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# Exploring the perceptions of student teachers about ‘creative school’ in early childhood education

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## ABSTRACT

Creative school environments use creative approaches in their curriculum, content, and teaching and learning. Considering that creativity is fostered by all elements of educational processes such as teachers, classrooms, and school environments, the purpose of the current study was to explore perceptions of Turkish student teachers in an early childhood education program about the concept of ‘creative school’ as a holistic system of creativity in early childhood. A case study design was used in the current study. Findings indicated that the student teachers described the ‘creative school’ as a space for active engagement, supporting inquiries of children through play-based activities, design of nature- and community-based schools, child participation and freedom of speech, and open-ended experiences. Moreover, descriptive analyses of drawings reflected the same or similar perceptions. Themes that emerged in the current study reflected the philosophy, curriculum, teachers, or children within a ‘creative school’. Further, the importance of a creative school in early childhood education is discussed.

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Creativity; creative school; early childhood education; case study; Turkish student teachers

## Introduction

Attention to the cultivating creativity in educational settings has been continuously increased (Amabile, 1996; Amabile, Hennessey, & Grossman, 1986; Guilford, 1950; Torrance, 1968, 1995). This growing interest in creativity has stimulated promising developments in educational processes regarding creativity, although it has been somewhat slow (Wyse & Ferrari, 2015). Early childhood is an important period of life by which all aspects of development simultaneously and rapidly occur (Pianta, Barnett, Justice, & Sheridan, 2012). Creativity is an important aspect of children’s development that needs to be cultivated in early childhood so that children will grow up with creative skills that can be used in all areas of their life (Robinson & Aronica, 2015). Therefore, integrating creativity in early childhood curriculum may help children improve their creative skills. Robinson and Aronica (2015) call for the new concept in education that is ‘creative school’, which refers to schools ‘that have taken a creative approach to the schedule, to the organization of content, and to the relationship between teachers and learners’ (Pinkus, 2016, p. 54). This concept is not new, as it has been continuously emphasized within curriculum on improving children’s creativity within school settings (e.g. *The Creative Curriculum*). Therefore, the concept of the ‘creative school’ can be seen as a shout-out and assurance for the importance of the development of creativity within school systems.

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Teachers' perception and understanding of creativity in their classrooms have been found to be related to child outcomes regarding creative skills (Cropley, 2001). These perceptions surrounding creativity are also influenced by cultural context (Rudowicz, 2003). Cultural psychology of creativity posits that culture has important influence on creativity as development of creativity is a product of socio-cognitive interactions with one's environment (Glăveanu, 2010a, 2010b). From this perspective, the purpose of the current study was to explore how Turkish student teachers perceive and understand the concept of the 'creative school' in early childhood education. By doing so, understanding in depth student teachers' perceptions about 'creative school' while they are in college may help university educational programmes to improve their skills regarding teaching and helping with the development of creativity in children during early childhood.

### ***Creativity in early childhood***

Creativity refers to generating and disseminating new ideas – outside of conventional ways of thinking, and most of the time the ideas are not accepted by the present authority (Sternberg & Lubart, 1995). In short, creativity is an 'imaginative process with outcomes that are original and of value' (Robinson, 2001, p. 118). The investment theory points out six characteristics that creativity should include: intellectual capabilities, thinking styles, personality, motivation, knowledge, and environment (Sternberg & Lubart, 1996). These characteristics emphasize that an individual who attempts to be creative should think out of box, use his/her potential abilities, be able to interact with the environment in perseverance, have inner motivation to sustain and engage in an activity, and be knowledgeable about the facts and materials that he/she is learning about (Shen, 2014; Sternberg & Lubart, 1996).

According to Vygotsky's (1962) concept of the zone of proximal development, children develop new learning outcomes via collaborative work with more advanced peers and adults. These social interactions during collaborations with both peers and adults provide opportunities for the development of creativity (Isbell & Raines, 2007). As parallel to Sternberg and Lubart (1995), Vygotsky emphasized that creativity in childhood is *subjective* in nature, such that children do not take strict rules about reality and social conventions into account (Copley, 2001). Both Vygotsky (1962) and Sternberg and Lubart (1995) emphasized that creativity of children can be strengthened by providing flexible and nurturing environment in where children interact with the environment and freely express their thoughts. From both perspectives, creativity in early childhood, focusing on children's outcomes rather than the process of creation work, impedes expression of creativity, as children may focus on their work as a product and do not enjoy the process of its creation (Isbell & Raines, 2007). Considering the importance of both theoretical perspectives on creativity in early childhood, we framed the current study with both perspectives (Sternberg & Lubart, 1995; Vygotsky, 1962) that children's creativity has some characteristics that impede or expedite their interactions with their environment; in turn, these interactions scaffold improvement of children's creativity.

