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ENTREPRENEURIAL EDUCATION - EXPLORING TEACHERS' CREATIVITY IN 11 COUNTRIES

Abstract

Creativity is considered as one of the main entrepreneurial skills next to leadership and risk taking. Teachers as role models are becoming more aware of the changes needed within themselves and their classrooms and precisely their perception of importance of creativity and innovativeness (C&I) in teaching is the focus of this research. The views of teachers (N=149) from 11 countries (Germany, UK, Croatia, Bosnia and Herzegovina, Serbia, Slovenia, Portugal, Ireland, France, Spain and Albania) are researched and compared. The theoretical background of the paper explains the connection between creativity and entrepreneurial education and provides a sound rationale for reinforcing and emphasizing creativity as a needed entrepreneurial skill in both teachers and students. The findings of this paper will hopefully encourage teachers to participate in teacher training in C&I and can help raise teachers' awareness of the obstacles to C&I in classrooms across Europe.

Keywords: Creativity, entrepreneurial skills, innovativeness, teachers

1. Introduction

The old paradigm of the twentieth century is being replaced with the new paradigm of the entrepreneurial society – a society which rewards creative adaptation, opportunity seeking and the drive to make innovative ideas happen (ILO and UNESCO, 2006). Creativity is nowadays widely recognized in the world as a skill important for all types of professions. Plenty of research regarding creativity in the classroom has been conducted, yet it seems there is limited research that focuses on teacher's opinion or self-assessment of creativity in the classroom. Therefore, this research will focus on creativity as one of the main entrepreneurial skills next to leadership and risk taking. The four primary hypotheses are:

H1: Teachers are aware of the importance of creativity in their teaching

H2: Teachers value their role in developing students' creativity and innovativeness highly

H3: Teachers are willing to participate in further training in creativity

H4: There is a difference in the perception of importance of C&I between female and male teachers.

One thing is irrefutable, changes in transferring knowledge need to happen and teachers should be the ones whose awareness thereof needs to be raised. Raising teachers' awareness is the aim of our research. The paper consists of an introduction with four research hypotheses. The theoretical background emphasizes the importance of entrepreneurial education and acquired entrepreneurial skills. It encourages creativity as a key entrepreneurial skill in individuals and supports the idea of the need for creativity and innovativeness in teaching. After that, methodology used for the research is described, followed by the results. Discussion, as well as suggestions for further study are mentioned in the conclusion.

2. Theoretical Background

2.1 Entrepreneurial Education

Entrepreneurship in the 21st century has emerged into an influential economic force. Entrepreneurial education, from now on referred to as EE, is gaining interest both in the field of research and among policy makers. This interest can be ascribed to the perceived importance EE plays in the equipping of potential entrepreneurs and as a 21st century strategy to foster economic growth and development (Kurotimi et al., 2017). Higher education should be employing entrepreneurial teachers who can and will provide their students with necessary efficacy beliefs, intellectual tools and intrinsic values. Approaches such as action-learning and experiential learning should be emphasized with the aim of increasing the probability of successful entrepreneurial outcomes. An entrepreneurial teacher is the gatekeeper to improving the quality of the learning experience. Therefore, priority is placed on training and supporting new and established teachers to introduce EE (David et al., 2018). It provides future entrepreneurs with the prerequisite skills for today and a broad set of competencies, which can bring greater individual, social and economic benefits. These competences lend themselves to application in every aspect of people's lives (European Commission, 2011; Kurotimi et al., 2017). According to Gibb (2002), EE aims to amplify individual characteristics and to promote a more entrepreneurial culture. Additionally, it prepares entrepreneurs who are able to chase entrepreneurship and innovation as employees and who become individuals who display enterprising behaviour (Gibb, 2002). Since sense of initiative and entrepreneurship are one of the eight key competences for lifelong learning, EE includes not only life-wide, but lifelong competence development (European Commission, 2011, European Commission, 2006[1]). Furthermore, entrepreneurship and innovation are nowadays crucial for dealing with current consumer, technological and environmental trends (Daniel et al., 2017).

