
Designing and Compiling a Pattern to Pave the Way for the Growth of Creativity in the Learning Process in the Curriculum Structure of Elementary Course Education

Azam Hosseinzadeh Sahl Abadi¹, Akbar Mohammadi^{2*}, Sara Haghghat²

1. PhD Student in Educational Psychology, Garmsar Branch, Islamic Azad University, Garmsar, Iran.
2. Assistant Professor, Department of Psychology, Garmsar Branch, Islamic Azad University, Garmsar, Iran.

Article history:

Received date: 2020/08/22

Review date: 2020/10/25

Accepted date: 2020/10/31

Keywords:

Growth of creativity, Learning, Curriculum, Elementary course

Abstract

Purpose: The present research aimed to designing and compiling a pattern to pave the way for the growth of creativity in the learning process in the curriculum structure of elementary course education.

Methodology: This study was in terms of purpose was applied and in terms of implementation was qualitative by method of theoretical. The research population was superior documents and education experts of education of Tehran city in 2019 year, which for this purpose were used from the theoretical foundations and approaches of creativity and the opinions of experts. Data were collected by filing and interview methods and their psychometric indices were confirmed. To analyze the data were used the methods of document analysis, interpretive analysis and consensus adequacy.

Findings: The findings showed that the amount of attention of the document of fundamental change of education to foster creativity was low and the amount of attention of the document of national curriculum to foster creativity was very low. Also, the most important elements and characteristics to pave the way for the growth of creativity in the learning process were included purpose, content, teaching and learning strategies, evaluation, learning activities, learning space, learning time, teaching materials and resources and grouping. In addition, the research pattern according to the findings was designed and approved based on the general consensus of experts.

Conclusion: According to the results, in order to pave the way for the growth of creativity in the learning process in the curriculum structure of elementary course education, must to pay attention to the elements and characteristics extracted from this research and design and implement programs to improve them.

Please cite this article as: Hosseinzadeh Sahl Abadi A, Mohammadi A, Haghghat S. (2020). Designing and Compiling a Pattern to Pave the Way for the Growth of Creativity in the Learning Process in the Curriculum Structure of Elementary Course Education. *Iranian Journal of Educational Sociology*. 3(4): 54-65.

* Corresponding author: Psychic2006@gmail.com

1. Introduction

The most important factor in human growth and development in all fields is creativity and creativity has a vital role in improving and evolving human life. What is certain is that the creation and growth of students' creativity has always been one of the main policies and goals of educational systems at different levels of education. Because the growth of creativity provides the necessary foundations for the growth and development of human societies in various dimensions and creates the ground for dynamism and innovation of educational institutions and their curricula with the rapid changes and developments of the present era (Amini, Rahimi & Montazer, 2019). In the present age, the importance and necessity of creativity has attracted the attention of researchers and educational planners to the analysis and study of creativity from an educational perspective, and educational systems according to their educational programs, goals, contents and facilities have an effective role in activating or weakening creativity. Therefore, curricula and modifications to help develop creativity in children and adolescents have long been the focus of most societies (Hossieni, 2006). In any country, the education system is one of the most important social systems whose mission, in addition to transmitting cultural heritage and human experiences to the new generation, is to make desirable changes in the cognitions, attitudes and behavior of children and adolescents (Egan & et al, 2017). The curriculum is a set of rules and regulations that organizes the factors and elements related to learning (Zhang, Jin & Du, 2020). Learning in each course is related to different factors, including the role of the teacher, students' interaction, teaching aids, learning environment, learner's ability and talent, and the content of the curriculum (Celikler & Aksan, 2011). Curriculum is one of the factors that affect teachers' performance and the most important features of a good curriculum include attention to purpose, content, teaching materials and resources, teaching and learning strategies, and learning activities, learning space, learning time, grouping and evaluation. Is (Wu & Hu, 2015).

Creating creativity in the elementary school curriculum is of particular importance and it is expected that this program, while being able to answer the questions and needs of elementary students in various fields, should create the conditions for a qualitative change in education and readiness for effective learning, improvement and knowledge development, And provided technology in the community (Afzalkhani & et al, 2010). Paying attention to children's creativity makes them think about their ideas and causes them to interpret these ideas for themselves and give them meaning that these factors increase their self-confidence about their abilities (Runco, Acar & Cayirdag, 2017). Creativity is a set of abilities and characteristics that lead to creative thinking. In another definition, creativity means a combination of initiative, flexibility and sensitivity to theories that enable a person to think of different and productive results outside of normal thinking and cause personal satisfaction. And please others (Hoogman & et al, 2020). If creativity is considered in a comprehensive and complete way in thought and action, it causes the growth and flourishing of talents, personal, professional and social successes, increasing quantity and quality in production and services, reducing costs and wasting material and human resources, increasing motivation. , Promote mental health and job satisfaction, stimulate and encourage healthy competition, promote growth and development, etc. (Stolte, Kroesbergen & VanLuit, 2019).

