

The Impact of Early Childhood Teacher's Perception on the Development of Creative Curriculum: A Mixed Approach

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Abstract

The current study focuses on investigating the impact of early childhood teacher's perception on the development of creative curriculum. Mixed approach was taken to analyse the findings of the study. For the qualitative study, past papers and scholarly researches have been taken to touch the deeper roots of the topic. Moreover, for the quantitative approach, regression analysis was conducted to statistically test the significance of the variables on the study variable. The main objective of the study was to examine the views of the early childhood teachers in creating the curriculum for the students. To collect the responses, semi-structured interviews were undertaken to know the responses of the teacher that were later encoded to perform the regression analysis. The findings showed that, teacher's role and perception has a significant impact on creative curriculum development as teachers are the main actors engaged in student teacher learning and experiment multiple methods in enhancing the learning experience of the students. Finally, it is recommended to conduct the longitudinal study in the future research to have the more detailed analysis of the study.

Keywords: Early Childhood Education, Creative Curriculum Development, Teacher Perceptions, Mixed-Methods Research, Regression Analysis

1. Introduction

The topic of giving major concentration to the idea of creativity in the educational environment has been taken into account in many researches (Guilford, 1950; Torrance, 1968). The study on the exploration of the effect of teacher perceptions on the development of creative curriculum has limited so it has driven the need to enthuse the improvements in the educational system by introducing creativity. These initiatives in the school have been taken very slowly (Wyse and Ferrari, 2015). The time of early childhood is an essential time in the life of the students where the entire features of the student takes place concurrently and quickly. Hence, creativity is an essential feature that contributes in developing the needs of the children that are needed to be refined in their early age in order to make them bloom with creative talents and abilities that are further used by the students in all the aspects of life (Robinson & Aronica, 2015). Incorporating innovation and inventiveness among the students in their early age enables the students to enhance their talents and capabilities (Ucus & Acar, 2017). The major call in the area of education is to know the idea of creative school in teacher's perception. This idea of creative curriculum has been implemented by many schools by considering a distinct and inventive approach while scheduling the curriculum for the students (Cropley, 2001). It implies that the idea of creative learning in the school settings is highly dependent on the fact that how teachers view this concept as they play a major part by preparing the curriculum for the students which means that their views to creativity are very important in promoting an innovative environment (Pinkus, 2016). Hence, the idea of creativity in schools can be viewed as the encouragement to expand innovation in the school settings.

Problem Statement

The concept of creativity must be introduced among the children at their time of early childhood due to the fact that in this age creativity will become the part of student's regular life and the student will be enabled to give value to creativity by giving their complete concentration to the outcome and also will be able to adore the procedure of creativity completely (Isbell & Raines, 2007). Additionally, it is the fact that children are very anxious regarding their social and physical environment they are surrounded by and students usually ask things to discover about the environment they are being surrounded by. It is an inevitable fact that students coming to the preschool come with know-how and capabilities that are required to be recognized by the teachers and should be taken towards a new learning procedures by considering their inventive and probing skills earnestly. There have been many researches in regards to this approach; however, a very little attention has been paid to acknowledge the gap among the early childhood teachers in the UAE in considering their views with respect to the concept of creative curriculum. Therefore, the present study addresses the gap by evaluating the impact of early childhood teacher's views on developing the innovative curriculum and promoting the creative learning environment in the school settings.

Aim of the study

The schools that are promoting the creative environments in the school settings considers innovative ideas and strategies that are used while making student's curriculum and planning the teaching material for the students. It is undoubtedly the fact that innovation is being driven by all the factors involved in the educational procedures that includes teachers, learning environment of the school and the classrooms. Therefore, the aim of the present study is to discover the views of the early childhood teachers of UAE regarding the idea of creative school as an all-rounded structure of innovation in the early childhood.

Research Objectives

To fulfil the objective of the research, following questions are outlined in the study:

- To identify the concept of creative school among the teachers in creating creative curriculum for the students
- To comprehend the role of teacher's perception in promoting a creative learning environment.
- To develop an innovative curriculum by considering the perceptions of early childhood teachers.
- To evaluate the role of burden free learning in promoting a creative learning environment for the students in their early childhood.

Research Questions

Following research questions will be answered in the study:

- Does perceived creativity has a significant role in developing creative curriculum?
- Does the burden free learning have a significant impact improving student's creativity?
- Does the concept of creative school among the teachers have the significant impact in creating creative curriculum for the students?

Hypothesis

Following are the proposed hypothesis of the research:

- Ha1: Perceived creativity has a significant role in developing creative curriculum.
- Ha2: Burden free learning has a significant impact improving student's creativity.
- Ha3: The concept of creative school among the teachers has the significant impact in creating creative curriculum for the students.

Significance of the study

United Arab Emirates is working hard to give the students an amazing educational environment by modifying its curriculum and taking it towards an innovative approach with

the objective to guarantee the increase in the literacy rates by linking it with modern educational system and offering equal chances to all the students. The educational improvement has been subjected primarily to technical innovation and improvement of the curriculum by means of implementing multiple tactics and approaches to promote an enhanced learning environment to the students. Therefore, the present study will help to evaluate about the views and perceptions of the teachers with respect to create an innovative curriculum for the early age students in order to promote creative learning environment among them.