For the last decade, EE has been the focus of research (O'Connor, 2012; European Commission, 2011; Bikse et al., 2014) and a need for policy makers to promote EE is apparent due to all skills acquired from which individuals later benefit in both their personal and private life. History suggests that various economic and social innovations were led by entrepreneurs who played a crucial role in communities due to their willingness to take the lead, problem-solving skills and diligence. Thus, entrepreneurship refers to an individual's ability to put theory and ideas into practice. It comprises the ability to recognize commercial opportunities, to plan and manage projects, as well as creativity, innovation, showing initiative, risk-taking and communication skills (Kurotimi et al., 2017; European Commission, 2011). The mentioned characteristics are ones of entrepreneurial spirit (ILO and UNESCO, 2006). Moreover, soft competences such as professionalism, reliability, coping with uncertainty and ability to work under pressure, good verbal and written communication skills, IT skills and creativity are more required by companies than hard competences (Sisson, Adams, 2013; Andrews, Higson, 2008). Nevertheless, entrepreneurship skills are not fixed personal characteristics and should therefore be taught and acquired (Oosterbeek et al., 2010). The importance and outcomes of the acquisition of entrepreneurial skills are evident from the impact logic model for education policy (David et al., 2018). Authors explain the intertwining and influencing relationship between individuals, institutions, teachers, and economy. In addition to reducing social exclusion and having more active

citizens in terms of volunteering and social returns on investment, it results in improving the society as a whole.

2.2 Creativity

Creativity is an elusive concept, but a fundamental human quality (Hondzel, Hanses, 2015). It is the process of reorganizing knowledge (general or specific) and of articulating that synthesis so that other people can understand the meaning (Rhodes, 1961). Dayan et al. (2013) mention that there is a conceptual gap between a need to better understand mediating factors influencing entrepreneurial creativity and how they are integrated and linked with individual personality traits and other factors such as resources. According to Rhodes (1961), creativity is synthesizing knowledge and therefore has interdisciplinary appeal. He has provided the intertwining structure of components influencing creativity and named them the 4 P's: person, process, press and products. Person refers to personality, intellect and temperament, while process involves motivation, perception and learning. Press deals with the relationship between people and environment, and the product is an idea that has become embodied into tangible form. In order to successfully execute ideas that will become profit-oriented, individuals need to have the entrepreneur's skill set. Having the ability to produce multiple ideas is the skill of being creative and as such the most valuable skill an individual can possess. Business durability and longevity are also dependent upon creativity. Business longevity is a critical element due to the challenges generated by globalization, increasing competition, and rapid pace of change (Alencar et al., 2017). Creativity pressures companies into quicker innovations by requiring both originality and effectiveness (Runco, Jaeger, 2012). Companies (such as Google, SAS, Lego) that manage creativity will have a crucial advantage in the ever-increasing competition for global talent (Ulrich, Mengiste, 2014).

When looking at the subjective nature of creativity, research dates back to Katz and Giacommelli (1982). They stated that the subjective consensual definition of creativity does not solely involve openness of mind. Gardner (1994) shared his definition of creativeness as an individual who solves problems, fashions products, or poses new questions within a domain in a way that is initially considered to be unusual but is eventually accepted within at least one cultural group. He mentioned that *"no person, act or product is creative or uncreative in itself. Judgments of creativity are inherently communal, relying heavily on individual experts within a domain".*

Creativity is essential at all stages of development, from concept to execution. Thus, a pattern of the competencies emerges, which teachers across the disciplines should enhance in their learners (David et al., 2018). Our first and second hypothesis will test whether teachers are aware of the importance of creativity in their teaching and whether they value their role in developing students' creativity and innovativeness. Possession of creative skills differentiates teachers from the future from the teachers of the past and it sets a new path for modelling future generation's knowledge. Moreover, it modifies the dynamic of teaching. In this 21st century, teachers are not expected simply to be sources of knowledge, but rather to develop entrepreneurial actions towards building a better educational system, thereby influencing their roles and general conduct (Neto et al., 2017). Entrepreneurship scholars agree that creativity is linked to entrepreneurship because creativity should promote identifying new opportunities (Murphy, Wright, 2017, as in Shane, 2003).

Creativity is not solely a mind-set for artists; rather, all professions under different circumstances benefit from being creative. Runco (2007) argues that even though creativity is associated with intelligence, innovation, imagination, insights and health, a distinction between these terms should be made. Creativity is positively related to organizational innovation since it is the first stage of innovation and provides the foundation for innovation (Muceldili, 2013, as in Baer, 2012). Furthermore, creativity is not an innate ability; it can be taught and learned.