Although some studies have been conducted to examine the factors influencing the growth of creativity in the curriculum, but less research has been designed and developed to model the ground for creativity growth. For example, Amini & et al (2019) while researching important and effective factors in the growth of students' creativity, including relevant and appropriate learning content and experiences, teaching methods, evaluation methods, the existence and optimal use of teaching aids and facilities, communication patterns, Introduced between teachers and students and the structure of the educational system. The results of Azemati & et al (2016) showed that the design principles were effective in promoting students' creativity in educational spaces including the use of flexibility of forms, semi-open space, variability of light and color, architectural use of green space and changeable furniture. In another study, Jahanian (2016) reported that factors influencing the development of elementary school students' creativity include teacher behavior in

the classroom, students' perseverance, students' interest in teaching methods, and content of education, creativity education, culture and family social relations, human relations. Teachers are in the classroom, family behavior and educational environment. Also, Pelfrey (2011) found in a study that effective teacher activities in developing students' creativity include encouraging students to choose and collaborate, giving them time and opportunity, encouraging exploration, and the opportunity to achieve valuable results. Students' risk-taking, motivation, teaching and learning activities, grouping, and creating appropriate learning time and atmosphere were appropriate. In addition, Niu (2007) while researching concluded that the factors affecting students' creativity included two general parts (individual, intelligence, personality, motivation, thinking style and knowledge) and environmental (such as school and family environment).

Reflecting on the educational system of Iran, we can see that the distance between what can provide the grounds for the growth and development of creativity in children and adolescents is very large. Therefore, attention and research on curriculum elements and their role in fostering students' creativity is of particular importance (Hossieni, 2006). If the elementary school curriculum is not designed properly because it is basic and does not raise children well, their destiny and future and that of society will be jeopardized. There is an interest in studying and learning. In addition, if the school does not have a suitable and supportive atmosphere, the teacher will not feel safe and will not be able to present new and effective plans with peace of mind, and in general, an inappropriate curriculum will destroy a large part of the country's capital (manpower capital). Therefore, the present study was conducted with the aim of designing and developing a model to pave the way for the growth of creativity in the learning process in the structure of the primary school curriculum.

2. Methodology

This study was applied in terms of purpose and theoretical in terms of qualitative implementation. The purpose of theoretical research in the curriculum is to create and critique conceptual schemas that are fundamental in nature and make the structure of curriculum phenomena and processes understandable. Theoretical research answers two questions. One is how structural elements, normative perspectives, and practical guidelines can be linked together in the form of statements to convey the overall conceptual structure for a particular curriculum. Another is the extent to which the curriculum plan has the credibility and efficiency to understand and communicate how the curriculum dimensions are organized into an integrated and usable set. The research community was high school documents and education specialists in Tehran in 2019, for which the theoretical foundations and approaches of creativity, experiences of leading countries and the opinions of experts were used.

The following six steps were performed to conduct this research. Step 1: Examining the current situation, in this stage, using full Persian text databases, an attempt was made to review the studies that had been done in order to examine the superior documents in the elementary school and theories of creativity formation, for which the document of fundamental transformation of education, The National Curriculum Document of the Islamic Republic and the existing curriculum including guidelines, programs, textbooks and teacher's manuals were reviewed. Second stage: Analysis of previous researches in which internal and external researches on the curriculum in the elementary course based on creativity were examined. Third stage: Identifying theories of creativity and selecting appropriate and comprehensive theories. In this stage, considering the criteria such as comprehensiveness, age-appropriate and audience capabilities of different theories, Sternberg's theory of investment investment was selected. Step 4: Judging and gaining confidence in the theory of choice and accreditation through the comments of psychologists, in which Sternberg's theory of investment investment was evaluated and approved by psychologists. Step 5: Model development In this stage, curriculum design patterns were examined and compared, and among the curriculum design patterns, Klein model was used to determine the macro approach of the model and curriculum elements and its characteristics. Step 6: Utilize the adequacy and

validity of the consensus in which ten curriculum specialists with the necessary experience in elementary education, creativity and curriculum design were asked to comment on the model. For this purpose, they were first given a summary of Sternberg's theory of creative investment investment, the need to design a curriculum model, and the basis for the growth of expressive creativity, and finally, their feedback on the model. In general, the process of summarizing, summarizing and validating a model to lay the groundwork for the growth of creativity in the learning process in the structure of the elementary school curriculum was presented in Figure 1.

