

Research Article

Preschool teacher's beliefs about creativity and children creativeness

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Abstract

The aim of this study was to determine what beliefs preschool teachers hold about creativity in general and about children's creativeness. A total of 366 preschool teachers and preschool teaching assistants participated in the survey, by completing a questionnaire designed for the purposes of this study in Slovenia. The results show that participants predominantly believe that creativity is innate, that it is a characteristic of all people, and it can be developed, in some specific areas, such as the arts. Participants also believe that all children are creative, but not at the same level and not in all areas. They agree that children need motivation to express and develop their creativity, which indicates an awareness of the importance of encouraging creativity. An analysis of the different views on creativity among teachers and teaching assistants shows differences in perception of children's creativeness. It follows that the longer training of preschool teachers can provide not only more knowledge and a sense of competence in working with children, but also the possibility of an over-structured, curriculum-constrained and pre-determined framework of seeing the child. This is why the results of the survey - an insight into the perspectives of preschool teachers and preschool teaching assistants - represent an important contribution in the area of developing the creativity of preschool children. The survey results reflect on how to guide the work of preschool teachers in the direction of developing and supporting the creativity of preschool children, pointing to the fact that (i) preschool teachers must be trained how to identify, foster and facilitate children's creativity and (ii) they should acquire these competences during initial teacher training programmes and nurture them through continuous professional development programmes.

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Introduction

Teachers and schools have always been the reflection of societies, their priorities and their needs. Today, in a fast-changing world, teachers' roles are changing, as are the expectations directed towards them. Teachers are faced with various demands (European Trade Union Committee for Education - ETUCE, 2008) such as in-depth subject knowledge, advanced pedagogical skills, reflective practice and the ability to adapt their teaching to the needs of each individual as well as to the needs of a group of learners. Furthermore, teachers need to help students acquire not only 'the skills that are easiest to teach and easiest to test', also known as 'hard skills' (Michnick Golinkoff and Hirsh-Pasek, 2016), but more importantly, 'soft skills' (ibid, 2016), as ways of thinking (creativity, critical thinking, problem-solving, decision-making and persisting, self-regulated learning, etc.); ways of working (communication and collaboration); tools for working (including information and communications technologies); and skills pertaining to citizenship, life and career as well as personal and social responsibility for success in modern democracies (OECD, 2011). Michnick Golinkoff and Hirsh-Pasek (2016) claim that in order to re-define success in the 21st century the six Cs need to be developed: (i) collaboration, (ii) communication, (iii) content, (iv) critical thinking, (v) creative innovation, and (vi) confidence. Within this context, creative innovation or creativity is understood as 'rearranging the old to make the

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new' (Michnick Golinkoff and Hirsh-Pasek, 2016, p.187). Creativity and creative problem-solving is recognised as one of the key skills that enable talented children - and all other children - to adapt adequately to the demands of modern society. With the realisation that creativity can be learned, the key issue of supporting creativity is shifting to the early years of early childhood education (ECE). Consequently, the most important role in this process belongs to teachers, who should include in their activities instruction and elements to facilitate creativity while at the same time achieving the educational objectives set by the curriculum (Lee and Kemple, 2014).