2.2.1 Challenges in Stimulating Creativity

Since EE was, for the last twenty years, undermined by scholars for promoting learner's analytical skills rather than their capacity for innovative thinking (Gibb, 2002), in this day and age scholars are the ones who should put the emphasis back on acquiring soft entrepreneurial skills. For Claxton (2008)[2] creativity, as an entrepreneurial skill, is the ability to move fluently between focused, purposeful perception and relaxed, receptive knowledge acquisition. It proves that an example of experiential education instead of frontal teacher-focused teaching is a step forward towards a more creative classroom. Yet, theory differs from practice and continuous

challenges in stimulating creativity prevail. Higher education institutions put the emphasis on students' creativity, and teachers have a crucial role in developing it. Nevertheless, college faculty are generally not familiar with learning and teaching environments that promote creativity (Alencar et al., 2017). Thus, researchers emphasize the need for additional professional development regarding creativity as an integral part of teacher training (Maloney, 1992; Esquivel, 1995; Blumen-Pardo, 2002; Cimermanová, 2014[3]; Maley, Kiss, 2018), which is in line with our third hypothesis since we want to comprehend whether teachers are willing to participate in further training in creativity. Alencar et al. (2017) mentioned factors such as excessive work load, insufficient time for preparing lessons and for contact with students, large class sizes and inadequate resources as factors that inhibit creativity and prevent its stimulation. Finally, even though plenty of teachers understand and value the importance of incorporating creativity into their teaching, much work needs to be done to ensure higher education culture that supports and encourages creativity (Alencar et al., 2017).

2.2.2 *Gender and Subject Differences Influencing Creativity and Innovation*

The regime of traditional professional teacher education is nowadays seen as somewhat inflexible and as one that does not allow room for creative processes. Therefore, differences between teachers (experience-wise, gender-wise, or subject-wise) regarding creativity and innovation are apparent. In our research we wanted to explore the teachers' differences in gender as well as the differences between teachers' main subject of teaching.

Gender differences in creativity are an omnipresent and favoured topic in various research (Simpkins, Eisenman 1968; Baer, 1998; Kaufman, 2006; Kousoulas, Mega, 2009). Baoguo et al. (2017) have concluded that women scored higher than men on originality. Moreover, women usually exceed men in semantic processing, which is the major function of the left temporal region. Our fourth hypothesis will test whether there is a difference in the perception of importance of C&I between female and male teachers in our survey.

Furthermore, Cimermanová (2014) believes that foreign language teachers have more opportunity to express their creative skills and promote creativity within their students. Also, students' creativity depends on the creativity of a teacher, the task, and the amount of creativity that the teacher embraces (Cimermanová , 2014). Teaching a foreign language allows the freedom to choose the tools, techniques and approaches appropriate for application in the classroom. Purposeful conduct is central rather than optional to successful language teaching as it should reflect the cognitive and sociocultural facets of creativity (Jones and Richards, 2016). The role of foreign language teachers has shifted from the controller to facilitator or catalyst (Cimermanová, 2014; Alencar et al., 2017; David et al., 2018). Simply by allowing students to choose how they want to learn, their intrinsic motivation is encouraged and they are better enabled to become creative.

3. *Methodology*

The focus of this research are the perceptions of European teachers from all levels of education regarding the use and need for creativity in teaching. The paper aims to raise the awareness of the need for entrepreneurial skills in teachers, i.e. for reinforcing creativity in entrepreneurial "classrooms". The survey was conducted online and the data was collected in the summer of 2017. The link to the survey was distributed using the purposive sample (the snowball sample) among teachers (N=149) in eleven European countries (Germany, UK, Croatia, Bosnia and Herzegovina, Serbia, Slovenia, Portugal, Ireland, France, Spain and Albania). Teachers who participated in the survey teach different subjects (foreign languages or other) at all levels of education (pre-school, primary, secondary, higher education). The survey examined their perception of creativity and innovativeness in teaching. The questionnaire included yes/no questions, questions with short and long answers, multiple choice questions and five-point Likert scales as answers. The survey was comprised of 16 questions in total, grouped into demographic data, teacher's perception of creativity and innovativeness and teacher's attitude towards receiving training in creativity. In order to analyse the data SPSS was used for descriptive statistics and bivariate statistical methods (independent sample t-test). Table 1 provides the demographic data of the respondents (N=149).