There are abundant evidences on why development of creativity is important in early childhood (e.g. Duffy, 2006; Marzollo & Lloyd, 1974; Wood, 2009). Creativity is developed through wide range of play activities (e.g. pretend and symbolic play) in early childhood in which children learn how to create imagination and transform these images into action during the play (Wood, 2009). Self-control and self-confidence are two main outcomes that come out through free play (Ball, 2002). During these play activities, children will be aware of their creativeness that they will carry on throughout their life (Craft, 2002).

Despite the fact that creativity is important in early childhood, cultivating creativity has been getting undercharged attention in early childhood (Cropley, 2001). However, it is known that if children will grow up to become self-organized learners and able to freely explore new opportunities in the learning process, teachers and school systems should integrate creativity into their curriculum and daily experiences of children (Edwards et al., 2014; Robinson & Aronica, 2015). Some approaches to early childhood education place emphasis on creativity in early childhood for children's overall

development and educational outcomes (e.g. Reggio Emilia Approach; Edwards, Gandini, & Forman, 2012). In fact, creativity is not a separate entity from the daily life of children at school in Reggio Emilia approach, but rather an integrated part of the learning process in early childhood education (Edwards et al., 2014). To illustrate this phenomenon, Loris Malaguzzi stated:

[W]e do not consider creativity sacred, we do not consider it as extraordinary but rather as likely to emerge from daily experiences. ... The more teachers are convinced that intellectual and expressive activities have both multiplying and unifying possibilities, the more creativity favors friendly exchanges with imagination and fantasy. (Malaguzzi, 2012, p. 51; as cited in Edwards et al., 2014)

Creativity should be emphasized in early childhood, as it is an integrated entity of children's daily lives and the creative process should be valued without focusing on outcome of the work so that children are able to freely enjoy the process of creation (Isbell & Raines, 2007). In addition, children are naturally curious about the social and physical environment around them, and they often ask questions to figure out events and situations around them. Children come to preschool with experiences and skills that need to be acknowledged and guided towards new learning opportunities by taking their imaginative and exploratory skills seriously (Curtis & Carter, 2005).

### **Concept of the 'creative school' and children's creativity**

The culture of a school is reflected in their curriculum, teaching styles, and the type of assessment used in the teaching/learning process. From this perspective, there is a great deal of importance placed on the school environment including physical structure, quality of teachers, and school administration in scaffolding children's creativity during early childhood. The traditional concept of schools is based on *intellectual* (as parallel to 'mainly theoretical or scholarly rather than practical or applied work') and *organizational* (as parallel to 'manufacturing process of industrialism') (Robinson & Aronica, 2015, p. 76). On the other hand, schools with creative orientations focus on 'recognizing that intelligence is diverse and multifaceted; enabling students to pursue their particular interests and strengths; adapting the schedule to the different rates at which students learn; and assessing students in ways that support their personal progress and achievement' (Robinson & Aronica, 2015, p. 83). Overall, creative schools may focus on the expression of fresh and divergent ideas, being open to new approaches to learning and teaching, and scaffolding creative ideas among its learners (Dziedziejewicz, Oledzka, & Karwowski, 2013; Robinson & Aronica, 2015). In one study, Ramey and Piper (1974) conducted a quasi-experimental study with children from first, second, and eighth grades. Children were recruited from two school systems, in that one school focused on traditional classroom setting ('follows a typical school regimen which stresses competence, obedience, and hard work and carefully prescribed curriculum is followed', p. 558) and the other school focused on open classroom setting ('not only to amass knowledge, but also to develop critical techniques of inquiry and to familiarize a child with the knowledge and techniques necessary to participate in the society thoughtfully, creatively, and with intellectual curiosity' p. 558). The researchers found that children from open classrooms scored higher on the Torrance Tests of Creative Thinking than children from tradition classroom settings (Ramey & Piper, 1974). In addition, Dziedziejewicz, Gajda, and Karkowski (2014) found that using Creative Compass programme improved 8–12-year-old children's creativity and intellectual ability. Creative compass programme was based on stimulating development of children's creative abilities and attitudes. Leaders in creative school environments are also not in a position where they command and control the process; rather they prefer to create an environment where learners can freely construct their learning and feel comfortable expressing their ideas within equal and non-judgemental contexts.

Nevertheless, it would be shallow argument that there is a clear distinction between traditional and creative schools. Therefore, we should not expect that all 'traditionally oriented' schools do not support creativity in their classroom; rather, these schools maybe lack in resources or curriculum

that may lack in creative content. From this perspective, one should not consider that all traditional schools are away from supporting children's creativity in early childhood.

### *The power of a teacher in 'creative school'*

Creativity in early childhood can be nurtured or impeded by external characteristics such as teacher approach to creativity, educational and cultural environment, curriculum (Craft, 1999; Kemple & Nissenberg, 2000; Robinson & Aronica, 2015). Teachers have an important role in developing and supporting children's creativity in early years (Beghetto, 2006; Craft, 2000; Dababneh, Ihmeideh, & Al-Omari, 2010; Kemple & Nissenberg, 2000; Wyse & Ferrari, 2015).