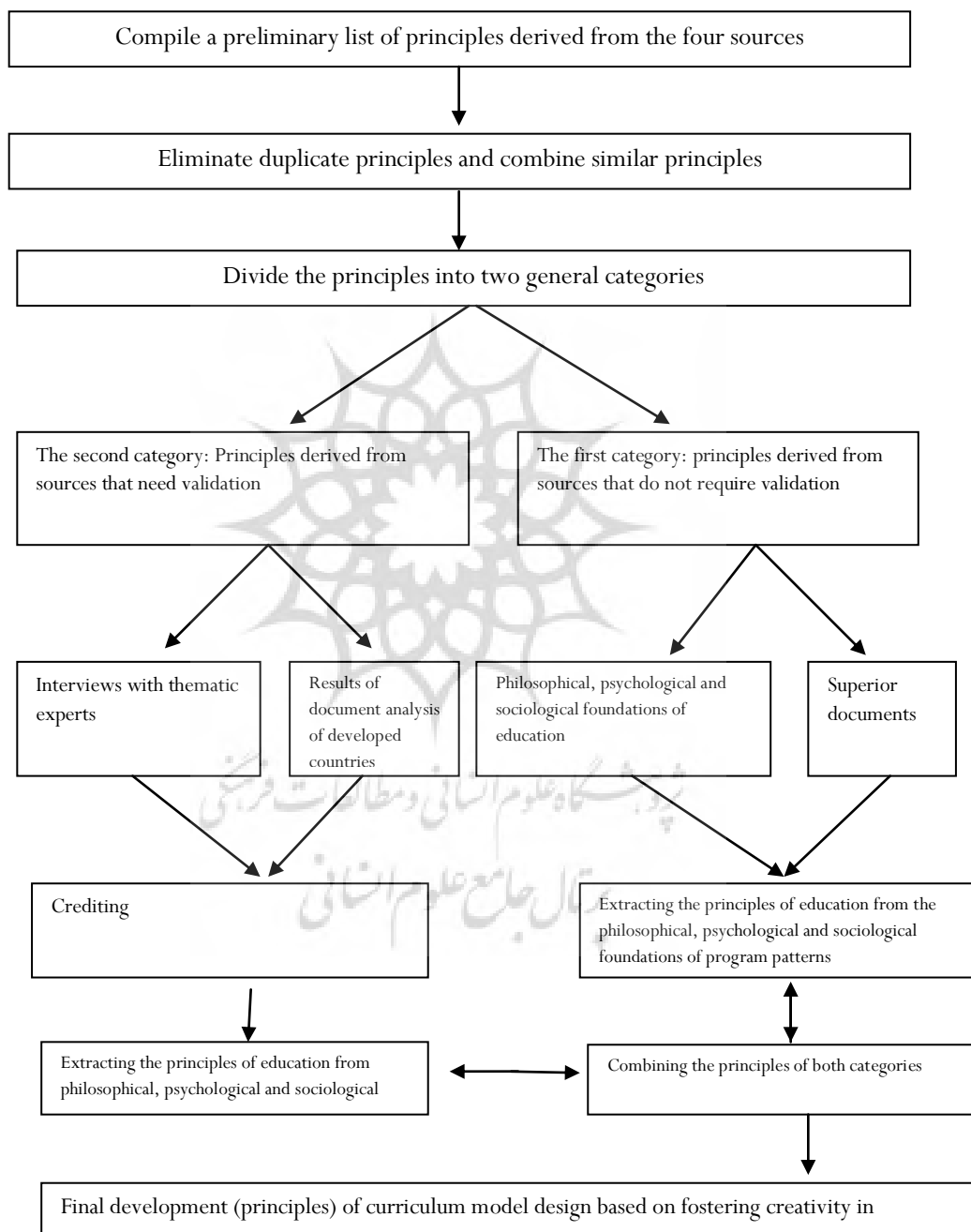


Figure 1. Process of summarizing, summarizing and validating a model to lay the groundwork for the growth of creativity in the learning process in the structure of the elementary education curriculum

Data were collected by filing and interview methods and their psychometric indices were confirmed. In order to examine the current situation for designing a model to pave the way for the growth of creativity in the elementary school curriculum, they first referred to written sources in documents, documents, regulations, circulars, articles and books published in the elementary school curriculum and reviewed the sources. Then, to provide a model, after reviewing the theoretical foundations and related studies in the field of curriculum based on fostering creativity in elementary school and Sternberg's theory of creative investment, a model was designed to pave the way for fostering creativity in the learning process in elementary school curriculum. Finally, to analyze the data and answer the question, what is the current state of the elementary school curriculum in terms of attention to fostering creativity? What are the main elements and features of a document-based curriculum model based on fostering creativity in elementary school to answer the question? From the method of interpretive analysis and to answer the question, what is the designed model of the curriculum based on fostering creativity in elementary school and is it valid enough? Consensus adequacy method was used.

3. Findings

To examine the status of the existing elementary school curriculum in terms of fostering creativity, first two documents, including the document of fundamental change in education and the national curriculum document were examined, the results of which are presented in Table 1.