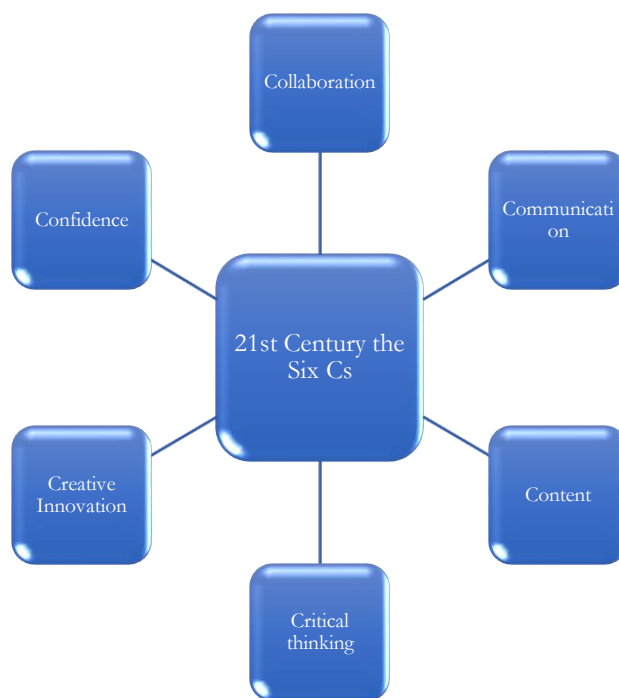


Figure 1

21st Century the Six Cs

Since it has been proven (Janssen et al. 2013; Rentzou and Sakellariou, 2011) that attitude is essential in constructing the mindset to adapt new requirements and perform new activities and roles (Drljić and Kiswarday, 2016), understanding the practices and beliefs of preschool teachers regarding creativity is, in effect, a critical starting point in the creation of an educational environment that encourages creative thinking (Cheung and Leung 2013; Lee and Kemple, 2014).

Aim of the Study and Conceptual Framework

As the study aims to determine preschool teachers' beliefs about creativity in general and about children's creativeness, it is important to comprehend that in the Slovenian school system preschool education is carried out by preschool teachers and preschool teaching assistants. Both, preschool teachers and their assistants need to be properly qualified. Preschool teachers are obliged to hold a bachelor's degree in preschool education. Bachelor preschool education study programmes are provided by faculties of education. They take three years to complete and encompass 180 European Credit Transfer and Accumulation System credits (ECTS). For preschool teaching assistants, it is necessary to have at least a secondary professional education. These programmes are delivered at specialised secondary schools. In addition, both preschool teachers and preschool teaching assistants have to pass a professional exam, which consists of three elements: Slovenian language (and/or the language of a relevant ethnic minority), educational legislation and knowledge of the Slovenian Constitution (The Education System in the Republic of Slovenia, 2019). We also emphasise (Rutar, 2021) that Slovenia is one of the few European countries that integrate care, protection and education in a comprehensive way, ensuring a unified organisation and financing of preschool education for children in the first (0-3 years) and second (4-6 years) age groups. This is expressed both in the training of preschool teachers, who are trained to work with children in the first and second age groups, and in the Kindergarten Curriculum (1999), which sets out the objectives and activities for working with children in both age groups. The Organisation for Economic Co-operation and Development (OECD) also argues that care/protection and education concepts are interlinked in quality kindergartens (OECD, 2001).

In order to better nurture and foster children's creativity, Swainston and Jeanneret (2013) suggest that conducting research on preschool teachers' beliefs is an essential aspect of understanding creative pedagogical ECE practices, as well as informing the design of up-to-date initial teacher education programmes and continuous professional

development programmes. Since beliefs are the main determinants of behaviour, it is crucial to comprehend how preschool teachers conceptualise creativity (Ariffin and Baki, 2014; Cheung and Leung, 2013; Lee and Kemple, 2014; Leggett, 2017). Fryer and Collings (1991) found that most teachers define creativity as imagination, originality and self-expression. In addition, studies (Eckhoff 2011; Leggett 2017) have shown that ECE teachers define creativity as originality. Researchers have also found that teachers' understanding of creativity is also determined by their effort (Bloomquist, 2010), affection (Cropley, 2001) and sense of responsibility for fostering creativity (Aljughaiman and Mowrer-Reynolds, 2005). Similarly, the teacher's role in fostering children's creativity is also important, but most research on creativity in education focuses on creativity in school, but not in preschool. Perhaps the lack of interest in research on creativity in preschool can be attributed to a divided opinion on whether preschool children can be creative at all. Many (e.g., Sorokin, 1987; Rosenblatt and Winner, 1988; Ayman-Nolley, 1992; Cropley, 2001) do not attribute creativity to preschool children, arguing that (i) children have a variety of ideas that are new to them but are not useful, and (ii) children lack criticality. However, some research by Castro-Fajardo, Santamaria, Bernal-Hernandez, Gomez-Hernandez, Garcia-Cepero (2014) demonstrated that 45% of the educators agree that childhood is the 'golden age' of creativity.

