

Develop a Model for the Growth of Creativity in the Structure of the Elementary School Curriculum based on the Fundamental Reform Document of Education (FRDE)

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Abstract

Purpose: As regards the effect of creativity and models for the growth of it, this study endeavors to develop a pattern model for with the purpose of growing creativity in the structure of the elementary school curriculum based on the fundamental reform document of education (FRDE)

Methodology: As for the purpose of this study, it was conducive. Furthermore, in view of procedure of methods, it could be considered as qualitative. 10 individuals of statistical society were chosen by targeted and snowball sampling methods in 2019. We utilized methods of reviewing the fundamental reform document of education and Semi-structured interviews. Validity and Validity of these methods were desperately examined by triangulation methods of data collection which was suitable for assessment and the coefficient of agreement that estimated to be 0.76. Ultimately coding method was used in order to analyze the gained data of reviewed document and interviews.

Findings: Results demonstrated that 25 codes belonged to the growth model of creativity in the structure of the primary school curriculum based on the fundamental reform document of education while 15 codes are known to be relevant to this model based on interviews that has gotten done with some experts of the elementary school curriculum. Consequently, the model for the growth of creativity in the structure of the elementary school curriculum was designed based on these codes.

Conclusions: Results of present study contain some practical functions. Moreover, identified codes and designed models were used in order to improve the model of growth in creativity.

Keywords: creativity, curriculum, elementary school, fundamental reform document of education (FRDE)

Introduction

Education system is one of the most momentous systems in the society which not only does strove to transfer the cultural heritage and human experiences from one generation to the other in a row but also make some optimal changes in individuals' beliefs, conceptions, attitudes and manners (Wu & Hu, 2015). The education system is considered to be among the vastest systems in each society that can determine the destiny and future of a society in long term precisely in addition in the long run it will ensure the development of society to a large extent if its aims, structures and sources could be designed properly. We have to take into account this important fact that even though having access to educational purposes depends on make an optimal use of human, financial and equipment resources, dynamism of education system is desperately due to mighty, creative, thoughtful, committed and loyal staffs and students (PeyravaniNia & PeyravaniNia, 2013). Education system is one of the most considerable substructures for progression of a country in all aspects. Furthermore, it is a strong tool for promotion of human capital and fulfilling the happy and calm life, ubiquities justice and Iranian Islamic civilization. Thus dynamic, purposeful, creative education system are evidentially some basic needs for achieving the ideals of every nation, society or culture (Moradi, Rahman & Shamshiri, 2018). Fundamental reform document has not attained a significant improvement and also faced a plenty of complex difficulties early on. Perhaps a majority of these problems are associated with the lack of coordination or effective willing of main or other involvers of mentioned document. In view of comparing, we have to take this into consideration that the fundamental reform document of education required solutions to be run better and much more rapidly since this document will face some problems and barriers during its running as do lots of strategic and immense documents of the country which have had terrible troubles in running process, strategical defeats and quitting the programs (Akhlaghi, Saleh Sedgh Pour & Navid Adham, 2020). Evaluation of the fundamental reform document of education began in 1381 and its primary studies took ten years to get done. Eventually all these assessments resulted in a final scheme that was approved by the Supreme Council of the Cultural Revolution and became a rule in addition it was called the fundamental reform document of education (FRDE) in the late 1389 and initial six months of 1390. Running this document entirely is going to be a marvelous way for achieving the first rate in training individuals among the countries of Middle East and Islamic world. Moreover, the value of teaching and training will be increasingly promoted worldwide (Moradi & et al, 2018). In 1390 this document approved and also became an approach in the Supreme Council of the Cultural Revolution after development and getting its approval by the Supreme Council of Education. This document was compiled in 8 chapters and also is based on deep and precious teachings of holy Quran and upstream documents such as twenty-year prospect and the general scientific map. The first chapter is about general matters and defining terminologies, the second chapter clarifies with reference to the statements of values(essential dos and don'ts in for formal and public teaching and training system), chapter three talks about mission statement(providing essential elements in a conducive and effective structure for students in order to access to an ideal life personally, in the family, socially and ubiquitously in an organized, public, justified and essential way), chapter four declares the designed prospect(description of schools in 1404), chapter five states eight immense purposes of formal and public teaching and training system, chapter six argues with reference to fifteen solutions for those mentioned purposes, chapter seven declares the operational aims and solutions for having access to immense purposes and finally chapter eight states Institutional framework and executive system of fundamental reform of education (Ebrahimi Moghadam & Dorrani, 2018).

