DOI 10.20544/HORIZONS.A.28.1.21. P03
UDC373.3.011.3-051:159.954-057.874

# WHAT TEACHERS THINK OF DEVELOPING STUDENT'S CREATIVITY[1]

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**Abstract**

In response to the emerging demands and needs of the ever-changing world of today, education systems around the world increasingly focus on developing students' higher mental competencies, including creative thinking skills. Teachers play an important role in fostering said creativity in their classes and among their students. Thus, the aim of this paper is to examine the attitudes of teachers from 23 primary schools towards creativity development and their thoughts of facilitating such development in the classroom. The results show that teachers do possess knowledge to do with creativity, but when it comes to facilitating development of these skills, some aspects could use improvements.

Keywords: *teachers, primary education, creativity.*

## INTRODUCTION

The pre-established national standards for competencies of primary education students, as well as the newly proposed concept for primary education, both emphasize the importance of the outcomes of the educational process in North Macedonia. Competencies in the subject area 7 Technique, Technology and

[1] review scientific paper

Entrepreneurship – clearly state that the knowledge and skills in this area should enable "*..development of creativity and critical thinking, decision making, risk taking and problem solving skills that contribute to students' personal and professional developmen*t" (Ministry of Education and Science, 2021, pg.22). In implementing said national priorities, many schools enthusiastically approach the idea of promoting creativity among students. They use imaginative and widely applicable practices that promote and develop students' creativity. Although this is the case, at the same time, there are certain concerns that many teachers do not have a clear idea of what creativity actually means and are unsure of the best practices to encourage it. Both schools and education authorities also face uncertainties as to how to assess their success in fostering creativity and are unsure of what can be considered an indicator of such success. To answer these questions, a survey was conducted in 23 primary schools in North Macedonia. The survey compiled the responses of 228 teachers who shared their thoughts on certain aspects of creativity and as well as the opportunities for creative activities in all subjects. The answers from the respondents give insight into current classroom practices in the schools in our country. The data further helps to identify and analyze the good practices that are implemented, including the opportunities for creative teaching.

## WHAT IS CREATIVITY?

Humans have incredible creative potential. Creativity is an inherently productive ability. As such, creativity is not an activity that has a clear cut purpose by itself, but something that aims to accomplish different goals for personal satisfaction – it is the quality or ability to create. The available definitions of creativity (Barron and Harrington, 1981; Gelade, 2002; Anderson and King, 2002) center around the claim that creativity consists of two principal elements. Firstly, creativity implies either the creation of something new or the rethinking and re-combining of pre-existing elements. In order to be considered creative, the concept or idea must be both valuable and useful. This second criterion indicates that creative ideas should also be purposeful. Both criteria are age and context dependent. Novelty is always relative, the solution may be new to the person who came up with it, but the possibility remains that other people already know it. Sometimes, we can all be brilliant.

## QUESTIONS AND PRACTICES TO DO WITH CREATIVITY IN PRIMARY SCHOOLS

Originality and value are the main features of the creative process or a product (Ferrari et. al., 2009). Yet, it is questionable whether or not primary school students can actually have such original and revolutionary ideas about their surroundings. Therefore, Runco (2003) suggests that when defining and discussing creativity in education, the terms originality (or novelty) and value should be considered in their mundane, everyday meaning. In this early school age, a child's creativity should not be assessed in terms of its influence and value in a wider social context, but rather on its influence on that particular child/student. This understanding implies the acceptance of a more democratic definition of creativity which recognizes the potential of all individuals to be or to become creative. Therefore, in terms of education, it is important for creativity to be conceptualized in such a way that each individual's ability to develop his creative potential is recognized, and the attributes of originality and value are considered in relation to the individual himself, rather than the entire society. Many authors claim that the opinions of children of all levels are significantly influenced by the opportunities presented to them. Providing appropriate opportunities for developing students' cognitive and creative potential should be a priority in curriculum design. Ferrari, Cachia and Punie (2009) identify several aspects that can result in improving the curriculum in terms of developing creative thinking:[2]