The concept of creativity, defined above, also points to some of the misconception that teachers and educators have about creativity. A survey *Creativity in Schools in Europe* (2009) found that most teachers believe that creativity can be related to different areas of life and that anyone can be creative. They also agree that creativity needs to be developed at school, but they are not sure how to do it. Cypriot teachers also agree that creativity is a general characteristic of all individuals (Diakidoy and Phitiaka, 2002), on the other hand, Fryer and Collings (1991) found that most British teachers believe that creativity occurs in a few individuals. In some studies, many teachers associated creativity solely with children's artwork (Diakidoy and Kanari, 1999). On the other hand, some studies determined that ECE teachers consider creativity from a much broader perspective, and as a result, associate it with other aspects of learning and instruction (e.g., role-play, reading, writing, science, and drama) (Eckhoff, 2011; Yates and Twigg, 2017).

Therefore, research indicates that teachers' beliefs about creativity, about the factors affecting creativity, and the ways of supporting creativity in ECE settings differ to a great extent.

Research indicates that the concept of creativity is often wrongly defined by teachers. Based on this, we can also identify so-called myths or misconceptions about creativity (Robinson, 2017). According to Robinson (2017), there are three myths that are most commonly found in misunderstandings about creativity, creative action and the characteristics of creative individuals. The first myth relates to the misconception that creativity is only for 'specific individuals', where creativity is consequently defined as an unchanging and unattainable ability of a small group of specific individuals. In the second myth, Robinson (2017) says that creativity is 'reserved' for specific areas of individual activity, such as the arts. The third myth describes misconceptions about creative individuals (Robinson, 2017), who are supposedly imagined as socially maladjusted, self-centred and weird. Similarly, both Turkish (Oral and Guncer, 1995, in Cropley 2001, p. 137) and American (Westby and Dawson, 1995, in Cropley, 2001, p. 137) researchers report that creative pupils are described by their teachers as not so close to their heart, and as disobedient, undisciplined, defiant and aggressive. Contrary to these myths, creative potential is a characteristic of every individual in any field of activity, and its development requires education, skill, imagination and discipline (Michnick Golinkoff and Hirsh-Pasek, 2016, 191). Consequently, preschool teachers should continuously reflect on their own beliefs about creativity and children's creativeness in order to facilitate and foster a supportive ECE learning environment.

Research Problem

According to the analysis of the presented research, we conclude that a teachers' attitudes are a key factor in his/her work in terms of developing and supporting the creativity of preschool children. Kamylyis et al. (2009) find that fostering children's creativity is an important part of the teacher's role in the classroom. In addition, Diakidoy and Kanari (1999: 226) highlight as two fundamental aspects of fostering creativity in education the need to (1) find out what attitudes and beliefs teachers have about creativity and (2) on that basis, consider how to train teachers to identify and foster creativity in the preschool period in general. Building upon this research theme, the current study intends to gain a more comprehensive understanding of preschool teachers' beliefs regarding creativity, as well as their understanding of children's creativeness.

Specifically, the study was based on the quantitative paradigm of research and it aimed at identifying:

- Preschool teachers' beliefs about creativity in general
- Preschool teachers' beliefs about children's creativity

Additionally, we wanted to determine the possible differences in beliefs regarding preschool teachers' work position, referring to their position as a preschool teacher or a preschool teaching assistant.

Method

Research Design

The research followed the quantitative approach (Creswell, 2014) using descriptive and a causal non-experimental survey research design, which was found to be the most suitable as the research aimed to describe the present situation as it exists (Cohen, Manion, and Morrison, 2007). With this research, a descriptive and causal non-experimental design was used to determine preschool teachers' beliefs about creativity in general and about children's creativeness and the differences in these beliefs, according to their work position.

Participants

In total, 366 preschool teachers and preschool teaching assistants employed in Slovenian public kindergartens were included in our study, which accounts for the 3.7 % of the total population of preschool teachers and their assistants in Slovenian kindergartens. Among participating teachers and teaching assistants, 358 (97.8%) were female and four (1.1%) were male, while four (1.1%) did not declare their gender. On average, the participants had 17 to 15 years' working experience ($M=17, 15, SD=11, 65$, range 0-38). The participants were selected randomly from all regions in Slovenia.