One of the operational aims and its approaches in the fundamental reform document of education is establishment of creativity and innovation system with the aim of general, moral and ethical training and financial and moral patronage of creative, innovative and entrepreneur managers, tutors and students (Shokouhi Amirabadi, Delavar, Abbasi Servak & Koshki, 2019). The growth in creativity of learners provides the needed basics for improvement in human society culturally, socially, economically, etc. In addition, it will make it possible to keep the dynamism and innovation of educational institutions and sync the present curriculum with rapid changes and mutations in the world. With baring that in mind it is evidentially clear that creating and boosting creativity have been one of the main policies and purposes in education systems

(Saggar, Xie, Beaty, Stankov, Schreier & Reiss, 2019). Creativity is a set of abilities, talents and characteristics which leads to creative thinking (Bousinakis & Halkos, 2021). For the most part creativity is the ability of creating thoughts and new and unique achievements with a mixture of innovation, being fluid and flexibility (Sokot, 2020). Being new is a concept that all the descriptions of creativity have in common howbeit this concept is not able to clarify creativity precisely since there are lots of new thing without even a modicum of creativity. As a result, they added the world” valuable” to this concept (Rubenstein, Ridgley, Callan, Karami & Ehlinger, 2018). Consequently, creativity is a process which results in a novel and unique activity and is known as beneficial, valuable and satisfactory at the same time (Simkova, Bondarenko & Bielovetska, 2021). On the other hand, some other experts believe that creativity is a combination of innovation, flexibility and sensibility toward ideas which make people able to conclude in different ways and gain others’ satisfaction by these novel conclusions (Alfonso-Benlliure & Santos, 2016). There are only a few studies that revolves around the components of creativity in education system and also there is not any study about developing a model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education. Results of the study of Safaei, Zarei & Samavi (2021) under the name of Designing and validating a curriculum model based on creative thinking skills for elementary students illustrated that it is essential to exert some changes in current teaching programs and focused more in creativity component for elementary students based on the designed model of curriculum and creative thinking skill with three main components. Knowledge, attitude and skills. Amini, Rahimi & Montazer (2019) stated in a study with reference to the pathology of the growth of students' creativity in the Iranian educational system that some factors have an effective effect on creativity such as contents and learning experiences, strategies for teaching or learning, evaluation methods, facilities and educational aids, communication patterns and the structure of the educational system whereas the main obstacles consist of textbooks, teachers, structural problems, evaluation methods, educational environment and family. Shokouhi Amirabadi & et al (2019) analyzed the content of fundamental reform document of education based on creativity and happiness. Furthermore, Hossieni (2006) study under the name of Creativity growth model and its efficiency in creating creative teaching skills in elementary teachers demonstrated that creativity growth model consists of five basic aspects which can be mentioned as follows environmental-social structure (such as safety, respect, no assessment, no competition and liberty), emotional-cognitive structure (such as curiosity, suffering ambiguity, taking risks and imagination), thinking structure (such as innovation, being fluid, flexibility and expanding), physical structure (such as visual stimulations, designing classes and educational aids).

Islamic republic of Iran approved the fundament reform document of education like a basic rule in education system and adopted this policy in order to achieve general and long term evolutions in the system. What is more all the schedules of education system is based on this document. Hence it seems so essential and valuable to evaluate the level of creativity and its development as a training propose for simplification of domestic teaching and training and bring up the pupils who will certainly build up their society successfully. It is also important to mention that identifying some factors which effect on education system and planning for teaching some approaches that lead to the increase, development and growth of creativity seem necessary for training creative and preeminent students. Results of present study contain some practical functions and help them to design educational plans for the growth of creativity. Consequently, this study aims to develop a model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education (FRDE).