Table 1. Address and description of the two documents of fundamental change in education, training and national curriculum to foster creativity

Superior documents	Address	Description
	Chapter Five / Macro Goals / Goal # 1	Faithful, creative and entrepreneurial human education
	Chapter Six / Macro Strategies / Sixth Strategy	Expanding and deepening the culture of research, creativity and innovation in the education system
	Chapter 7 / Operational Objectives / Objective 1, Solution 1 / Part B.	The dominance of cultural-educational approach in content production and strengthening the basic competencies of students
	Chapter 7 / Operational Objectives / Objective 1, Solution 1 / Part c	Benefit more from active, creative and uplifting methods
	Chapter 7 / Operational Objectives / Objective 11, Solution 3	Establish the necessary mechanism to attract and retain top talents
	Chapter 7 / Operational Objectives / Objective 17, Solution 3	Improvement and updating of teaching methods with emphasis on active group and creative methods according to the role model
Document of fundamental change in education	Chapter 7 / Operational Objectives / Objective 18, Solution 1	Adaptation of organizational culture based on Islamic ethics standards with emphasis on creativity and continuous education
	Chapter 7 / Operational Objectives / Objective 18, Solution 5	Establishing a system of creativity and innovation in education in order to provide comprehensive education and material and spiritual support to creative, innovative and entrepreneurial students
	Chapter 7 / Operational Objectives / Objective 19, Solution 2	Design and implementation of outcome-oriented evaluation system and incremental evaluation approach in elementary school
	Chapter 7 / Operational Objectives / Objective 23, Solution 3	Material and spiritual support for successful projects and indigenous innovations
	Chapter 7 / Operational Objectives / Objective 23, Solution 4	Material and spiritual support for theorizing chairs and providing a platform for new findings and innovation in schools
	Clause 2 / Perspective	The vision of the formal and uncle education system on the horizon of 1404 using an advanced model; To provide the ground for educating a united, faithful and creative generation

Clause 3 / Principles of Supervisor / Validity of Learner Role	Curricula should pay attention to the active role of the learner and provide the ground for developing a spirit of inquiry and creativity.
Clause 4 / Approaches / Approach 3 / Clause 4	Content tailored to current and future needs, interests and psychological characteristics of students
Clause 4 / Approaches / Approach 4 / Teaching and Learning	Learning is the result of the learner's creative and purposeful interaction with diverse learning environments
Clause 8 / Areas of education and learning / Culture and art	Provide in the process of learning activities and production of works of art by creating conditions for problem solving, cultivating imagination and creativity.
Clause 8 / Areas of Education and Learning / Mathematics	The learner should become familiar with and master mathematical processes such as problem solving, visual thinking, and creative thinking.
Clause 8 / Areas of training and learning of experimental sciences / Orientation of content organization	Linking the content of learning leads to meaningful learning and the acquisition of useful knowledge, and this helps to nurture creative people.
Clause 9 / Principles governing the choice of learning strategies / Principle 6	To provide the ground for science by using more active, creative methods and by innovating and creative organization
Clause 10 / Principles governing evaluation / Principle 8	The process-oriented evaluation approach should be based on the promotion of the basic educational institutions
Clause 10 / Principles governing evaluation / Principle 9	Emphasize teamwork and problem solving methods to provide the learner flourishing
Clause 12 / Materials Production Policies and Learning Media / Part 2	Utilization of new educational technologies with a problem-solving approach in the production of learning materials and media
Clause 12 / Materials Production Policies and Learning Media / Part 7	Production of electronic multimedia content tailored to the needs of teachers and students
Clause 13 / Training time / Clause 1	50 hours for extracurricular activities and 50 hours for schools in accordance with environmental conditions.
Clause 13 / Time of education / Clause 2	Due to the need to meet the needs and requirements of local and regional areas, part of the official time will be at the disposal of the province, region and school.

Table 1 shows the address and description of the two documents, including the document on the fundamental transformation of education and the national curriculum document on attention to fostering creativity. The results of direct and indirect attention of the two mentioned documents to fostering creativity were presented in Table 2.

Table 2. The extent of direct and indirect attention to the document of fundamental change in education and the document of the National Curriculum to foster creativity

documents	Attention rate	Result
Document of fundamental change in education	0/25	Low
National Curriculum Document	0/15	very little

According to the results of Table 2 and considering that attention 0 to 20% means very little attention, 21 to 40% means low attention, 41 to 60% means medium attention, 61 to 80% means high attention and 81 to 100 Percentage means a lot of attention, it can be said that the amount of attention of the document of fundamental change in education and training to foster creativity is low and the amount of attention of the national curriculum document to foster creativity is very low. To examine the main elements and features of the curriculum model based on fostering creativity in elementary school through interviews with experts and according to Klein model (purpose, content, teaching and learning strategies, evaluation, learning activities, learning space, learning time, materials and educational resources and Grouping) was examined and the results of its studies are presented in Table 3.