– The recognition that all subjects can benefit from creativity, as well as the fact that creativity is not subject-related;
– The acknowledgement of the importance of every domain of knowledge, as this facilitates creativity development;
– The recognition of the importance of creativity for every age group;
– The recognition of teachers' freedom;
– A curriculum which allows space and time for innovation and experiments;
– The recognition of students' interests when designing the curriculum;

[2] Ferrari, A., Cachia, R., & Punie, Y. (2009): „Innovation and Creativity in Education and Training in the EU Member States: Fostering Creative Learning and Supporting Innovative Teaching. Literature review on Innovation and Creativity in E&T in the Member States (ICEAC): JRC-IPTS

– Time away from the statutory curriculum to allow space and time for teachers and students to teach and learn what they are interested in.

A re-thinking of the pre-existing curricula is necessary so that skills such as creativity can be encouraged freely. Creativity, above all, should be recognized as a skill that can be developed through creative teaching. The development of such a skill depends significantly on the development of curricula – a curriculum that will prioritize striking the right balance between the different subject areas, as well as the prescribed and the autonomy.

## TEACHERS AS A KEY FACTOR FOR CREATIVITY DEVELOPMENT

Teachers play an important role in the development of students' creativity. Teachers are key components (Sharp, 2004) and builders of a creative climate conducive to creative learning (Esquivel, 1995). They provide the balance between structure and freedom of expression and determine the triggering or hindering of students' creative output. Creative performance is more likely to happen in a classroom where a teacher empowers students (Craft, 2005). Innovative teachers enjoy working in a democratic classroom (Esquivel, 1995) where everyone has a say. Many authors emphasize the importance of a nurturing environment to kindle the creative spark, an environment where students feel free and rewarded, where they learn actively, have a sense of ownership, and can freely discuss their problems; an environment where teachers promote cooperative learning methods, thus making learning relevant to students' life experiences. In order to do this successfully, teachers need to be prepared both on the pedagogical side – being aware of the ways and means to foster student's freedom and on the subject-knowledge side. Lack of preparation will prevent teachers from being ready to provide a learning environment which allows students to discover and explore (Craft, 2005). Teachers' preparation for creative teaching is a critical factor, for without well-trained teachers and educators who will work on developing the creativity and creative potential of the student, the end result will not be satisfactory.

## EMPIRICAL SECTION

In addition to providing a theoretical review, this paper aims to gain data in an empirical way, thus obtaining a more comprehensive understanding of the current situation regarding the development of creativity. The purpose of the research was to check teacher's attitudes towards some creativity determinants

and to study their attitudes towards the possibilities of implementing different creative activities in teaching all subjects. The research was conducted in 23 primary schools in our country (the list of schools is attached in the Appendix at the end of the paper) and the representative sample consists of a total of 228 teachers – both Lower primary teachers/Grade teachers (Grade 1 to Grade 5) as well as Upper primary teachers/Middle grade teachers (Grade 6 to Grade 9). The research tool used in this research was a structured questionnaire, consisting of 2 parts. The first part consisted of a set of claims that examine the general knowledge indicators for creativity as a skill that can be developed. The second part of the questionnaire examined teachers' attitudes towards activities and opportunities they implement that aim towards the development of creative thinking. A 5-point Likert scale was offered for each statement.

## RESULTS AND DISCUSSION

The analysis of the first part of the questionnaire (Table 1) – the part that focuses on teachers' knowledge and attitudes to do with creativity – shows that teachers do possess the much needed knowledge to do with creativity. The majority of the teachers state that they think that creativity is a skill that "*can be developed*" and that "*Creativity can be found in all aspects of human life*". A further, more detailed observation of the data, shows: most of the teachers (52%) expressed their complete agreement with the statement "*creativity can be developed*". This is a pleasant surprise, because it indicates a positive perception of encouraging creativity while teaching. In regards to the second statement, "*creativity can be assessed*", teachers' answers gravitate around (4) and (5). This implies that teachers think that the criteria, rules and support that come from the environment are considered important for the recognition and development of creativity. The statement "*everyone can be creative*" had a response rate that gravitated around (3). This shows a certain scepticism among teachers in regards to the development of creative skills in all students. The data also further emphasizes the need to raise awareness that in the early school period, creativity should be seen as something each individual has the potential of and the criteria of value and usefulness must be tailored to be age-appropriate. For most of the surveyed teachers (39% stated that they fully agree while 26% partially agree), "*creativity is linking up ideas whose connection was not previously suspected* " which indicates that teachers do possess a certain level of knowledge in this area. The results to do with the statement " *Creativity can be found in all aspects of human* life " – to which more than half of the respondents answered in the