Data Collection

We collected the data using a questionnaire with five sections, and for the purpose of this paper we will use the questions from the first section (demographic data) and the questions from the second section, which consists of a 5-point Likert scale of attitudes with answers (1 - I do not agree at all, 2 - I do not agree, 3 - I cannot decide, 4 - I agree, 5 - I fully agree). The statements in this section refer to (1) teachers' beliefs about creativity in general and (2) teachers' beliefs about creativity in relation to children. The set of statements on beliefs about creativity includes five statements and the set on creativity in relation to children includes seven statements. Both sets of scales show high internal consistency ($\alpha_{gen}=0.860, \alpha_{chi}=0.901$). The questionnaire was developed for the purposes of this research by the authors of the paper (See Appendix 1)

Data Analysis

The data were processed using SPSS and the following statistical procedures were used: frequency distribution ($f, f\%$); inferential non-parametric statistics (Mann-Whitney test). Mann-Whitney tests were used to test differences in beliefs about creativity in general and about children's creativeness and differences in these beliefs according to their work position. The results obtained are presented in tables. All decisions were made up at ≤ 0.05 .

Results

Preschool Teachers' Beliefs Regarding Creativity in General

Table 1

Frequency (f) and Percentage (f%) for Each Level of Agreement with the Statements Made About Creativity in General

	Frequency	Percent
<i>Creativity is innate.</i>		
I fully agree.	21	6.2
I agree.	153	44.9
I cannot decide.	48	14.1
I do not agree.	92	27.0
I do not agree at all.	27	7.9
<i>Creativity is a characteristic of all people.</i>		
I fully agree.	17	5.0
I agree.	120	35.1
I cannot decide.	48	14.0
I do not agree.	135	39.5
I do not agree at all.	22	6.4
<i>Only some individuals are creative.</i>		
I fully agree.	11	3.2
I agree.	92	27.1

I cannot decide.	38	11.2
I do not agree.	164	48.4
I do not agree at all.	34	10.0
<i>Creativity cannot be developed.</i>		
I fully agree.	5	1.5
I agree.	11	3.2
I cannot decide.	15	4.4
I do not agree.	227	66.6
I do not agree at all.	83	24.3
<i>People with an arts tendency are more creative.</i>		
I fully agree.	54	16.0
I agree.	137	40.5
I cannot decide.	46	13.6
I do not agree.	84	24.9
I do not agree at all.	17	15.0

As can be seen from the table above, the majority of the teachers surveyed agree (44.9%) or strongly agree (6.2%) with the statement that creativity is innate. It is interesting to compare the level of (dis)agreement with the claims that creativity is a characteristic of all people and that only some individuals are creative. On the one hand, a majority of teachers (45.9%) do not think that all people are creative, while on the other hand, a majority (58.4%) also disagree that only some people are creative. Furthermore, teachers do not agree at all (90.9%) with the statement that creativity cannot be developed.

Preschool Teachers' Beliefs Regarding Children's Creativeness

Table 2

Frequency (f) and Percentage (f%) for Each Level of Agreement With the Statements on Children's Creativeness

	Frequency	Percent
<i>All children are creative.</i>		
I fully agree.	63	28.6
I agree.	154	45.8
I cannot decide.	25	7.4
I do not agree.	53	15.8
I do not agree at all.	8	2.4
<i>Some children are uncreative.</i>		
I fully agree.	2	0.6
I agree.	58	17.2
I cannot decide.	48	14.2
I do not agree.	201	59.5
I do not agree at all.	29	8.6
<i>Some children are more creative than others.</i>		
I fully agree.	142	42.0
I agree.	168	49.7
I cannot decide.	7	2.1
I do not agree.	16	4.7
I do not agree at all.	5	1.5
<i>A child may be creative in one area but not in another.</i>		
I fully agree.	53	15.6
I agree.	124	36.5
I cannot decide.	24	7.1
I do not agree.	107	31.5
I do not agree at all.	32	9.4
<i>Creative children do not need additional motivation to be creative.</i>		
I fully agree.	6	1.9
I agree.	61	19.1