Table 1 Demographic data

Country	n (%)
Croatia	107 (71.8)
Other	42 (28.2)
Total	**149 (100)**
Gender	n (%)
Female	99 (66.4)
Male	50 (33.6)
Total	**149 (100)**
Age	n (%)
20-30	29 (19.5)
31-40	52 (34.9)
41-50	41 (27.5)
51-60	22 (14.8)
60+	5 (3.4)
Total	**149 (100)**
Years of experience	n (%)
5 or less	30 (20.1)
6 to 10 years	33 (22.1)
11 to 20 years	51 (34.2)
More than 20 years	35 (23.5)
Total	**149 (100)**
Institution	n (%)
Early Childhood Education	3 (2.0)
Primary Education	8 (5.4)
Secondary Education	23 (15.4)
Higher Education	115 (77.2)
Total	**149 (100)**
Subject	n (%)
Foreign language	52 (34.9)
Other	97 (65.1)
Total	**149 (100)**

Source: Authors' own calculations

4. Results

Teachers (N=149) were asked to share their perception of the importance of creativity and innovativeness in general and in their teaching. The questions contained five-point Likert scales as answers. For the purpose of simplifying the results in our Tables, answers were categorized. Table 2 provides the data from 11 European countries where it is apparent that more than 97% of all responding teachers value creativity and innovativeness as important, regardless of the subject they teach. Furthermore, 93.95% of teachers consider the use of creativity and innovativeness in teaching important. When asked to self-assess the use of creativity and innovativeness in their teaching, only two teachers (1.3%) do not consider it important. Since English teachers are more prone to using technology and altering their lessons, it is not unexpected that they value their use of creativity and innovativeness in teaching more (85.6%) than do teachers of other subjects (78.4%).

Table 2 Teachers' Perception of the Value of Creativity and Innovativeness in General and in Their Teaching

How do you value creativity and innovativeness?					
		not important	moderately important	important	Total
Which subject do you teach?	Foreign language	1 (1.9%)	1 (1.9%)	50 (96.2%)	52 (100.0%)
	Other	0 (0.0%)	2 (2.1%)	95 (97.9%)	97 (100.0%)
How do you value the use of creativity and innovativeness in teaching?					
		not important	moderately important	important	Total
Which subject do you teach?	Foreign language	1 (1.9%)	1 (1.9%)	50 (96.2%)	52 (100.0%)
	Other	1 (1.0%)	6 (6.2%)	90 (92.8%)	97 (100.0%)
How do you value YOUR use of creativity and innovativeness in teaching?					
		not important	moderately important	important	Total
Which subject do you teach?	Foreign language	1 (1.9%)	6 (11.5%)	45 (86.5%)	52 (100.0%)
	Other	1 (1.0%)	20 (20.6%)	76 (78.4%)	97 (100.0%)

Source: Authors' own calculations

Table 3 exhibits teachers' agreement or disagreement with ten statements regarding creativity and innovativeness in teaching. As most of the surveyed teachers (76.5%) have between 5 and 20 years of experience in teaching, it is not surprising that as many as 131 of 149 teachers agree that they are confident of their own teaching. Over 85% agree or strongly agree that they like new things and would try out new functions and usages. Additionally, when they encounter a problem, a great majority (132) often asks themselves "why" in order to get to the bottom of a phenomenon. Almost three out of four teachers (71.8%) find that their needs are not catered for by ordinary teaching materials, and therefore often have to develop materials by themselves. More than 80% of teachers agree that everyday objects and events often stimulate them to embark on self-learning and exploration (82.55%), while only 6 teachers disagree with the statement (4.02%). While there are 117 teachers (78.52%) who believe that multimedia helps them be more creative and innovative in their teaching, there are only 7 teachers who disagree (4.69%). Interestingly, only two teachers (1.3%) disagree with the statement that creativity and innovativeness enhance teaching performance. Even though the results show that 52 teachers (34.9%) are satisfied with the knowledge and skills they had acquired during their initial teacher education, the results from the Likert-scale show that merely four out of those 52 teachers (0.76%) strongly agree with this statement. Almost all teachers (N=145) assess their role in developing student's creativity and innovativeness as crucial (97.4% teachers agree with this). 123 teachers agree that creativity and innovativeness contribute to a faster path to employment of graduate students (82.55%), while only six teachers disagree (4.02%).