affirmative (39% stated that they fully agree while 35% - partially agree) – instill optimism that it is possible to encourage creativity development in all areas respectively, alongside all teaching areas. 57% of the respondents i.e. teachers think that "*creativity can be expressed in all school subjects"* while 43% of them believe that "*creative teaching techniques are applicable in all subjects*". This attests to the positive attitude of educators in terms of the necessity and opportunities to develop creativity across all curricula. The results regarding the following question on teacher competence show that teachers are confident in their ability to teach such skills (43% stated that they agree while 33% that they fully agree). These results might be linked to the numerous projects and initiatives for development of creative thinking, organized by different institutions that teachers have attended. However, the results are incoherent with the data gathered on the next question. The data gathered to do with the question "*Which aspects of teacher training do you consider most useful in teaching such skills*" leads to the conclusion that the most noteworthy aspect is, according to 58% of the respondents is "*training to do with the suitable teaching methods, techniques and skills"*. Respondents also singled out other elements as usefull. 23% of them stated that "*knowledge in the field of creative thinking*" is important while 11% thought that "*professional training to do with community communication*" is key. These numbers clearly show that the majority of the respondents believe that the content and didactic features of the development of creativity are the components that they feel they need additional education or training for.

Table 1: Results from the first set of statements in the questionnaire. Students' inclinations and preferences derived from the questionnaire for teachers

| Creativity determiners | **Completely disagree** | | **Partially disagree** | | **Neither agree nor disagree** | | **Partially agree** | | **Fully agree** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Fr | % | Fr | % | Fr | % | Fr | % | Fr | % |
| 1. Creativity can be developed | **2** | **1** | **1** | **0** | **24** | **11** | **83** | **36** | **118** | **52** |
| 2. Creativity can be assessed | **5** | **2** | **9** | **4** | **51** | **22** | **70** | **31** | **92** | **40** |
| 3. Everyone can be creative | **16** | **7** | **35** | **15** | **72** | **32** | **64** | **28** | **41** | **18** |
| 4. Creativity is linking up ideas whose connection was not previously suspected | **5** | **2** | **11** | **5** | **62** | **27** | **90** | **39** | **60** | **26** |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.Creativity can be found in all aspects of human life | **8** | **4** | **7** | **3** | **45** | **20** | **79** | **35** | **89** | **39** |
| 6.Creativity can be expressed in all school subjects | **1** | **0** | **1** | **0** | **27** | **12** | **68** | **30** | **131** | **57** |
| 7. Creative teaching techniques are applicable in all subjects | **3** | **1** | **5** | **2** | **37** | **16** | **84** | **37** | **99** | **43** |
| 8. The teacher's education has trained him adequately to teach these skills | **4** | **2** | **8** | **4** | **40** | **18** | **98** | **43** | **75** | **33** |

9. Which aspects of teacher training do you consider most useful in teaching such skills*? (choose one)*

| Knowledge to do with creative thinking | | Training to do with the suitable teaching methods, techniques and skills | | Professional training to do with community communication | | Preparation of teaching materials | | No answer given | |
|---|---|---|---|---|---|---|---|---|---|
| Fr | % | Fr | % | Fr | % | Fr | % | Fr | % |
| 53 | 23 | 133 | 58 | 25 | 11 | 15 | 7 | 2 | 1 |