I cannot decide.	34	10.7
I do not agree.	196	61.4
I do not agree at all.	22	6.9
<i>Creativity cannot be fostered in every child.</i>		
I fully agree.	1	0.3
I agree	54	15.9
I cannot decide.	27	8.0
I do not agree.	211	62.2
I do not agree at all.	46	13.6
<i>Creative children are often difficult and undisciplined.</i>		
I fully agree.	8	2.4
I agree.	24	7.1
I cannot decide.	43	12.7
I do not agree.	206	60.9
I do not agree at all.	57	16.9

Regarding views on children’s creativity, we find that teachers are more inclined to believe that all children are creative than to believe that all people are creative; 28.6% fully agree and 45.8% agree. This opinion is confirmed by the majority disagreement with the statement that some children are uncreative (59.5% disagree, 8.6% strongly disagree). At the same time, there is a strong (91.7% agreement) belief that some children are more creative than others. The statement that a child can be creative in one area but not in another is not a dominant view, as participants’ opinions are evenly spread. However, the predominant views of teachers on fostering creativity are positive. Teachers mostly (68.3%) do not agree that creative children do not need additional motivation, and they mostly (75.8%) do not agree that creativity cannot be fostered in every child. In addition, teachers mostly do not agree (77.8%) that creative children are often difficult and undisciplined.

Differences in Preschool Teachers’ Beliefs About Creativity in General According to Work Position

Table 3

Differences in Preschool Teachers’ Beliefs About Creativity in General According to Work Position

Claim	Work position	N	\bar{R}	U	2P
Creativity is innate	Preschool teacher	252	188.42	12368.500	0.048*
	Preschool teaching assistant	111	167.43		
Creativity is a characteristic of all people	Preschool teacher	240	162.25	100019.500	0.007*
	Preschool teaching assistant	101	191.80		
Only some individuals are creative	Preschool teacher	241	168.31	11401.000	0.329
	Preschool teaching assistant	101	179.12		
Creativity cannot be developed	Preschool teacher	237	162.59	10332.000	0.037*
	Preschool teaching assistant	101	185.70		
People with an artistic tendency are more creative	Preschool teacher	240	173.87	10952.000	0.224
	Preschool teaching assistant	99	160.63		

The results of the Mann-Whitney tests (U = 12368.500, 2P = 0.048 and U = 100019.500, 2P = 0.007) show that there are statistically significant differences between teachers and teaching assistants in their agreement with the claims ‘Creativity is innate’ and ‘Creativity is a characteristic of all people’. Teachers are more inclined than teaching assistants to agree that creativity is innate (\bar{R} = 188.42), and teaching assistants are more inclined than teachers to agree that creativity is a characteristic of all people (\bar{R} = 191.80). A statistically significant difference between teachers and teaching assistants is also found in the agreement with the claim that creativity cannot be developed (U=10332.000, 2P=0.037), which is also more strongly agreed by teaching assistants (\bar{R} = 185.70).

Differences in Preschool Teachers' Beliefs About Children's Creativeness According to Work Position

Table 4

Differences in Beliefs About Children's Creativeness According to Work Position

Claim	Work position	n	\bar{R}	U	2P
All children are creative	Preschool teacher	240	174.14	11366.000	0.275
	Preschool teaching assistant	101	163.53		
Some children are uncreative	Preschool teacher	237	166.23	11193.000	0.375
	Preschool teaching assistant	100	175.57		
Some children are more creative than others	Preschool teacher	237	164.24	10721.500	0.184
	Preschool teaching assistant	99	178.70		
A child may be creative in one area but not in another	Preschool teacher	237	169.79	11900.000	0.926
	Preschool teaching assistant	101	168.82		
Creative children do not need additional motivation to be creative	Preschool teacher	229	160.78	10126.000	0.773
	Preschool teaching assistant	90	158.01		
Creativity cannot be fostered in every child	Preschool teacher	239	171.90	11735.000	0.645
	Preschool teaching assistant	101	167.19		
Creative children are often difficult, undisciplined	Preschool teacher	238	172.86	11101.000	0.270
	Preschool teaching assistant	100	161.51		

When examining the role of the workplace for the set of claims on children's creativity, there were no statistically significant differences in agreement with these claims between teachers and teaching assistants, indicating that the two groups of participants were fairly similar in their views.