The general trend in formal educational systems throughout the world is for teachers in early and later childhood to inhibit or discourage children's creativity by insufficiently scaffolding children's divergent thinking, being flexible as children express their ideas, and focusing on one type of answer for a given question (Dababneh et al., 2010). Overall, there is a lack of stimuli and opportunity to spark children's creativity in early childhood, and increasingly in the general formal educational process (Eason, Giannangelo, & Franceschini, 2009; Kemple & Nissenberg, 2000). While teachers have understating of the importance of creativity in early childhood, they may not know the value of children's creativity for their overall development (de Souza Fleith, 2000).

### *Teachers' perception and understanding of children's creativity*

Teachers' scaffolding of creativity in their classrooms may depend on how they perceive creativity and its importance for children's development. A large body of research has examined how both teachers and student teachers perceive creativity in childhood education, and the general trend in results from previous research has shown that teachers perceive creativity as an important entity of early childhood education (e.g. Alkus & Olgan, 2014; Bolden, Harries, & Newton, 2010; Cropley, 1997). However, many teachers have a lack of knowledge about how to facilitate creativity in their classrooms (e.g. Fryer & Collings, 1991; Lee & Seo, 2006). For example, Lee and Seo (2006) examined 42 Korean elementary teachers' understanding of creativity in children and found that one-third of teachers had biases on conceptualizing veracity in their classrooms by disregarding personal and partial understating of environmental components of creativity. Another study (Alkus & Olgan, 2014) found that Turkish pre-service and in-service preschool teachers also had discrepancies in their conceptualizations of creativity in the early childhood such as utilizing creative activities in the classroom and creativity is better in adults than in children.

Prior research examining teachers' perceptions of creativity in children has come up with similar findings across cultures; teachers generally perceive creative children as disliked, disruptive, and lacking in obedience to rules (e.g. Oral & Guncer, 1993; Scott, 1999; Westby & Dawson, 1995). For example, Westby and Dawson (1995) examined both student teachers' and in-service teachers' perceptions of creative children's characteristics and found that teachers predominantly rated children with creative characteristics as the least favourable in their classrooms. Besides teachers' views on creativity and creative children in their classrooms, teachers also considered obstacles for the implementation of creative activities in their classrooms, such as school administration and parents in terms of support for creative activities for children (Aslan & Cansever, 2009). Overall, the previous findings highlight teachers' awareness for fostering creativity as an important component of the educational process. However, due to lack of knowledge and support from school administration and parents, teachers have difficulty implementing certain activities regarding children's creativity development.

### *The current study*

Although several studies have examined how student teachers perceive creativity and creative children in educational processes (e.g. Alkus & Olgan, 2014), there has been no research to our

knowledge, exploring student teachers' perceptions and understanding surrounding the concept of 'creative school'. In the current study, the creative school is 'a practical environment' to actualize the concept of creativity and present concrete perspective for educational settings. Also, the creative school involves implications, behaviours for students and teachers, tangible environments and corners.

To address the knowledge gap related to how Turkish pre-service teachers perceive and understand the concept of 'creative school', we addressed this main question: What main characteristics of 'creative school' do early childhood student teachers ideally perceive and understand?

## Methodology

### *The qualitative design*

A qualitative case-study approach was thought the most appropriate method for data collection for the current study, as the purpose of a qualitative case study is to unfold 'how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences' (Merriam, 2009, p. 5).

A case often is identified as a particular programme or a project or setting instead of focusing on one individual. A case study involves the specific and detailed study of a case or cases (Lichtman, 2012, p. 81). This particular design allows researchers to investigate the thoughts, experiences, belief systems of participants through interviews. This design helps to reveal individual perceptions or viewpoints related to a creative school as a phenomenon. The case in the current study was framed around sophomore student teachers and their perceptions of 'creative school' in the early childhood education.

### *Participants*

The bounded system of the current study was student teachers' experiences that reflect their understanding of the concept of the 'creative school'. Creswell (2013) suggested that researchers use a combination of convenience and purposeful sampling to recruit participants reflecting unusual and maximum variation in a researched case. A total of 63 sophomore students (51 females), primarily aged 17–20 (92%) in an early childhood education programme at a state university in central Turkey were recruited for the study. Sophomore students were selected because they were enrolled in the fall semester 'Creativity in Early Childhood Education' class, which presents the philosophy of creativity, creative thinking, learning environments in the early childhood development, and new trends and approaches in early childhood education. While a few students (28.5%) graduated from vocational high schools focused on child development and education, they did not take any specific courses related to creativity. A total of 36 student teachers voluntarily agreed to participate in the current study.