Table 3 Respondents' Agreement and Disagreement with Statements Regarding Creativity and Innovativeness

Statement	Disagree	Neither agree nor disagree	Agree	Total
I am confident of my own teaching and my ability in solving problems.	5 (3.4%)	13 (8.7%)	131 (87.9%)	149 (100.0%)
I like new things and would try out new functions and usages.	3 (2.0%)	20 (13.4%)	126 (85.6%)	149 (100.0%)
Whenever I encounter a problem, I often ask myself "why" in order to get to the bottom of a phenomenon.	4 (2.7%)	13 (8.7%)	132 (88.6%)	149 (100.0%)
I find that my needs are not catered for by ordinary teaching materials, and therefore often develop materials by myself.	6 (4.0%)	36 (24.2%)	107 (71.8%)	149 (100.0%)
Everyday objects and events often stimulate me to embark on self-learning and exploration.	6 (4.1%)	20 (13.4%)	123 (82.5%)	149 (100.0%)
Multimedia helps me to develop creativity and innovativeness in my teaching.	7 (4.7%)	25 (16.8%)	117 (78.5%)	149 (100.0%)
Creativity and innovativeness enhance my teaching performance.	2 (1.4%)	20 (13.4%)	127 (85.2%)	149 (100.0%)
I am satisfied with the knowledge and skills I had acquired during my initial teacher education in the University.	47 (31.5%)	50 (33.6%)	52 (34.9%)	149 (100.0%)
Teachers should encourage students to develop their creativity.	2 (1.3%)	2 (1.3%)	145 (97.4%)	149 (100.0%)
Creativity and innovativeness contribute to a faster path to employment of graduate students.	6 (4.0%)	20 (13.4%)	123 (82.6%)	149 (100.0%)

Source: Authors' own calculations

Statistically significant differences were evident from the statistical tests, which were based on the analysed data on teachers' gender and the subject that they teach. According to the T-test in Table 4, there is a statistically significant difference between teachers according to their gender (p=0.009, df=84.314, t=2.655) since there are more female teachers who consider that teaching materials do not cater to their needs and therefore often need to develop the materials by themselves (x=4.04) than male teachers (x=3.66). Also, based on the results of the T-test in Table 4, there is a statistically significant difference between teachers according to their gender (p=0.005, df=81.867, t=2.911) regarding the benefits of multimedia use for developing creativity. Female teachers (x=4.23) believe that multimedia helps them to develop creativity and innovativeness in their teaching more than male teachers do (x=3.78). Interestingly, the results of the T-test in Table 4 prove the statistically significant difference (t=2.118 df=147 p=0.036*) between male and female teachers since there are more female teachers (x=4.31) who believe that creativity and innovativeness enhance their teaching performance than there are male teachers (x=4.04). Based on the results of the T-test in Table 4, there is a statistically significant difference between teachers according to their gender (p=0.000, df=147, t=3.597) regarding the use of creativity and innovativeness in their teaching. Female teachers who participated in the survey value their use of creativity and innovativeness in teaching more (x=4.41) than male teachers who participated in the survey (x=3.94).

Table 4 Statistically Significant Gender Difference between Teachers

	Gender	Mean	Std. Dev.	t-test
I find that my needs are not catered for by ordinary teaching materials, and therefore often develop materials by myself.	Female	4.04	.727	t=2.665, df=84.314, p=0.009*
	Male	3.66	.872	
Multimedia helps me to develop creativity and innovativeness in my teaching.	Female	4.23	.767	t=2.911, df=81.867, p=0.005*
	Male	3.78	.954	
Creativity and innovativeness enhance my teaching performance.	Female	4.31	.709	t=2.118, df=147, p=0.036*
	Male	4.04	.807	
How do you value YOUR use of creativity and innovativeness in the classroom?	Female	4.41	.700	t=3.597, df=147, p=0.000*
	Male	3.94	.867	

**p-value is given for T-test on a significance level of 0.05*
Source: Authors' own calculations

Furthermore, according to the results of the T-test in Table 5, there is also a statistically significant difference between English teachers and teachers who teach other subjects (p=0.049, df=147, t=1.948) regarding multimedia. English teachers believe that multimedia helps them to develop creativity and innovativeness in their teaching more (x=4.27) than do teachers who teach other subjects (x=3.98). Moreover, the results of the T-test in Table 5 also demonstrate a statistically significant difference in the opinion of English teachers and teachers of other subjects regarding the fact that creativity and innovativeness contribute to a faster path to employment of graduate students (t=-2.272, df=77.987, p=0.026). Teachers of other subjects (x=4.30) give higher value to creativity and innovativeness as a factor of employment of graduate students than do English teachers (x=3.92).