Discussion and Conclusion

According to the older researchers in the field of creativity (Milgram 1990; Gardner, 1996; Srića, 1999; Marentič Požarnik, 2000), creativity is a general human characteristic. The analysis of the results of the present study shows that the participants' believe that creativity is innate, that it is a characteristic of all human beings, and that it can be developed, but mainly in specific areas of individual activity (e.g., the artistic field). These results show the duality and ambivalence of professionals' beliefs about creativity. On the one hand, the belief that creativity is innate may preclude participants' awareness of the possibilities of influencing the development of creativity, while on the other hand they report that their actions can change and develop individual creativity. As can be seen in our review of recent studies (Fryer and Collings, 1991; Diakidoy and Phitiaka, 2002; the European Commission, 2009; Ariffin and Baki, 2014; Cheung and Leung, 2013; Lee and Kemple, 2014; Leggett, 2017), teachers' understanding of creativity is an important element of their educational practice. However, the results of the present study show that teachers mostly believe that creativity cannot be developed and that people with an artistic tendency are more creative. In this context, we can observe the presence of some misconceptions about creativity (Robinson, 2017), in particular the myth that creativity is 'reserved' for specific areas of individual activity, for example, the arts. Similarly, Marentič Požarnikova (2000, 93-94) argues that in the Slovenian school system creativity is too narrowly understood and mostly associated only with aesthetic and technical areas, while creativity in other areas is forgotten.

We further examined teachers' views on children's creativity. We found that professionals believe that all children are creative, but at different levels: some more, some less, indicating that they recognise differences in the level of creativity of individual children. Teachers have divided opinions on the areas in which children express their creativity - they believe that children are creative in some areas and not in others. They agree that children need motivation to express and develop their creativity. In the preschool period, a particularly important aspect of fostering creativity is the creation of a stimulating learning environment and the planning and implementation of activities and instructions through promoting creative approaches, which can be initiated by children through learning by doing, active involvement and experiential learning (Cachia, Ferrari, Ala-Mutka and Punie, 2021).

An analysis of the differences in attitudes towards creativity between teachers and teaching assistants shows that teachers believe that creativity is innate but can be developed. Teaching assistants, on the other hand, believe that creativity is a characteristic of all people, not just a specific group of individuals. These conclusions can be partly explained by the differences in the level of education between the two groups of professionals. A longer education for teachers may bring with it not only more knowledge and a sense of competence in working with children - which may explain the differences in views on developing and fostering children's creativity - but also the possibility that teachers have an over-structured, curriculum-constrained and pre-determined framework of seeing the child. Perceiving the child with predefined criteria and assumptions, such as which goals to achieve and which tasks to

master, makes it impossible to create an open, innovative and stimulating learning environment that facilitates and fosters creativity.

To sum up, educational institutions should, at all levels of education, including the preschool level, incorporate, promote and foster creativity (Council of the European Union, 2008, 2009) However, it must be highlighted that information specified in policy documents and curricula, it is not necessarily reflected in educational practice.

Curricula cannot be effective without supportive structures. Teachers must be trained on how to allow creative approaches from learners, to identify creativity and how to facilitate and foster it. Even though positive attitudes towards creativity are important factors in supporting creativity, they do not always automatically transfer to educational practice, which largely depends on teachers' teaching competences and experience. Therefore, greater input in teacher training is essential. Teacher training programmes should provide all teachers with guided development on classroom teaching practice in terms of recognising and fostering creativity, which should be realized both, through initial teacher education programmes for pre-service teachers and through continuous professional development programmes for in-service teachers. These conclusions also point to the policy makers and to the teacher training institutions, which are both responsible for the teaching programmes curricula and their delivery.

Limitations of the Study

The possible generalizations based on this study are limited as the participants belong to the Slovenian educational environment. In the future, the reasonable direction seems to be to enlarge the size and the heterogeneity of the sample and also to include preschool teachers from other countries and put the study in the international context. However, the study and its results do outline some important issues that need to be addressed in the context of equipping preschool teachers with guided training of classroom teaching practice in terms of recognising and fostering creativity.