The results gathered in the following section questions (Table 2) portray teachers' views on the ways they facilitate the development of creative thinking while they teach and to what extent they implement activities that encourage creativity. The data showed that classroom practices generally aim at fostering creativity such as the *development of divergent thinking, which is considered the basis for creating new ideas, respecting other students' opinions and ideas, encouraging various extracurricular activities and supporting the initiatives by the students themselves.* Although such practises are implemented, respondents' answers show that teachers still prefer students whose traits differ from the traits creative students show – students who conform easily and are attentive. The analysis of the gathered data further shows: the answers to do with the statement *"as a teacher I often make lesson plans that include activities for creative-thinking development"* range mostly around (4) and (5) which show that teachers recognize the importance of the development of these skills and thus include suitable activities in their lesson plans. The data to do with the statement "*While teaching, I tend to link the acquired knowledge with real life situations"* – a statement that the majority of the teachers i.e. 69% completely agree with, further attests to the former conclusion. The statements 12, 13, 14, and 15 look into some of the most important teaching elements that encourages creativity and innovation - reframing mistakes as a valuable learning point, and making room for imagination. The values of their answers gravitate around (4) and (5), which shows that teachers know or recognize certain features of creative

teaching and they also strive to foster the development of creative thinking. The answers to the statement "*non-conformism should be hindered*" give some interesting insights into the traits teachers find desirable. When it comes to this statement to do with non-conformism, the majority of teachers either agree (48% of the respondents stated that they fully or partially agree) or do not have a specific standpoint (around 40% of them said that they neither agree nor disagree). This points to the fact that certain traits that creative people tend to posses are not yet desirable nor wanted by teachers; These results are pessimistic for nonconformism should be seen as a driving force of society – something that is to be supported and not prevented; something that can encourage students' creativity. Moreover, teachers often see nonconformism as a displeasing phenomenon that can lead to problematic behavior. However, in order for creativity to be developed, children must be encouraged to think "outside the box" which is why teachers need to know how to channel the non-conformism children manifest, and not to hinder it. Although a series of projects that aimed to improve the infrastructure and modernize schools has already been implemented, teachers' answers to do with the claims 17 and 18 circulate around 3 and 4. This shows that the physical and technical conditions in the schools are not at a high level, and the ICT tools do not function properly. Another issue arises when we look into the activities that foster creativity development in different schools- claim 19. Teachers' answers show that for the most part *"participation in different competitions"* and "*special projects* are the key activities that they implement in this regard. Unfortunately, only 3% chose activities to do with "school companies". These companies are a form of an extracurricular activity. They can be very useful as they can aid the development of different personality qualities such as: independence, creativity, confidence, risk-taking etc. Furthermore, they can significantly help the development of entrepreneurship – a competency from the so-called Area 7. Keeping this in mind, one could argue that more attention should be paid to the founding of such companies within our schools.

Table 2: Results from the second set of questions for teachers: curricular components for the development of creative thinking

| Classroom practices for developing creative thinking | **Completely disagree** | | **Partially disagree** | | **Neither agree nor disagree** | | **Partially agree** | | **Fully agree** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Fr | % | Fr | % | Fr | % | Fr | % | Fr | % |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10. As a teacher I often make lesson plans that include activities for creative-thinking development | **1** | **0** | **2** | **1** | **21** | **9** | **92** | **40** | **110** | **48** |
| 11. While teaching, I tend to link the acquired knowledge with real life situations | **1** | **0** | **1** | **0** | **7** | **3** | **59** | **26** | **158** | **69** |
| 12. I let my students to make mistakes | **8** | **4** | **10** | **4** | **33** | **14** | **91** | **40** | **84** | **37** |
| 13. I let my students use their imagination | **1** | **0** | **5** | **2** | **16** | **7** | **79** | **35** | **125** | **55** |
| 14. I encourage "thinking outside of the box" | **2** | **1** | **0** | **0** | **13** | **6** | **65** | **29** | **146** | **64** |
| 15. I encourage divergent thinking | **2** | **1** | **3** | **1** | **61** | **27** | **72** | **32** | **85** | **37** |
| 16. Non-conformity should be hindered | **16** | **7** | **3** | **1** | **92** | **40** | **64** | **28** | **45** | **20** |
| 17. I have all the necessary resources (equipment, technology, staff support) to teach creativity and innovation | **3** | **1** | **32** | **14** | **66** | **29** | **86** | **38** | **41** | **18** |
| 18. The ICT (Information and Computer Technology) tools in my school are excellent | **5** | **2** | **22** | **10** | **45** | **20** | **109** | **48** | **47** | **21** |