### *Data collection*

The study involved multi-source of data collection including in-depth interviews, student teacher group reports, group discussions, and drawings on the concept of 'creative school'. Group discussions were the first part of data collection and concluded with reports after the completion of each week. They were five sessions and lasted approximately between 60 and 90 minutes for each session; besides, all discussions were recorded. The case was structured around discussion questions such as: 'How do you describe your creative school?', 'What is your philosophy in your creative school?', 'How is the curriculum in your creative school?' Sub-discussion questions were scaffolder for developing ideas such as 'How did you decide that?', 'Do you have a story of thinking like that?' Each week was based on one theme with interactive learning skills. Discussion and debate were highlighted

strategies which reinforced the process of systematic reasoning in support of an idea or theory, agree on a decision, or to exchange/reshape ideas. Each member of the group expressed himself/herself in the discussion via active participation with equal speaking opportunities. To encourage student teacher participation, the instructor indicated that 'Group performance depends on the weakest linker/member, every idea is precious for the discussion; there is no wrong answer'. In addition, role-play, SCAMPER activities (a series of questions on differential thinking), brain storming, six hats thinking, panel-discussion, creative writing and creative reading, worksheets, videos (e.g. TED Talks – Ken Robinson 'How do schools kill the creativity?' etc.), caricatures, biographies, and some masterpieces (e.g. Albert Einstein, Leonardo da Vinci, etc.) were other tools used to support discussion. The evaluation for each week's discussion was completed after all groups presented on their current theme. Student teachers used bullet points, samples, slogans, and metaphors to support each theme in their reports. For example:

If you are able to make mistakes, you may make progress toward being creative, Imagination is not only a creative manner but also it is real human-being. Looking in a different way as a teacher and providing children opportunity to look in a different way. Each child is an artist, scientist, or innovative thinker if you see their potential during early childhood as a teacher. Creativity is a combination of exploring, inventing, living, breaking the rules, experimenting, taking risks and reflecting.

Student teachers drew and designed their creative schools to describe their opinions in a visual way during the last week of implementation. Before the last session, 'All things and themes considered and think all discussions, how do you portray your creative school as a group product?' was only one instruction to tell drawing practice. They also supplemented their reports with their visual products (i.e. photographs, drawings). The instructor also took student teachers' opinions about photos to support their opinions and improve their thinking. Photos made interviews clear and student teachers organized their ideas with photos as a concrete material during the interviews since she started to interview by some photos from the process. Three weeks after class completion, student teachers were invited to have an interview with the instructor regarding construction of the 'creative school' processes. Semi-structured, face-to-face interviews were conducted with all the participants. The average time for interviews was between 10 and 30 minutes. Interviews contributed to the production of ideas, beliefs, feelings, and experiences that rarely get expressed in written questionnaires. Researchers documented everything that was spoken for use in data analysis (Merriam, 2009; Patton, 2014). The interview questions included: 'What would a school look like that helped children grow up to be creative thinkers? how do you construct educational environments effectively? Tell me about important factors and dynamics related to creative school'. Before the first group discussion, student teachers were asked whether mental images would be requested in school drawings as metaphor. They chose the best metaphor to represent their own creative school phenomenologically and they analysed with drawings as supportive findings.

### **Data analysis**

Data analysis was an ongoing and dynamic process in this study. Patton (2014) indicates analysis as a 'process of bringing order to the data, organizing what is there into patterns, categories, and basic descriptive units'. Findings of data analysis were organized under the themes derived from the content analysis in order to determine student teachers' beliefs and opinions. Content Analysis is described as the scientific study of content and communication with reference to the meanings, contexts, and intentions contained in messages; used to determine particular concepts related to codes of creative school in the interview sessions (Prasad, 2008). Stempel (1989) suggested four steps when using a content analysis approach, including selection of units of analysis, developing categories, sampling appropriate content, and checking the reliability of coding (as cited in Prasad, 2008). Prasad (2008) also pointed out that impressionistic observations about the phenomena can help you make a quantitative expression of the phenomenon (i.e. express it in numbers or percentages)

which will make the data more specific and objective. Descriptive analysis of the drawings was used as support for the content analysis. In that context, student teachers' first impressions from drawings were matched with data with supportive student teacher explanations in the interviews and then sorting and analysing data (Miles & Huberman, 1994).

All the collected data were organized into manageable units and patterns and were labelled using codes selected throughout the data collection period. The units in their patterns were also grouped into broader categories. The basic components of a school were identified as main themes and included: Philosophy, curriculum, teacher, student, and the environment underneath the practice instructor's course outline and experiences with literature review (e.g. Glasser, 1998; Rathvon, 1998; Robinson & Aronica, 2015). Discussion and debate were included each week as part of classroom processes. The researchers transcribed interview notes verbatim from the tapes onto a computer program using a transcription software. Some of the participant responses were categorized under multiple codes. During analysis, participants were asked to validate their responses and made some additional comments to clarify their previous remarks. Participants were named and coded 'P1, P7 etc.' in the interpretation of their quotations to provide anonymity.