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References

- Aljughaiman, A. and Mowrer-Reynolds, E. (2005). Teachers' conceptions of creativity and creative students. *Journal of Creative Behavior*, 7(1), 17–34.
- Ariffin, A., and Baki, R. (2014). Exploring Beliefs and Practices among Teachers to Elevate Creativity Level of Preschool Children. *Mediterranean Journal of Social Sciences*, 5(22), 457-463.
- Ayman-Nolley, S. (1992). Vygotsky's perspective on the development of imagination and creativity, *Creativity Research Journal*, 5 (1), 77-85, DOI: 10.1080/10400419209534424
- Bloomquist, J. (2010). Teacher Conceptualizations of Creativity: Implications for Educational Practice. <http://csusd-space.calstate.edu> (10. 01. 2011).
- Cachia, R., Ferrari, A., Ala-Mutka, K. and Punie, Y. (2010). Creative Learning and Innovative Teaching. Final Report on the Study on Creativity and Innovatation in Education in the EU Member States. Luxemburg: European Commission.
- Castro-Fajardo, L. E., Santamaria, A., Bernal-Hernandez, K. L., Gomez-Hernandez, F. A. and Garcia-Cepero, M.C. (2014). How Do Educational Professionals Understand Creativity? A Study on the Implicit Theories on Creativity, In A Sample of Educators. *Journal for the Education of Young Scientists and Giftedness*, 2(2), 41-48.
- Cheung, R. H. P., and C. H. Leung. (2013). Preschool Teachers' Beliefs of Creative Pedagogy: Important for Fostering Creativity. *Creativity Research Journal*, 25(4), 397–407.