Table 3. The main elements and features of the curriculum model based on fostering creativity in elementary school

Interviewees	Elements and features
Interviewer 1	1. Paying attention to the key role of the teacher in fostering creativity, 2. Paying attention to the role of goals appropriate to the learner and local and indigenous requirements, 3. Lack of sufficient skills and competence in the field of fostering learners' creativity, 4. Direct relationship between creative teaching methods and Teacher training in the field of creativity, 5. Existence of transcendent goals due to the emphasis on memory and objective goals, 6. Preparation of fully predetermined content prevents the emergence of creativity, 7. Traditional classroom space contrary to fostering creativity, 8. Considering teaching activities and Learning to be creative, 9. The need to prepare a variety of educational packages in the component of learning materials and resources, 10. Attention to identifying the golden times of learning and its optimal use, and 11. The need to pay attention to identifying the groups responsible for fostering creativity
Interviewer 2	1. Paying attention to the field of creating innovation and creativity skills in teacher education, 2. Paying attention to the effectiveness of the teaching method from the environment and individual personality of the teacher, 3. Paying attention to comprehensive evaluation and self-assessment for learners, 4. Paying attention to the underlying goals of fostering creativity. Attention to the preparation of creative content as a tool of the teacher in the learning process, 6. Emphasis on the preparation of creative content, 7. Creating mobility and a spirit of happiness through redesign of the school environment, 8. Adequate attention to teaching and learning activities based on standards, 9. Attention Creative learning materials and resources as necessary materials in the creative learning process and 10. Paying attention to the experiences of educational systems in the field of production of learning materials and resources
Interviewer 3	1. Paying attention to the key role of the teacher in the success rate in fostering creativity, 2. Paying attention to the teacher's familiarity with creative teaching methods in Farhangian University, 3. Paying attention to the community and diverse evaluation process, 4. Involving the teacher in preparing learning materials and resources, 5. The importance of learning space in the emergence of creativity in elementary school, 6. Creating diversity in the layout of elementary school classroom space according to the subject of the lesson,
Interviewer 4	1. Paying attention to acquiring teacher creativity skills during the teacher training course, 2. Paying attention to effective teaching methods such as problem solving, 3. Using a variety of assessment methods, 4. Paying attention to the opinions of parents, learners and all stakeholders in preparing educational goals, 5 Paying attention to the requirements of native and ethnic class of learners in designing and compiling content, 6. Giving a degree of authority to the teacher in preparing learning materials and resources, 7. The need to interact with learners in preparing learning materials and resources, 8. Teacher flexibility in Use of learning time and 9. Pay attention to grouping appropriate to the subject of the lesson
Interviewer 5	1. Paying attention to the role of the teacher in creating creativity in learners, 2. Not using fixed and limited methods in Farhangian University, 3. Paying attention to all existing teaching methods such as exploratory methods, 4. Performing continuous evaluations to pave the way for creativity in learners 5. Receiving feedback and self-assessment of learners as a facilitator of the evaluation process, 6. Paying more attention to the comprehensive initiative in setting and preparing goals, 7. Paying attention to various methods of compiling and preparing content, 8. Emphasizing the enthusiasm and appropriate spaces of elementary school, 9. Predetermined teaching and learning activities are an important barrier to innovation, 10. Pay attention to teacher-learner collaboration in the preparation of learning materials and resources, 11. Pay attention to the lack of time to teach high volume content and centralized assessment methods that hinder creativity 12. Emphasis on the teacher's authority in classroom scheduling and 13. Possibility and authority to group the teacher according to the learner's age and the subject of the lesson
Interviewer 6	1. Paying attention to innovative teacher training during teaching at Farhangian University, 2. Paying attention to the impact of creative teaching methods in the curriculum, 3. Using different assessment methods in primary school, 4. Involvement of teachers, parents and related officials in formulating goals, 5 Reduce the number of goals, 6. Do not use repetitive spaces, 7. Change the schedule and give more authority to the teacher, 8. Create diversity in teaching and learning activities, 9. Prepare suggested packages for lessons according to local and indigenous facilities And 10. Pay attention to diverse grouping

According to the results of Table 3, almost all interviewees emphasized the role of purpose, content, teaching and learning strategies, assessment, learning activities, learning space, learning time, teaching materials and resources, and grouping to facilitate creativity in the learning process in the elementary school curriculum structure. . Therefore, the model designed to pave the way for the growth of creativity in the learning process in the structure of the elementary education curriculum according to Klein model was presented in Figure 2.