Researchers had two outlines for coding so that separate data coding was carried out for reports and interviews. For the converging data, two different outlines were sorted together, and different codes were re-evaluated. Compiling a common outline was based on coding and sorting unrelated codes out, and developing and elaborating codes. Creative school drawings and student teachers' explanations, reasoning, and their school definitions were added to the code in the compiled outline. We used researcher documentation to support data analysis to aid in the deciphering of codes and explain the meanings. In the current study, we also used 'quantizing', which refers to using numbers to 'facilitate pattern recognition or otherwise to extract meaning from qualitative data, account for all data, document analytic moves, and verify interpretations' (Sandelowski, Voils, & Knafl, 2009, p. 210). This process helps researchers and readers to understand the qualitative data (Sandelowski et al., 2009). We used counts and percentages in the current study to strengthen our interviews, student reports, and group discussions.

### **Trustworthiness of the data**

In the current study, group reports, interviews, researcher diary, audio-visual materials (drawings, slogans, virtual metaphors) were used as instruments for data collection to triangulate data sources. Converging several sources of data or perspectives from participants provides comprehensive and coherent justification on behalf of triangulation (Creswell, 2015). In addition, follow-up interviews with five random student teachers were conducted to provide member checking, after themes were created (Creswell, 2015). Participants made general comments about the findings and 'creative school' and contributed additional points to the research.

Moreover, the study was based on prolonged engagement. Prolonged engagement could be a relationship building process to establish trust between the investigator and participants (Shenton, 2004). The first author led the course called 'Creativity in Early Childhood Education' and spent adequate time with participants in their natural settings. This provided gathering in-depth understanding and contributed to student teachers' comfort when reflecting their opinions. Finally, crosscheck codes were developed by two different researchers by comparing findings and results. One of our colleagues who was blind to the study hypotheses coded reports and transcriptions separately. Interrater agreement across codes was 91%, which is adequate (>80%; Miles & Huberman, 1994).

### **Findings**

The themes included philosophy, curriculum, teacher, student, mental images (metaphors), drawings by means of interviews, discussion reports, researcher diary, and visual images regarding creative



school. Philosophy referred to principles, mission, and vision in the creative school. The curriculum included content, goals, resources, and tools. When it comes to the teacher and the student, their personality characteristic, treats, behaviours, and features were discussed in the creative school. The school environment included facilities, classrooms, psychical environment, the positive climate of the school, safety, and health. The creative school metaphor for each group was a phenomenon used to understand group perspective and a sharing common group characteristic. Creative school drawings were used to represent group ideas and reports.

### ***Theme 1. The philosophy of the creative school***

Eleven codes were identified through content analysis related to the philosophy of the creative school. These opinions and suggestions are presented in accordance with how frequently they were mentioned by student teachers and included: learning by doing (18.2%), active learning environment (15.2%), freedom of speech and thinking (15.2%), discovering the world (11.8%), inquiring (10.0%), integration of multiple disciplines (8.1%), exploration (6.6%), multi-thinking (6.6%), rich environment and resources (5.5%), and combinations of all well-known approaches (2.2%). Student teachers mostly indicated that getting experiences and having more interaction with the environment refer to learning by doing.

P1: Schools could have creative classrooms, learning corners. Many stimulating activities could be arranged like stations.

Active learning environments refer to environmental designs that stimulate children's learning psychically and encourages interactions with nature, society, and communities. Philosophy of freedom of speech and thinking refers to the concept of early childhood education as a noteworthy starting point for child participation and children's free expression in early childhood.

P2: If freedom is provided for children especially to express their feelings, they will discover their potential easily. It is believed that people are comfortable when they express themselves. In that case, children ask their questions within a rich environment.

A few student teachers mentioned that creative school philosophy may be a combination of all well-known approaches to structure the philosophy of the creative school. Philosophy must be open to all approaches and trends available at the time because new ideas, environment, society, and new theories affect creativity in early childhood education. For example,

P3: Creative school must be a mix of alternative early childhood education. Not only Reggio Emilia, but other approaches must also be considered.

The philosophy is based on children's experiences in an arranged and active environment. In that case, children inquire about the matters in their lives and children have rights related to freedom of speech, free thinking, and they have their own creative characteristics. The other main points included an awareness of what is happening in the world and meaning attribution to existing matters. In addition, children could understand new contexts and interactions with the inquiry.

### ***Theme 2. The curriculum of the creative school***

Codes from student teachers' interviews reported their perception of the curriculum in a creative school as followings: curriculum as informal learning (17.4%), everything could be content (15.1%), no expected outcomes (9.09%), no assessment and evaluation programme (8.3%), flexibility (8.3%), play-based learning (7.5%), school-based (6.8%), community-integrated curriculum (6.06%), nature-based learning environment (6.06%), inquiring and searching (5.3%), adult interaction (parent, specialist, expert) (5.3%), interdisciplinary (3.7%), contains multicultural education (0.75%). Student teachers commented on the important aspects of curriculum components. Three codes

regarding the curriculum had the highest frequency, indicating their importance to all student teachers in the current study. Informal learning does not have strict instructions and steps for teaching.

P7: Teachers don't need strict curriculum guidelines. Children learn about the world and the community by means of serendipities on behalf of their curiosity. Formal education limits a child's imagination even in early childhood education.