Table 5 Statistically Significant Subject Difference between Teachers

	Which subject do you teach?	Mean	Std. Deviation	t-test
Multimedia helps me to develop creativity and innovativeness in my teaching.	Foreign language	4.27	.660	t=1.984, df=147, p=0.049*
	Other	3.98	.935	
Creativity and innovativeness contribute to a faster path to employment of graduate students.	Foreign language	3.92	1.064	t=-2.272, df=77.987, p=0.026*
	Other	4.30	.738	

**p-value is given for T-test on a significance level of 0.05*
Source: Authors' own calculations

Additionally, teachers were asked to identify and comment on some challenges of EE and aspects that inhibit creativity in form of an open-ended question. A descriptive analysis of results is used and the most significant answers are provided. The main aspects recognized from teacher's answers were the curriculum, conformity and lack of materials and conditions. To be more precise, 14 teachers mentioned the constraints of the curriculum, the traditional style of teaching, as well as *ex cathedra* approach and the pressure of predefined grading system. Furthermore, 39 teachers mentioned the lack of support for proactive teachers (seminars, workshops), as well as the lack of motivation of both teachers and students, technology and electronic devices, Wi-Fi, materials, time, resources and interest. Apart from that, 11 teachers pointed out the fact that the main aspects that inhibit creativity are the ones within the teachers themselves, namely intrapersonal factors such as reluctance

to change, teacher's fear of change, losing control, fear of humiliation and insufficient thinking out of the box as well as the lack of teacher's knowledge about how to boost creativity among students. Even though teachers who participated in the survey are quite confident in their teaching, 96% of teachers (N=142) would be willing to receive further training in creativity and innovativeness if provided by their educational institution.

5. Discussion and Conclusion

It is relevant to understand whether teachers are aware of the importance of creativity in their teaching and whether they value it. If we do not develop teachers who can recognize, develop and demonstrate entrepreneurial skills and creativity, we could be disadvantaging students who need to be able to adjust to the fast-changing entrepreneurial environments. (David et al., 2018). Teachers are the educators, facilitators and catalysts who transfer knowledge, energy and motivation to their students. If they are not creative, students who are might be missing out on their personal development and even have their creativity suppressed. Even though creativity in the classroom is gaining its reputation in research, it appears there is limited research that focuses on teacher's opinion or self-assessment of creativity in the classroom. This is the reason why this research focused on creativity as one of the main entrepreneurial skills. As it is evident that almost all of the teachers who participated in the survey value their creativity and innovativeness in teaching highly, the first hypothesis has been proven. Moreover, teachers who participated in the survey seem to be rather creative, innovative and confident in their teaching, but are in general unhappy with the materials they have to use in the classroom. The collected sample for the survey was non-representative, the participation was voluntary and the selection of teachers unguided. Teachers in the survey are confident of their teaching, which is not surprising as more than 56% of them have between 5-20 years of teaching experience. As many as 85.6% expressed their wish to try out new things and functions. This is encouraging since motivation and a positive attitude towards change are key entrepreneurial skills which should be a part of each teachers' personality. A large part (88.6%) of teachers in the survey ask themselves the question "why" when they encounter a problem. Those teachers tend to search for causes of problems and they do not take them for granted, which in turn represents the willingness to put effort into their work. Similarly, a substantial majority (82%) embark on self-learning and exploration on a regular basis, which is crucial for having successful lessons. The willingness to learn emphasizes the desire to improve oneself, to learn new things and become more competent in both professional and personal life. Almost all teachers (97.4%) agree that teacher's role is, among other things, to stimulate creativity in their students. Furthermore, it accompanies other entrepreneurial skills such as thinking "outside the box", opportunity recognition, problem-solving and self-confidence, which are important for their personal development and future career. This has proven our second hypothesis.

From the results of our research, certain differences between teachers are evident. Female teachers seem to be more creative than male ones (self-assessment). Furthermore, female teachers are also more conscious that creativity and innovativeness enhance their teaching performance. Therefore, our fourth hypothesis which states that there are differences in the perception of C&I regarding female and male teachers has been proven. Interestingly, teachers of English believe that multimedia helps them develop creativity and innovation in their teaching more, compared to teachers who teach other subjects. Still, teachers who teach other subjects value creativity and innovation as a factor that leads to faster employment of graduate students more than English teachers do.