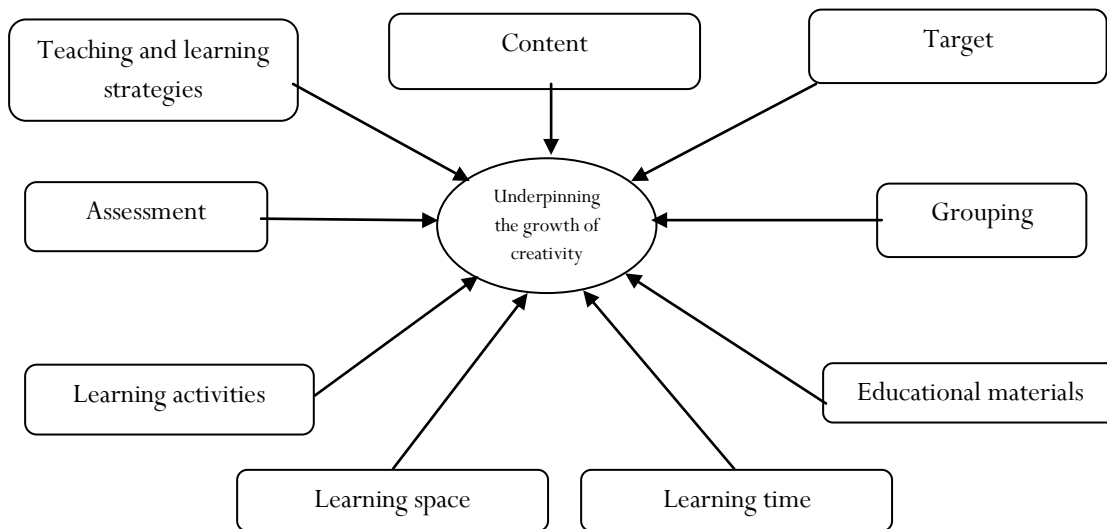


Figure 2. Model designed to pave the way for the growth of creativity in the learning process in the structure of the elementary school curriculum according to Klein model

The validity of the creativity growth model in the structure of the elementary education curriculum according to the Klein model model was confirmed by 6 experts using the Delphi method in two stages; So that the calculated Kendall coefficient in the first stage was 0.648 and in the second stage was 0.745, which is higher than the value of 0.7 of the desired pattern has a good rating.

4. Discussion

Creativity has an effective role in academic performance and career success and improving the quality and quantity of society in the future. Therefore, the present study was conducted with the aim of designing and developing a model to pave the way for the growth of creativity in the learning process in the structure of the primary school curriculum. The findings of the present study showed that the level of attention of the document of fundamental change in education and training to foster creativity is low and the level of attention of the national curriculum document to foster creativity is very low. The main elements and features of the curriculum model based on fostering creativity in elementary school included purpose, content, teaching and learning strategies, evaluation, learning activities, learning space, learning time, teaching materials and resources, and grouping, and the designed model had good validity. These results are in the field of little attention of the documents of fundamental change of education and national curriculum to fostering creativity with the results of Hossieni (2006) and in the field of elements and characteristics of creativity growth in curriculum structure with the results of Amini & et al (2019), Azemati & et al (2016), Jahanian (2016), Pelfrey (2011) and Niu (2007) were consistent.

In describing and interpreting the results, given the small emphasis of the two documents on fostering creativity and the confirmation of this by the interviewees, it can be said that the characteristics of the curriculum based on fostering creativity in primary school should include knowledge about educational issues and topics and always necessary. Attention to new developments in the field of science to align these goals with the structure of new thematic knowledge and the views of experts and educators should be considered. According to Sternberg's theory of creative investment, fostering creativity requires new knowledge and guarantees the effectiveness of these goals in an ever-changing world. In this regard, it should emphasize the ability to change goals while paying attention to current knowledge and the conditions and facilities of society and the needs of the day. Creativity means having an idea and thinking will be fully effective when it leads to innovation, that is, to objectify the creative idea. Goals that may be forgotten due to the great distance between opinion and action in the above documents, therefore, and in this regard, it is

necessary to provide a suitable basis for using creative thoughts to be used in practice and the need for goals with specific conditions and needs of the audience. The elementary course also emphasized. In order to set goals as the main platform for fostering creativity in the elementary school, paying attention to learners' interests and individual differences, as well as the flexibility of these goals, should be emphasized. Objectives in a curriculum based on fostering creativity in elementary school in terms of number should be commensurate with the time of one session and one academic year. Perhaps the existence of a large number of goals in the current curriculum and the lack of sufficient time to achieve the goals deprive learners of the opportunity to think, reflect and be creative and is more than the physical and cognitive ability of students in this course.