P3: If curriculum has some strict principals, teachers follow these principles. In that case, they will need to teach academic goals to children who feel under pressure. In my opinion, especially literacy skills shape in children in a one way.

The second most used code was content flexibility; curriculum must provide diversity for the content.

P19: Flexible goals provide divergent skills for teachers in the curriculum – any topic could be integrated into the curriculum.

Following the most stated codes were: no expected outcomes and not evaluating children. It is interesting to point out that student teachers had some beliefs that do not promote children's creativity if there are regular assessments and evaluation.

P22: Children could learn with interactions naturally. Assessment creates pressure for teachers. They can't think about broader ideas for their students.

Creativity in the curriculum has no limitations or strict instructions, so teachers can use any source for the content in the learning–teaching process. The curriculum is open to informal learning, so children can learn from interactions in the environment and society.

### ***Theme 3. The teacher at the creative school***

Regarding teachers' roles and characteristics in the creative setting, 12 codes were composed: the teacher stimulates to learn (20.6%), divergent thinking skills (18.9%), multi-skilled and lifelong learner (18.1%), interested in all kinds of art (13.2%), creates her/his own creative approach (10.9%), designs her/his classroom (8.6%), no experience of mobbing (5.1%), do not feel pressure (1.7%), expose children to different kinds of questions (open-minded, analytic, etc., 1.1%), smiles (0.5%), be brave (0.5%), and has high self-confidence (0.5%). Participants emphasized stimulating to learn, having divergent thinking skills, being a multi-skilled and lifelong learner as highlighted themes for teachers' role in the creative school.

Stimulating to learn refers to encouraging children to inquire and think deeper.

P11: According to Reggio Emilia, children have 100 hundred languages. Ninety-nine of them could leave, but only one mustn't leave. One language is enough to stimulate creativity. Teacher is a person who has to pay attention to activate children's 100 hundred languages.

Divergent thinking skills are to think deeply and from different points of view (reflective, critical, inquired, etc.).

P22: Teacher is a second hero to support children's thinking after parents. They must ask their questions to encourage children to think deeply and differently.

Another most stated point was teachers' skills. Student teachers pointed out that a creative teacher must be multi-skilled.

P15: On condition that teachers travel, listen to different kinds of music, perform some type of fine art, write every experience, a bucket of experience ... I bet, she/he can create anything (material, creative activity) from her/his experiences. As aforementioned in the class discussion, creative individuals only grow at the mercy of creative teachers.

The teacher has a role in stimulating children to learn and creates a learning environment. Multi-skilled teachers nourish children with art, literature, science; often have divergent thinking skills and perspectives. Thus, teachers can identify the diverse learning needs of students and the unique ways with using their creative mind shifts.

#### ***Theme 4. The child in the creative school***

The child in the creative school has high participation and expresses his/her own feelings (23.4%), has argumentation skills (12.5%), plays everywhere (12.5%), learns by playing and interacting with others (10.8%), has freedom of playing, speech, acquiring information (9.7%), is an active individual (9.7%), has curiosity and inquires (8.5%), is open to new learning (6.8%), does not feel pressure to learn something (5.7%).

Children's participation, expressing his/her feelings, argumentation skills, and the importance of play were the most common and, respectively, important themes among the nine themes in this category. Children can express their feelings freely which enables them to be more innovative and creative.

P12: If a teacher is a gardener, children will be a seedling during early childhood. When teachers encourage their students' participation to freedom of expressing. The play is an essential tool and way for children to express their feelings and have increase self-confidence. Thinking differently will start with having self-confidence.

Debates and discussions were found to be an important way to think about the inquiry.

P1: A child is eager to solve problems or has curiosity – either of which is the starting point of being creativity.

Self-expression is a way to reflect the inner word and mind shift of a child and when a child chooses the way (playing, drawing, talking, interaction with the environment, etc.) in which they express themselves, it supports children's participation and children presenting arguments.

#### ***Theme 5. The school environment at the creative school***

The codes generated by student teachers regarding the school environment included: five senses (26.17%), enjoyable and full of amusement and getting students relaxed (21.4%), child-centred and child-friendly (19.4%), no borders for learning (16.7%), enrichment space with content (14.0%), free play (1.3%), providing private space for each individual (supporting thinking and incubation) (0.6%). Five senses in a learning environment, enjoyable and full of amusing corners and classroom, getting students relaxed were mostly emphasized as ideas in the classroom environments. Also, environments should have constructed child-centred and child-friendly, no borders for learning, and enrichment space with content. Some statements exemplified as following:

P8: Classrooms have shapes and borders – the more field trips, the more creativity.

P3: Learning by doing is a magic idiom for creativity. If we begin by arranging our learning environments around the five sense organs such as hearing, touching, etc.; in the future, we as early childhood educators can talk about supporting creativity, indeed.