Methodology

As for the purpose of this study, it was conducive. Furthermore, in view of procedure of methods, it could be considered as qualitative. 10 individuals of statistical society were chosen by targeted and snowball sampling methods in 1398. In purposeful sampling method researchers chose some experts and specialists as human specimens who could help the study more than the others due to their recognition of and they were requested to inform other experts to the researcher. At last some of the informed experts were collected as specimens based on some scales in order to have enough and qualified results.

Procedure of this study was as follows: initially the content of the fundament reform document of education was assessed with considering creativity and its development and the findings were studied by supervisor and consultant. Secondly they helped to design some questions for developing a model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education (FRDE). Experts and specialists were interviewed by these questions in a half-structured way individually. Prior to the interview, specimens were understood with reference to the necessity of this study and obeying the ethical points and a brief summary of selected matters of the fundament reform document education which was relevant to creativity and an original version of this document. We announced the scheduled time and told them about noting important points and recording their talking to restudy it for more times. It took 30 to 40 minutes averagely to interview with experts individually with designed questions and support of supervisor and consultant in the determined time and place. Methods of reviewing the fundamental reform document of education and half-structured interviews were used for data gathering. In this way all the sentences of mentioned documents which belonged to creativity and related structures such as initiative, innovation... were assessed and recorded. Moreover, we evaluated the experts' opinion about measuring the attention of the fundament reform document of education to creativity. Finally, we designed the model for the growth of creativity after combining the results of document reviews and interviews. We have to take this into consideration that supervisor and consultant accepted the validity of subjects that were extracted from the document. In addition, proper triangulation method of data collection examined the validity of interviews. Triangulation method consists of triangulation of data resources (using several data resources in a study or research), triangulation of researchers (using more than one researcher for data gathering, analyzing and interpretation of data). Evaluating the questions of interview with two experts and utilizing theories, other data resources and documents declare the validity of triangulation in this study. Reliability of interviews estimated to be 0.76 by using the coefficient of agreement method (researcher and another person) which was significant when it came to less than 0.05. Ultimately coding method was used in order to analyze the gained data of reviewed document and interviews.

Findings

Participants consist of ten experts and specialists of education system who had expertise in elementary school curriculum. The results of frequency and frequency percentage of their demographic information were reported in Table 1

Table1. Frequency and frequency percentage of interviewers' demographic information

Frequency percentage	frequency	levels	variable
30%	3	female	sex
70%	7	male	
90%	9	married	marital status
10%	1	single	
60%	6	faculty	position
40%	4	Non-faculty employee	
20%	2	11-15years	work history
50%	5	16-20years	

20%	2	21-25years
10%	1	26-30years

Table 1 reveals 70% of participated interviewers were male, 90% were married, 60% were faculty and 50% had work history for 16-20 years.

The results of coding the model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education is reported in table 2.

Table2. Results of coding the model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education

codes	directions
1. Training a faithful human, 2.training a creative human and 3. Training an entrepreneur human	Chapter five /immense purposes /purpose one
1.development and propounding the culture of research, 2.creativity and innovation in formal and public teaching and training system	Chapter six/ approaches/sixth immense approach
1.Training learners with imaginary power and 2.increasing necessary skills for creation of cultural and artistic things	Chapter seven/ operational purposes/ part 7/ purpose one
1.cultural and educational approaches in providing content and 2.boosting basic competencies	Chapter seven/ operational purposes/ purpose one/ approach one/ part 2
1.developing the utilization of active methods, 2.using creative methods and 3.utilizing methods which lead to being more superior	Chapter seven/ operational purposes/ purpose one/ approach one/ part 3
1.Making the culture appropriate based on Islamic ethical standards by emphasizing on creativity and 2.countinous teaching of creativity	Chapter seven/ operational purposes/ purpose eighteen/ approach one
1.creation of a suitable situation for attraction and retaining top talents	Chapter seven/ operational purposes/ purpose eleven/ approach three
1.amendent and updating teaching and training methods with emphasizing on active and creative activities in a group and 2.considering the effect of teacher in training creativity as a pattern for students	Chapter seven/ operational purposes/ purpose seventeen/ approach three
1.establishment of creativity and innovativeness system for general training and 2.backing up the creative, innovative and entrepreneur students financially and spiritually	Chapter seven/ operational purposes/ purpose eighteen/ approach five
1.designing and running a result-based evaluation system and 2.backing up the domestic innovativeness	Chapter seven/ operational purposes/ purpose nineteen/ approach two
1. Economical and spiritual supports of successful schemes and 2. backing up the domestic innovativeness	Chapter seven/ operational purposes/ purpose twenty three/ approach three
1. economical and spiritual supports of theorizing and 2.make it possible to adopt new and innovative findings in schools	Chapter seven/ operational purposes/ purpose twenty three/ approach four

