if?)	92	74.80%	0.467	no
2	Brainstorming	80	65.04%	1.248	no
3	Drawing and mind maps	68	55.28%	**2.828**	**yes**
4	Checklists creation (control of the implementation of)	56	45.53%	1.059	no
5	Creating lessons for the future (positive or negative moments)	45	36.59%	0.936	no
6	Anagram and other word/mind games or puzzles	16	13.01%	0.684	no
7	Memory development techniques (e.g. LOCI)	15	12.20%	0.648	no
8	90-second technique (creative solution by uninterested people)	9	7.32%	0.364	no
9	NLP – neuro-linguistic programming	6	4.88%	**2.281**	**yes**

3.2 Discussion and recommendations

In education, an understanding of motivation can be applied to promote students' classroom engagement, to foster the motivation to learn and develop talent, to support the desire to stay in school rather than drop out, and to inform teachers how to provide a motivationally supportive classroom climate (Reeve, 2009, p. 19). In such a progressive-motivation way, the sustainability of university might be built (Zraková, Kubina & Koman, 2017; Șimon, Stoian & Gherheș, 2020; Sisto, Sica & Cappelletti, 2020).

Advocating the results presented in the empirical section, qualitative-quantitative analysis of students' results in two consecutive years (n_1 = 45 and n_2 = 53 students) could be included. This shows that, motivational bonuses at higher, harder level, i.e. the systematic motivation of and fairness to students have positive impacts on their results (Blašková, 2014).

Higher education policies must cover *exceptionally diverse and significant areas or dimensions*. Therefore, to maintain clarity and impact, it is appropriate to **structure the overall policy into sub-policies.** The mosaic understanding of sub-policies, covered by the overall higher education policy, creates a space for greater detail, precision, and simultaneously the

discovery and 'forward' management of key areas of modern universities. We can consider the need for the following partial policies:

- General higher education policy – a policy for the development and balance of higher education, both public and private, in the state;
- Motivational higher education policy – a policy for increasing the motivation and enthusiasm of university students;
- Creativity higher education policy – a policy for finding, identifying, supporting, increasing and appreciating the creativity of university students;
- Sustainability higher education policy – a policy for responsible transition between current and future ambitions;
- Progress-able higher education policy – a policy for systematic progress and challenges of society to progress;
- 5.0 higher education policy – a policy to expand knowledge, wisdom, intelligence, maturity, mastery, excellence;
- Multicultural/globalizable higher education policy – a policy for the development and integration of international perspectives and emergencies;
- Inclusive higher education policy – a policy for the involvement of minority or otherwise handicapped students;
- Gender higher education policy – a policy for the integration and balance of gender aspects;
- ICT higher education policy – a policy for the use and development of new information-communication tools/systems for the benefit of universities and society.

As with any system and its subsystems, all the aforementioned partial higher education policies must be mutually consistent, mutually supportive, complementary, and even multiply their strengths, content, and responsibilities.

Conclusion

A comprehensive and harmonized complex, of all defined higher education policies, should be created based on responsibly performed analyzes. Interestingly enough, creative policy can be an intention (desired result), and a necessary input of the entire **improvement process** also. Multiple retractions, discussions, finishing, chiseling, repeated test runs, etc. must be necessary.

From the **standpoint of building** a creative higher education policy, it might be wise to recommend that all participants take part. That means students and employees of universities,

representatives of employers, experts from the Ministry of Education and the Ministry of Economy, etc. Specifically, the process requires the involvement of each lecturer; each head of the department; director of each study program; the dean of each faculty, including the participation of vice-deans; each rector, vice-rectors; Ministries of Education + coordinators in the entire department (harmonization of public and private universities).

In terms of **content,** it is appropriate to incorporate more modern, non-traditional methods, techniques, tools or elements, into the creative higher education policy. University students prefer novelties, elements that others do not know (they like to consider themselves innovative, unusual, groundbreaking). In particular, the deep and true involvement of students in the development of their creativity can be an excellent inspiration, which should cause their own generation of unique, "their" methods. Every creative individual likes a feeling of their own uniqueness, which is not only appreciated but also *applied and duplicated by others.*

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