Student teachers mostly generalized the school environment as an empowering stimulus, learning by enjoying, and integrated nature and community. When an individual enjoys the life and has the pleasure and happiness, she/he can be productive and innovative. Student teachers were asked to explore their mental images regarding creative school, and [Table 1](#) illustrates their mental images related to creativity. Metaphors were representations of their mental images about creativity and creative experiences from discussions about existing creative school ideas. In this context, they composed their group metaphors, respectively, 'sun, rainbow, eureka, sky, nature or bazaar'. Reasons for selecting the particular metaphors included enrichment of children's creativity, many perspectives, inspiration, and imagination.

**Table 1.** Student teachers' creative school drawings.








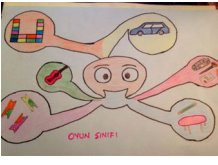

	Creative school images		Opinions
Group Originality			Diversity in multi-interests for children Differentiated learning: individual process and products, paying attention to children's individual needs Theme-based learning: considering and focusing on a specific theme empowers different thinking skills and having deep knowledge Interest corners: creativity is a possible thing when classroom designed and divided on children's interests School design refers to child's freedom and imagination
Group Curiosity			More green places: nature is nurturing element for fostering creativity for children Innovative designs for supporting divergent thinking skills Teaching is not the first goal here, interaction is more important in this school
Group Flexibility			Supporter of multicultural education: children from different nations and with individual differences Flexibility and free space for each individual All spaces are designed to stimulate curiosity
Group Imagination			Project corners: Project-based learning and different workshops for students The teacher does not inform or instruct kid in this school. He only guides child for the process Grass symbolizes that nature is the third teacher and nature interaction is very noteworthy
Group Inspiration			Many inspirations are supported. It is not complicated and based on a simple school design which only represents similar and basic environment Octopus represents many different domains such as fine art, science, sport, verbal learning, architecture, etc.

Table 1 illustrates student teachers' creative school designs from the groups' points of view based on their explanations. First, 'Group Originality' indicated diversity for interest, differentiated learning, theme-based learning, interest corners, and children's freedom and imagination with their pictures. Second, 'Group Curiosity' demonstrates more green places, innovative design for supporting divergent thinking skills, and the importance of interaction rather than teaching by means of their visual images. Third, 'Group Flexibility' represented as reflecting a supporter of multicultural education, flexibility and free space, and the concept of all spaces are designed to stimulate curiosity. 'Group Imagination' the important highlighted ideas were project corners, different workshops for students, not formally presenting information or instructing, guiding children toward the process, and the influence of nature in their creative school's pictures. Lastly, 'Group Inspiration' pointed out supportive inspirations, based on simple school designs and basic inspirations, supporting many different domains such as: fine art, science, sports, verbal learning, architecture, child's inquiring, exploring, answering children's questions, and solving children's hypotheses. Overall, the themes outlined basic requirements and principles for creativity such as the importance of physical environment, nature-based areas, inspirations, and multi-dimensional constructs.

## Discussion

The current study explored student teachers' perceptions and understanding of concepts regarding 'creative school'. The findings described how student teachers perceived and reflected upon the concept of 'creative school' in early childhood education around patterns of philosophy, curriculum, teachers, and students within a 'creative school'. Each of these patterns within themes is discussed in turn.

First, a majority of student teachers approached the philosophy of a 'creative school' from the perspective of active learning and freedom of expressing ideas within a comfortable environment. Student teachers reflected on active learning environments as part of the creative school philosophy as something that should stimulate and scaffold children's learning by providing inquiry-based, interdisciplinary, and multi-thinking approaches to learning and teaching. This is consistent with the development of creativity framework in children that educational processes such as using activities (e.g. open-ended questions, letting students create their learning) scaffolding to help children develop creative skills in early childhood (de Souza Fleith, 2000; Fasko, 2001). In previous research, teachers believed that classroom learning environments encouraging children's creativity (e.g. accepting different ideas, focusing on children's strength and interests) could help children to boost their creativity skills (de Souza Fleith, 2000). The findings from the current study appear to be promising regarding student teachers understanding of philosophy concerning 'creative school', so that they may use this philosophy in their teaching when they start their careers.

Second, student teachers perceived curriculum for a 'creative school' as consisting of informal learning (i.e. no strict instructions and steps for teaching), flexible content (i.e. diversity in the context so it can be switched as needed), and personalized evaluation of development and learning of children (i.e. no expected outcomes and not evaluating children – focusing on the process rather than outcome). This finding was interesting, in that student teachers perceived curriculum as flexible, diverse, and not outcome-based, although, the Turkish education system is centralized and does not provide much flexibility to teachers regarding their curriculum. Student teachers appeared to believe that limitation and strict instructions may block the development of creativity in children. This finding is congruent with the conceptualization of curriculum for a 'creative school' defined by Robinson and Aronica (2015) who stated that conventional curriculum consists of serrate subjects, outcome-based rather than the process, and setting limitations on children's and teachers' flexibility in learning and teaching. Contrary to conventional curriculum, Robinson and Aronica (2015) felt that creative school curriculum should be based on