Table 2 provides 25 codes in the fundamental reform document of education with reference to the model of the growth of creativity in the structure of the elementary school curriculum. Results of coding the

creativity growth model in the structure of the elementary school curriculum are reported in table 3 based on our interview with experts of curriculum.

Table3. Results of coding the creativity growth model in the structure of the elementary school curriculum based on the interviews with experts of curriculum

codes	Interviews transcription
1.more concentration of creativity rather than the past,2.notfocusing on creativity on textbooks completely and 3.the necessity for paying more attention to creativity by designing thought provoking activities in the textbooks	Interviews 1&7: there is more focus on creativity in comparison with the past although there is not a significant sign of that in the books. Indeed There some practices in Persian and science book which can be thought provoking nevertheless they are not sufficient; in spite of that we have to consider creativity a major point for scheduling curriculum and compiling textbooks
1.lack of enough focus on creativity,2.no consideration of creativity and its components in paragraphs of the book	Interview 2: even so creativity and its components are mentioned in the fundamental reform document and some of textbooks, fulfilling this idea and adopting this policy is still debatable
1.efforts for development of creativity and 2.ommiting obstacles for emergence of creativity with real targeting	Interview 3&10:they have given some efforts however targets have become an obstacle for creativity when it comes to running this scheme
1.paying attention to creativity in aesthetic and artistic education field and 2.not enough concentration of creativity in textbooks	Interview4: in the fundamental reform document they highly considered creativity and innovativeness in aesthetic and artistic education as one of the six fields of education notwithstanding we cannot find enough emphasize on creativity in other fields and textbooks
1. more concentration of creativity rather than the past , 2.orgnizing contents of textbooks in a way in which focused on creativity more than before and 3. The necessity of more concentration of creativity better than before	Interview5&9: they emphasized on creativity in the fundamental reform document to some extent but it is not enough. Furthermore some organizing in the textbooks have been exerted albeit they need to go to their great length for development of creativity.
1.the necessity for emphasizing more on creativity in the fundamental reform document, 2. more emergence of creativity in textbooks and 3. emphasizing on creativity in all the books and teaching and learning activities.	Interview6&8: luckily the fundamental reform document compiled after Islamic revolution and concentrated on creativity up to a point. Having said that it is essential to emphasize on the emergence of creativity in order to develop this skill through books and teaching and learning activities in the books.

Table 3 provides 15 codes with reference to the creativity growth model in the structure of elementary school curriculum based on the interviews with experts and specialists in curriculum. Consequently, creativity growth model in the structure of elementary school curriculum regarding to the identified codes in figure1.

Table 4. The creativity growth model in the structure of elementary school curriculum

Updating the methods of teaching and training	Creativity growth model	Training a faithful, creative and entrepreneur
Establishment of creativity and innovativeness system		Development of researching culture
Supporting creative and innovative students		Training the imagination power
Result-based and procedure-based evaluation		Being skillful in creation of cultural and artistic figures, paintings, sculptures, etc.
Supporting theorization		Boosting basic competencies
More concentration of creativity in the textbooks		Active, creative and excellent educational methods
Designing and squeezing more creative activities in the textbooks		Improvement of creativity cultures in different systems
Paying attention to creativity in all of the textbooks		Attraction and retaining top talent