One of the limitations of this research is the fact that the sample for foreign language teachers was non-representative. If the sample had been larger, some valuable statistically significant differences between them and teachers of other subjects might have had appeared. Also, another limitation of this research is the fact that authors only requested the teachers to choose whether they teach foreign languages or other subjects. Teachers could not give further information on which other subjects they teach.

More than 70% of teachers are not satisfied with the teaching materials because they do not cater to their needs. In addition, they have to develop their own materials. Furthermore, female teachers are more aware of the lack of suitable materials. This is crucial information for authors and publishers since a market research should be carried out in order to see which materials are needed,

to meet expectations and needs of teachers. Also, authors should work in cooperation with teachers to improve the efficacy of the published material. Surprisingly, more than a third of teachers in this survey (34.9%) are satisfied with the knowledge and skills acquired during teacher education. This result is of great value for teachers at training colleges and course designers since the need for creating various teacher training courses is evident and should be offered to educational institutions. The questions remain whether there are such programs, whether they depend on the country, whether they are free for the teaching staff and which topics they would entail. Additionally, how would they be implemented into the working hours of the teachers and how could the outcome of these trainings be measured?

Moreover, the focus of this paper is the research question: What aspects inhibit creativity? Among the most serious challenges are the constraints of the curriculum, lack of support for teachers but also certain intrapersonal factors such as reluctance to change. It is surprising that in this day and age teachers still feel that there is lack of support for them, since they are the ones who educate young people for the future and should therefore have all the needed support. Yet, depending on the educational institution they are affiliated with, the teacher training policy may not be as transparent as it should be. The most difficult issue to deal with is essentially the lack of materials. Publishers issue books they believe teachers need, yet teachers still have to come up with their own resources, authentic material and supplements for their specific purpose due to publishers' insufficient adjustment to teachers' requirements. When discussing the issue of the lack of technology, the question of whether teachers can be creative without technology remains. Surprisingly, there are still 5% of teachers who are not interested in further training in creativity and innovativeness. This shows us the everyday reality of the rest of the 95% of 21st century teachers who value the use of creativity in teaching and would be willing to receive further training on creativity and innovativeness. Thus, our third hypothesis has also been proven. Nonetheless, our purposive sample might be the reason behind such a large number of teachers willing to receive training on creativity since the mere fact that these teachers were willing to participate in the research shows their inclination towards creativity.

These findings are of utmost importance since we hope to raise awareness and encourage teachers globally to become proactive and keep up to date regarding their teaching methods and approaches. We hope to encourage teachers to participate in teacher training in creativity, as well as help raise their awareness of the obstacles to creativity and innovativeness in classrooms across Europe. Finally, it is suggested that further studies be conducted on a larger sample of teachers for a cross-cultural comparison with the aim of a more valuable insight in the global perception of creativity in teaching. Furthermore, it would be insightful to see the extent or benefits of the implementation of creative teaching on students' own creativity and their motivation and willingness to learn.

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Poduzetničko obrazovanje - istraživanje kreativnosti profesora u 11 država

Sažetak

Kreativnost se smatra jednom od najvažnijih poduzetničkih vještina uz preuzimanje vodstva i spremnost na rizik. Profesori kao uzori postaju svjesniji promjena potrebnih unutar sebe kao i promjena potrebnih u njihovoj nastavi, te je upravo njihova percepcija važnosti kreativnosti i inovativnosti (K&I) u nastavi svrha ovog istraživanja. Istraženi su i uspoređeni stavovi profesora (N = 149) iz 11 država (Njemačka, Velika Britanija, Hrvatska, Bosna i Hercegovina, Srbija, Slovenija, Portugal, Irska, Francuska, Španjolska i Albanija). Teorijska pozadina istraživanja objašnjava povezanost između kreativnosti i poduzetničkog obrazovanja te pruža razumna obrazloženja za jačanje i naglašavanje kreativnosti kao potrebne poduzetničke vještine kod profesora i studenata. Rezultati ovog istraživanja nastoje potaknuti profesore na obučavanje za kreativnost i inovativnost te mogu pomoći podići svijest profesora o preprekama na koje te dvije karakteristike nailaze u nastavi širom Europe.

Ključne riječi: inovativnost, kreativnost, poduzetničke vještine, profesori