Due to the need to compile content based on new developments in a particular topic and increase the motivation for creative activities, we can point to the synchronization of content based on the current needs of society and learners, the need for up-to-date information and sufficient knowledge. Creating an opportunity for creativity and then rewarding creative ideas and achievements, including the solutions offered to foster creativity in learners, shows the emphasis on preparing and organizing content components and elements in a way that reinforces each other and gives the opportunity to work and learn later. They are. Content characteristics include paying attention to content design based on encouraging participation, strengthening creative thinking, strengthening critical thinking, and creating a spirit of inquiry. In the elementary school, due to the cognitive and emotional conditions of the learners, the content should consider the above characteristics in a more colorful way and by performing various actions in order to increase the motivation and participation of students in these fields. In the elementary school curriculum, it is better to organize the content, lead the teacher to use divergent questions to guide students to strengthen the power of initiative, flexibility, as well as intellectual development and flow.

In the field of teaching and learning strategies, it can be said that teachers should pay special attention to creating opportunities for creative thinking in the strategies used. The teacher should give students the opportunity to think, reflect and be creative when teaching or asking homework. For example, by using divergent questions, students can be guided to strengthen initiative, flexibility, and intellectual development. Rewarding learners' creative ideas and achievements is another way to teach creativity. When students see their teacher encouraging new, fresh and creative ideas, they are encouraged to do creative work and innovative ideas. Therefore, teachers should not only talk about the value of creativity, but also reward students' creativity by making them sensitive to it. Students should be able to engage in a variety of experiences, albeit with a negative outcome. Therefore, they should not be afraid to make mistakes. To this end, teachers can encourage students to come up with ideas and creativity by telling the stories of creative people and their experiences. In this regard, it should be noted that teaching and learning strategies should be designed based on increasing the comprehensive experience to apply the findings in a wide horizon in the future and based on the need to be responsive and based on various inclusive interests and needs.

After paying enough attention to creating the necessary and appropriate space in teaching and learning activities, creativity can be taught during the teaching process and its impact can be evaluated when evaluating. Evaluation is considered as examining the result of teaching and learning activities. When these activities are used as a factor in fostering creativity during the teaching process by creating the necessary and appropriate space, the next step is evaluation that measures the impact of the activities. The teacher can design the evaluation questions of the lessons in such a way that answering them requires the use of creative thinking. For example, students can be asked to study phenomena and experiment with them while designing. Therefore, one of the skills required in fostering creativity is the ability to evaluate and analyze ideas to create new and innovative ideas, which is one of the effective solutions in this field is self-regulation training. If we teach students self-regulation strategies, students will be able to choose appropriate teaching questions and plans, learn how to report and express them, and thus evaluate their performance. In general, in assessment, each learner should be compared with himself / herself and the rate of his / her progress,

and creative assessment should pay attention to the quality of education and learner behaviors in order to determine the educational needs of learners and creativity.

Another important element in laying the groundwork for the growth of creativity is learning activities. Learners' participation in creatively designed learning activities reinforces self-efficacy personality traits, overcoming obstacles, a willingness to take reasonable risks, and tolerating ambiguous issues. Establishing learners' participation in learning activities from elementary school can be the basis for creating the necessary preparation to foster learners' creativity, and it is better that learning activities be designed to meet learners' interests, needs, ideas, skills, and ways of understanding and thinking creatively. The elementary course is consistent. Learning activities have a significant place among the elements and features of the curriculum and in designing a macro elementary curriculum based on fostering creativity, these activities should be designed and selected in such a way that while considering the characteristics and abilities of students, they have the opportunity to express ideas. Give creative.

The learning environment should motivate and motivate learners to support and facilitate learning activities. The desirability of the space, architecture, and landscape of the elementary school and classroom is based on the interaction of the three elements of the school body, curriculum, and children's perceptions. The quality of the space, environment and landscape of the school can provide opportunities for the child's imagination and pave the way for the formation of a childish and creative place, and this environment leads to a sense of curiosity, imagination, visualization, reconstruction and ultimately creativity. A learning environment is a situation in which all teaching and learning processes take place and affects these processes. This space should not be considered just school and classroom, because in some cases, topics such as the preservation of cultural heritage may take learners to museums and use the museum as a classroom.

Learning time is one of the most important features and elements for the growth of creativity. Because the educational content along with the methods and materials in order to achieve the goals must be presented in a specific time frame. A competent teacher should provide the necessary time to create a spirit of inquiry. Because questioning is the basis of intellectual exchanges and class interactions. Learning time means an opportunity to convey and present the concepts and content desired in the classroom, and the physical and cognitive ability of elementary school children is the most important factor in scheduling learning. In setting the teaching time in the primary school, the authority of the teachers should be considered more than the current situation, and in this regard, special attention should be paid to the priorities. In general, in setting the learning time, learners should be given the opportunity to discuss and ask questions in order to strengthen their questioning spirit.