19. What kind of creativity-development activities are implemented in your school *(You can choose more than one answer)*

| Special projects | | School competitions | | School companies | | Open days | | School newspaper | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % |
| 163 | 71 | 182 | 80 | 6 | 3 | 95 | 42 | 63 | 28 | 5 | 2 |

## CONCLUSION

Educational trends now worldwide focus increasingly on creativity development as well as the development of critical thinking, risk taking and problem solving skills. The importance of a well-designed national program is now greater than ever, for these programs provide a framework for action, and at best, they can motivate educational workers - the ones who will have to tread a difficult path and deal with all the implementation problems - to take a more active role. As stated in the theoretical part above, the teachers are a key factor in the creativity development process. They have the power to enhance or inhibit students' creative potential. Yet, their attitudes and behaviors towards this issue

are largely based on the knowledge, skills and experience they possess in regards to creative thinking and creative behavior development. The results of this research show that facilitating activities that aim to develop creative skills in different classroom practices is of utmost importance. The teachers who took part in the survey showed significant knowledge in the creativity department. According to their answers, they strive to create different activities that facilitate creativity development, divergent thinking and enhancing the respect for students' opinions and ideas. Furthermore, most teachers believe that creative skills can be developed in all school subjects, which indicates that they are increasingly less convinced that these skills are exclusive for the arts and science. However, the results also show that despite having the knowledge in the field of creativity, when it comes to nurturing these skills in real life classrooms, teacher could improve in some aspects. The answers show that teachers still prefer students whose traits, such as conformism and attentiveness, contrast creative traits. Thus, one may conclude that teachers still do not like the character traits associated with creativity. After all, the biggest challenge in developing creativity lies in the values that characterize creativity (such as nonconformism and work and research techniques that defy the rules) – values and traits that are vastly different to the cherished school values of obedience and relevance. In addition, the surveyed teachers emphasized another important aspect that they think would be most useful in teaching such skills. They stated that getting "*training to do with the suitable teaching methods, techniques and skills"* is of utmost importance. This further highlights the need for continuous professional development and training of teachers. It also emphasizes the importance of education authorities in identifying the correct strategies for providing appropriate professional training that will help teachers develop these skills. Such skill expansion will help teachers create an environment that will foster and encourage playfulness and risk-taking instead of strictness and discipline at all costs.

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## Appendix

Table 3 - The list of schools included in the conducted research

| Primary schools | | Teachers |
|---|---|---|
| Municipality | Name of school | |
| Bitola | 1. “St. Kliment Ohridski” | 15 |
| | 2. “Elpida Karamandi” | 15 |
| | 3. “Kole Kaninski” | 15 |
| | 4. “Goce Delchev” | 9 |
| Velgoshti, village | 5. “ Zhivko Chingo” | 7 |

| | | |
|---|---|---|
| Veles | 6. ”Vasil Glavinov” | 9 |
| Volkovo, village | 7. “Joakim Krchovski” | 10 |
| Kavadarci | 8. “Tosho Velkov - Pepeto | 8 |
| Kriva Palanka | 9. “Ilinden” | 5 |
| Krushevo | 10. “Nikola Karev” | 7 |
| Kumanovo | 11. “Hristijan Karposh” | 9 |
| Mogila | 12. “Kocho Racin” | 10 |
| Negotino | 13. “Goce Delchev” | 9 |
| Ohrid | 14. “Hristo Uzunov” | 11 |
| Prilep | 15. “Kire Gavriloski - Jane" | 12 |
| | 16. St. Kliment Ohridski | 10 |
| Resen | 17. “Mite Bogoevski” | 10 |
| Rosoman | 18. “Pere Toshev" | 10 |
| Skopje | 19. “Strasho Pindzur ” | 9 |
| | 20. ”Tihomir Milosheski ” | 9 |
| | 21. Cyril and Methodius | 10 |
| Struga | 22. “Goce Delchev” | 9 |
| Stip | 23. “Goce Delchev” | 10 |
| | **Total** | **228** |