Discussion

Creativity and developing different models for the growth of creativity could have a substantial impact on educational activities and the future of a country. Therefore, this study endeavored to find a model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education (FRDE). There were few studies about the growth of creativity and nothing about designing a model for the growth of creativity in the structure of the elementary school curriculum based on the fundamental reform document of education (FRDE). albeit, the results of this study were in line with the results of Safaei & et al (2021), Amini & et al (2019), Shokouhi Amirabadi & et al (2019) and Hossieni (2006) in some ways. In view of analyzing the results of this study, we have to mention that designed model has special functions and properties and the connection and interaction of its different aspects are considerable. Regarding to the results of this study and the fundamental reform document of education, teachers who are the most effective factors for exerting curriculums can play a substantial rule in running curriculums by an approach in which develops creativity so it is important to consider them as a thinker workforce rather than people who must be stuck to curriculum strictly. Furthermore, it is essential to avoid having one-dimensional attitudes toward teaching by concerning about Its aesthetic artistic background along with its scientific and technical background and provide a suitable situation for development of creativity. Diversification of policies which revolve around the recruitment and training of human resources is a necessary factor for fulfilling this idea which need to be done in a specific way for selecting individuals with high level of characteristic, mental and physical abilities, knowledge and skills. With bearing that in mind perhaps it is a good idea to assess the general and academic skills of applicants for selecting skillful students for Farhangian University in formal or public training system. With considering the training terms of Farhangian University and providing human resources, training teachers and tutors should be in a way in which they experience the needs and challenges in a real class and educational environment of now and the future and also facilitate the participation of teachers in the curriculum process and increase their freedom of action by developing their professional capacities. Hence it could be expected that teachers will no longer be the transferor of knowledge to tutors, a training pattern and organizer of various training chances. In addition, they will become a determiner rather than individuals who run the designed curriculum.

Considering the consistency of curriculum implementation factors is so essential to run the creativity growth model of the structure of curriculum successfully and designing a good curriculum without prediction of effective factors is evidentially impossible. Successful implementation of a designed curriculum requires management support, briefing and training sessions for teachers, preparation of staff and providing an

appropriate situation for implementation of each of the curriculum codes. Which requires more accuracy of compilers of textbooks in syncing its components since the environment of classrooms is way too deeper and more complicate than unreal beliefs that are mostly organized in a curriculum. Furthermore, compilers should consider the unwanted results as a black educational box. For instance, we have to consider all the effective factors on running a curriculum such as teachers, families and related organizations like Broadcasting Organization in order to achieve creative evaluation based on descriptive evaluation. Analyzing the results of interaction and communication between elements of a curriculum that is based on creativity in elementary schooling period is another advantage of creativity growth model. Flexibility and variability in the aim element lead to the multiplicity of contents and providing several activities in a creative content, facilities the situation for the active role of learners, encouraging the idea generation and reinterpretation of the problem in teaching and learning strategies. Assessment and utilizing various methods and tools is essential. Moreover, it should be possible to judge the inclusiveness by determining the gained changes in knowledge, attitudes, values and skills with self-evaluation and evaluation of others. This study intended to assess the mentioned features by elementary descriptive evaluation system. In descriptive evaluation it is possible to understand persona talents and capacities, simplifying and making them prominent even by individuals themselves.

Limitations of this study consist of designing the creativity growth model based on only one document which was the fundamental reform document of education (FRDE) and interviewing with few curriculum experts and specialists in Tehran hence it is necessary to generalize the results cautiously and with more accuracy. Thus it will be possible to achieve more precise results if more documents such as national curriculum and elementary school strategic document get assessed moreover more experts of Tehran or even other cities become involved and interviewed in future studies. We also advise to develop and design the model for the growth of creativity based on different documents or even content of textbooks. Furthermore, it is advised to base the model for the growth of creativity in the structure of the elementary school curriculum on viewpoint of experts like Tyler, Taba, Acker, and the nine elements of the Klein curriculum. And as a last suggestion studying the obstacles and limitation which prevent the occurrence of creativity growth model in the structure of curriculum seems essential and help us to take more effective steps in order to plummet these barriers and limitations dramatically. Results of present study contain some practical functions for experts and planners. Moreover, identified codes and designed models were used in order to improve the model of growth in creativity. Assuredly utilizing the results of this study and related ones can provide a clear and exact idea of the model for the growth of creativity in the structure of curriculum and make the implementation of creativity growth model more suitable, faster and more precise.

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