Teaching materials and resources are a set of materials and situations used to help the learner learn. Progress in scientific fields as one of the requirements and fields of growth and development of creativity requires new and up-to-date knowledge and sufficient information in this field. Educational materials and resources are necessary and important for acquiring new knowledge and are one of the main components of a successful learning process. The use of educational materials and resources in teaching and learning makes the desired principles and concepts of education more lasting and causes sustainable learning. In designing educational materials and resources, there should be diversity and moving from a single media approach to a multimedia approach to achieve active, creative and sustainable learning.

The last element and feature for the growth of creativity is grouping. Teamwork takes place in grouping and causes the individual to experience a sense of self-efficacy and effectiveness, which will provide a suitable context for creating and increasing creativity in learners. Grouping should emphasize learners' self-confidence in the face of different attitudes in problem solving and the emphasis on understanding educational issues collectively provides a basis for creative interaction. Grouping should be appropriate to the subject and interests of learners and this will lead to increased knowledge and information of learners and make the learning meaningful and deep.

The results of the present study showed that the level of attention of the two documents of fundamental change in education and national curriculum to foster creativity is low and very low, respectively. The content, teaching and learning strategies, assessment, learning activities, learning space, learning time, teaching materials and resources, and the design grouping and pattern had good validity. The limitations of the present study include the refusal of some experts to participate in the study, the small number of interviewees, the limited number of interviewed specialists to the city of Tehran, and the existence of little research on designing a model for the growth of creativity. Another important limitation of the present study was the design and development of a model to pave the way for the growth of creativity according to Klein's model. Therefore, it is suggested that in future research, more experts be interviewed and examine the pattern of underpinning the growth of creativity based on other models, including Tyler, Taba, and Acker. According to the results, it is suggested that those in charge of compiling and revising the document of fundamental change in education and the national curriculum document, based on the results of this research, make changes in the documents in order to develop as much creativity as possible. Also, textbook writing specialists and planners can use the model designed in this research along with other models to develop creativity.



References

- Afzalkhani M, Naderi E, Shariatmadari A, Seifnaraghi M. (2010). Investigating the curriculum structure of Iranian secondary education from the perspective of teachers and curriculum planning specialists in order to design a guide model for grounding fostering students' creativity. *Quarterly Journal of Educational Leadership & Administration*. 4(1):9-36.
- Amini M, Rahimi H, Montazer M. (2019). The determine the role and contribution of some factors and obstacles to creativity growth in Iranian educational system (Study case: Secondary schools first in Kashan). *Quarterly Journal of Innovation and Creativity in Human Sciences*. 9(1):81-114.
- Azemati H, Parvizi R, Karimi Azari AR, Aghabeigi Kalaki M. (2016). Design effective principles in improving students' creativity in teaching spaces Example case: maidenly high schools in Lahijan. *Quarterly Journal of Innovation and Creativity in Human Sciences*. 6(2):121-142.
- Celikler D, Aksan Z. (2011). The effect of computer assisted instruction in teaching ionic compounds on pre-service elementary science teachers' academic achievement and permanent learning. *Procedia - Social and Behavioral Sciences*. 28:547-552.
- Egan A, Maguire R, Christophers L, Rooney B. (2017). Developing creativity in higher education for 21st century learners: A protocol for a scoping review. *International Journal of Educational Research*. 82:21-27.
- Hoogman M, Stolte M, Baas M, Kroesbergen E. (2020). Creativity and ADHD: A review of behavioral studies, the effect of psychostimulants and neural underpinnings. *Neuroscience & Biobehavioral Reviews*. 119;66-85.
- Hossieni A. (2006). A model for creativity development and its application in creative teaching skills for primary-school teachers. *Quarterly Journal of Educational Innovation*. 5(1):177-201.
- Jahanian R. (2016). Aspects and elements of fostering and development the creativity among elementary school students in Alborz province. *Quarterly Journal of Innovation and Creativity in Human Sciences*. 6(2):175-202.
- Niu W. (2007). Individual and environmental influences on Chinese student creativity. *Journal of Creative Behavior*. 41(3):151-175.
- Pelfrey R. (2011). Classroom behaviors in elementary school teachers identified as fostering creativity. Dissertation, United States: Northern Kentucky University.
- Runco MA, Acar S, Cayirdag N. (2017). A closer look at the creativity gap and why students are less creative at school than outside of school. *Thinking Skills and Creativity*. 24:242-249.
- Stolte M, Kroesbergen EH, VanLuit JEH. (2019). Inhibition, friend or foe? Cognitive inhibition as a moderator between mathematical ability and mathematical creativity in primary school students. *Personality and Individual Differences*. 142:196-201.
- Wu Y, Hu J. (2015). Skill learning attitudes, satisfaction of curriculum, and vocational self-concept among junior high school students of technical education programs. *Procedia - Social and Behavioral Sciences*, 174:2862-2866.
- Zhang H, Jin S, Du S. (2020). Developing a curriculum model of English teaching for master's degree nursing education in a Chinese medicine university. *International Journal of Nursing Sciences*. 7(1):99-104.