- Council of the European Union. (2008). Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 22 May 2008 on promoting creativity and innovation through education and training. *Official Journal of the European Union*, C 141/110.
- Council of the European Union. (2009). Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, of 26 November 2009 on developing the role of education in a fully- functioning knowledge triangle. *Official Journal of the European Union*, C 302/303.
- Creativity in Schools in Europe. (2009). A Survey of Teachers. <http://ftp.jrc.es> (11. 02. 2011).
- Cohen, L., Manion, L. and Morrison, K. (2007). *Research Methods in Education*. London, New York: Routledge.
- Creswell, J. W. (2014). *Research Design. Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles: Sage.
- Cropley, J. A., (2001). *Creativity in education and learning: A guide for teachers and educators*. Sterling, VA: Stylus Publishing.
- Diakidoy, N. I. and Kanari, E. (1999). Student teachers' beliefs about creativity. *British Educational Research Journal*, 25(2), 225-243.
- Diakidoy, N. I. and Phtiaka, H. (2002). Teachers' beliefs about creativity. In S. P. Shohov, (ed.), *Advances in psychology research*. Hauppauge (pp. 173–188). New York: Nova Science Publishers, Inc.
- Drlić, K. and Kiswarday, V. R. (2016). Razvijanje rezilientnosti študentov preko doživljanja izkušnje inkluzije na pedagoški praksi [Development of the Resilience of Students through Experiencing Inclusion during Teaching Practice], *Revija za elementarno izobraževanje [The journal of Elementary Education]*, 9(3), 53-73.
- Eckhoff, A. (2011). Creativity in the Early Childhood Classroom: Perspectives of Preservice Teachers. *Journal of Early Childhood Teacher Education*, 32(3), 240-255.
- ETUCE - European Trade Union Committee for Education (2008). *Teacher Education in Europe*. An ETUCE Policy Paper. Brussels: ETUCE.
- Fryer, M. and Collings, J. A. (1991). British teachers' views of creativity. *Journal of Creative Behavior*, 25(1), 75-81.
- Gardner, H. (1996). The Creators' Patterns. In M. Boden, (ed.), *Dimensions of Creativity*, (143–159). Cambridge: Massachusetts London: A Bradford Book The MIT Press.
- Golinkoff, R. M., and Hirsh-Pasek, K.. (2016). *Becoming brilliant: What science tells us about raising successful children*. American Psychological Association. <https://doi.org/10.1037/14917-000>
- Kampylis, P., Berki, E. and Saariluoma, P. (2009). In-service and prospective teachers' conceptions of creativity. *Thinking Skills and Creativity*, 4(1), 15–29.
- Lee, I. R., and K. Kemple. (2014). Preservice Teachers' Personality Traits and Engagement in Creative Activities as Predictors of Their Support for Children's Creativity, *Creativity Research Journal*, 26(1), 82-94.
- Leggett, N. (2017). Early Childhood Creativity: Challenging Educators in Their Role to Intentionally Develop Creative Thinking in Children, *Early Childhood Education Journal*, 45(6), 845-853.
- Marentič Požarnik, B. (2000). *Psihologija učenja in pouka [The psychology of learning and teaching.]* Ljubljana: DZS.
- Milgram, M. R. (1990). Creativity: An Idea Whose Time Has Come and Gone? In A. Runco, and M. A. S. Robert (eds.): *Theories of Creativity* (215–235). Newbury Park, London, New Delhi: Sage Publications.
- Janssen, J., Stoyanov, S., Ferrari, A., Punie, Y., Pannekeet, K., and Sloep, P. (2013). Experts' views on digital competence: Commonalities and differences. *Computers and Education*, 68, 473-481.
- Kurikulum za vrtce [Curriculum for kindergartens]. (1999). Ljubljana: Ministrstvo za šolstvo. <https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/Sektor-za-predsolsko-vzgojo/Programi/Kurikulum-za-vrtce.pdf>
- OECD. (2001). *Starting strong*. Paris: OECD.
- OECD. (2011). *Preparing Teachers and Developing School Leaders for 21st Century - Lessons from around the world (Background Report for the International Summit on the Teaching Profession)*. Retrieved January 18, 2017, from the World Wide Web <https://www.oecd.org/site/eduistp2012/49850576.pdf>
- Rentzou, K., and M. Sakellariou. (2011). The Quality of Early Childhood Educators: Children's Interaction in Greek Child Care Centers. *Early Childhood Education Journal* 38 (5): 367–376.
- Robinson, (2017). *Out of our minds: the power of being creative*, Oxford, UK: Capstone.
- Rosenblatt, E., & Winner, E. (1988). The art of children's drawings. *Journal of Aesthetic Education*, 22(1), 3-15.
- Rutar, S. (2021). Problematizacija vloge organizirane predšolske vzgoje v Sloveniji v času covida-19 [Problematization of the role of organised pre-school education in Slovenia in the period of covida-19]. *Sodobna pedagogika [Journal of Contemporary Educational Studies]*, 72(138), 3, 66-84.
- Sorokin, B. (1987). Kreativnost i okolina [Creativity and the environment]. In L. Kroflin, D. Nola, A. Posilović, A. Rudi (eds.): *Dijete i kreativnost [Childhood and creativity]* (65–88). Zagreb: Globus.
- Srića, V. (1999). *Ustvarjalno mišljenje [Creative thinking]*. Ljubljana: Gospodarski vestnik.
- Swainston, A., and N. Jeanneret (2013). Pre-service Teacher Beliefs: Are Musicians Different?, *Victorian Journal of Music Education*, 37(3), 43-51.
- The Education system in the Republic of Slovenia 2018/2019 (2019). Ljubljana: Ministry of Education, Science and Sport of the Republic of Slovenia.
- Yates, E. and E. Twigg (2017). Developing Creativity in Early Childhood Studies Students. *Thinking Skills and Creativity*, 23, 42-57

Appendix 1.*Preschool Teachers' Beliefs about Creativity Questionnaire*

Preschool Teachers' Beliefs about Creativity Questionnaire						
1: I do not agree at all, 2: I do not agree, 3: I cannot decide, 4: I agree, 5: I fully agree						
Section 1: Preschool Teachers' Beliefs Regarding Creativity in General						
	Items	1	2	3	4	5
1	Creativity is innate					
2	Creativity is a characteristic of all people					
3	Only some individuals are creative					
4	Creativity cannot be developed					
5	People with an arts tendency are more creative					
Section 2: Preschool Teachers' Beliefs Regarding Children's Creativeness						
	Items	1	2	3	4	5
1	All children are creative					
2	Some children are uncreative					
3	Some children are more creative than others					
4	A child may be creative in one area but not in another					
5	Creative children do not need additional motivation to be creative					
6	Creativity cannot be fostered in every child					
7	Creative children are often difficult and undisciplined					