*curiosity* – the ability to ask questions and explore how the world works (p. 135), *creativity* – the ability to generate new ideas and to apply them in practice (p. 136), *criticism* – the ability to analyze information and ideas and to form reasoned arguments and judgement (p. 136), *communication* – the ability to express thoughts and feelings clearly and confidently in a range of media and forms (p. 137), *collaboration* – the ability to work constructively with others (p. 138), *compassion*, the ability to empathize with others and to act accordingly (p. 139), *composure* – the ability to connect with the inner life of feeling and develop a sense of personal harmony and balance (p. 139), and *citizenship* – the ability to engage constructively with society and participate in the processes that sustain it (p. 140). (Emphasis in the original)

From this perspective, student teachers seem to understand the concept of the curriculum in a 'creative school' so that they may use these ideas as they begin their careers.

Third, when student teachers talk about the role and/or characteristics of teachers in a 'creative school', they frequently mention that teachers should have the ability to stimulate children's learning, divergent thinking, lifelong learning, and creating their ways of teaching depending on the needs of children. Also, they also discussed the importance of creating nurturing classrooms and school environments for a 'creative school' that can help children develop better creative skills in early childhood. These perceptions of student teachers on the roles of teachers and their characteristics entailing creativity in education are parallel to previous work (Berggraf Saebø, McCammon, & O'Farrell, 2016; Rinkevich, 2011) indicating teachers' understanding of creativity, approach to teaching and

scaffolding creativity in children, and using innovation in their approaches to teaching is related to the development of children's creativity, as well as nurturing classroom environment for creativity in children. From this perspective, it is important for student teachers to understand the significant role teachers play in the development of children's creative skills in early childhood.

Last, student teachers approached children in 'creative school' from the perspective that children are naturally and actively engaged in learning the process and their learning is based on playing and interaction with the social environment. The most coded answers by student teachers regarding children in 'creative school' were children's participation, expressing his/her own feelings, argumentation skills, the importance of play. These statements by student teachers are congruent with previous studies and theoretical conceptualizations of creativity in children (Holmes & Romeo, 2013; Reunamo, Lee, Chen-Wang, Rukonen, Nikkola, & Malmstrom, 2014; Robinson & Aronica, 2015) such that children who were able to generate new concepts during imaginary play settings engaged in pretend play, and had good communication skills had better creative skill-related outcomes. Although it appears that student teachers perceive the development of children's creative skills, an important part of the creative school learning process, teachers have a lack of knowledge about how to facilitate creativity in their classrooms (e.g. Fryer & Collings, 1991; Lee & Seo, 2006). This lack of knowledge may cause discrepancies in children's development of creativity in early childhood. Findings from the current study revealed that student teachers could define characteristics of children in a 'creative school'. However, if school administration or education policy-makers do not support teachers in their creative skill development, these important perceptions of student teachers regarding the development of creativity in children will not make it into practice.

### **Limitations and future directions**

Despite the fact that this study used multi-source approach to data collection to provide an in-depth understanding of student teachers about 'creative school', there are some limitations worth mentioning. This study is limited to a small group of student teachers within central Turkey. Thus, the small size of the sample may not be representative of the population of all student teachers in early childhood education. Therefore, the results may not be generalized to all of Turkey's early childhood education student teachers. Future research may gather similar data from different programmes and regions across the country to have more generalizable findings.

Another limitation of the current study is that data were collected within a semester. Thus, this research may be converted to longitudinal design enhanced with a variety of data collection tools such as observation of student teacher while they practise in preschool settings. By doing so, researchers can obtain well-rounded information about student teachers' perceptions of creativity school, beliefs, and experiences in implementations. In addition, the first author of the current study was the instructor for the course which may create reflexivity problems such that the instructor may have been biased in verbatim coding, although this was reduced by the use of member checking (Creswell, 2013).

### **Conclusion**

The findings from the current study point out perceptions and understanding of Turkish student teachers of the creative school in early childhood education. Creativity is a broad and abstract concept for transferring its application to the education process. Thus, it is possible to say that 'creative school' is an actualized and implied concept for practice since student teachers and even early childhood educators need to be provided with concrete meaningful experiences to understand creativity in the education process deeply. To sum up the findings, the perspective that was highlighted by participants is the active learning and freedom in expression of ideas within a comfortable environment as part of the creative school philosophy supports children's active participation and interaction in the classroom.

Evaluating the quality of the classroom environment, school environment, creative activities, and lesson plans could be noteworthy to foster creativity in children. Thus, the concept of creativity regarding creative schools should be integrated into teaching practicum for student teachers and professional development for early childhood educators. The current study points out that the creative school concept has embedded implications for theory regarding the practice of creativity. With having a broader vision of growing up creative and innovative individuals, the concept of creative schools will enhance understanding of vitality of real nature and the purpose of the education in today's world (Robinson & Aronica, 2015).

## Disclosure statement

No potential conflict of interest was reported by the authors.

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