2. Literature Review

Burden-free learning

Burden-free learning reduces stress and cognitive overload to make learning more engaging, enjoyable, and effective. It challenges traditional methods that emphasize rote memorization and high-stakes testing, which can burnout and disengage students. Burden-free learning emphasizes student-centered methods like project-based learning, experiential activities, and personalized learning paths. Constructivist learning theories suggest that students learn best by actively constructing their own worldview through experience and reflection (Piaget, 1954; Vygotsky, 1978). The literature on burden-free learning suggests it may boost student motivation, creativity, and comprehension. According to Ryan and Deci (2000), self-determination theory emphasizes autonomy and intrinsic motivation in learning, which are essential to the burden-free approach. In his meta-analysis of educational strategies, Hattie (2009) shows that student-centered learning environments improve academic performance. Dewey (1938) promoted experiential learning to develop critical thinking and problem-solving skills. According to research, burden-free learning can reduce stress and anxiety associated with traditional education methods and improve learning outcomes and student well-being.

Education in UAE

The UAE is considered as a young state that was came into being in 1971 after the British colonial departed from the Arabian Gulf. The country has established seven emirates among which Abu-Dhabi is the capital and other emirates include Dubai, Sharjah, and Fujairah etc. The contemporary educational system is present but is properly backed by the finance comparing with other nations (Suliman, 2000). Teachers were financially backed up by the other Arab government programmes (Khlalifat, 1992). When emirates came into alliance in 1971, it impacted the oil revenues and there was also an increase in the schools (Alraway, 1988; Khlalifat, 1992). In the early 19th century, the educational advancement evolved after the development of institutes in Abu-Dhabi (Al-Hai, 1990; Badri, 1991). With the rise in the need for the advanced schooling in the country, four higher colleges were set up in 1988 (Badri, 1991) along with number of branches. Today in UAE, education has been prolonged in every stage as there were many state and private educational institutes in the country (Khlalifat, 1992).

Edifice of the Teaching Method in UAE

The Ministry of education (MoE) is responsible for providing the educational services in all the seven emirates (Badri, 1991). It is also accountable to plan about the entire system (Al-Taneiji, 2001). Presently there are educational zones in UAE. Every zone is responsible to have public and private schools under its control. The zones have the direct link with the main offices of the MoE and all the educational decisions are being centrally (Sulaiman, 1987; Al-Taneiji, 2001). In the schooling system of UAE the education consists of four levels including kindergarten, elementary, secondary and tertiary (Al-Hai, 1990; Al-Nayadi, 1989). The kindergarten level completes within the time duration of two years and is optional for the students to take (Alraway, 1988). The students take admission in the elementary level in the age of 5. The elementary stage is presently known as Basic Education Cycle from the starting phase of the school year. At the initial level, students are being made taught about the compulsory subjects (Alraway, 1988).

Teacher's Perception

It is defined as the way where the perceptions can be evaluated. The most preferred way to understand the teachers is to make them demonstrate about their actions (Gatbonton and Johnson, 1999). To this point it has been argued that beliefs and views are not easy to be influenced or controlled. On the other hand, the researchers make use of the terms like early opinions (Wright, 1997; Brousseau & Freeman, 1988) and progress in the teacher's thinking (Freeman, 2002). There are also some researchers who founded that training plays a significant role in changing the views of the teachers regarding creative curriculum (Tillema & Knol, 1997). Moreover, teachers might have some views about the display of the classroom and its practices that are not as per their opinions due to the fact that the culture of the school does not support change. Hence, it has been debated by some researchers that in order to make changes in the schools settings, the first step for the school is that it should change first (Fullan, 1993, 1999, 2001a, 2001b; Karavas-Doukas, 1998).

Curriculum

Taking it from a broader perspective, curriculum is known to be a process or a plan. With this view, the curriculum is viewed as setting a process of decision making that involves decisions that are being set as per the goals and objectives of the school keeping in mind the teaching procedures and monitoring methods. Hence, the curriculum is a process instead of being an unbending product as it is open to changes (Brown, 1995).

Teacher's Role in Curriculum Development

The central issue in the curriculum development is the teacher's views that are known in the literature (Markee, 1997; Rea-Dickens & Germaine, 1998). Curriculum development is a method where teachers are main actors as they keep testing the new ways to engage the students in order to make a curriculum (Elliot, 1994). Therefore, teacher's involvement is very important in the curriculum development (Rea-Dickens & Germaine, 1998). It is being supported that the teachers are the specialists of making curriculum work in the classroom

and play an important role as investigators of the curriculum. The effectiveness of the curriculum depends on the teacher's degree of involvement and the higher involvement will lead to more effective curriculum (Finch, 1981). It was outlined that the teacher's involvement in the management decisions acts as a medium of endorsing more active contribution in changing the curriculum (Lieberman, 1997). The findings have shown that, teachers recognize development as a main element for the curriculum development. Therefore, the absence of support in the curriculum development is one of the main hindrances in coping with the curriculum change.

Teacher's Perception on Creativity in Curriculum

There have been many keys identified in the previous researches that lead to creativity in the curriculum development. In one of the research, it was explored that divergent thinking is a major factor defining the creativity (Gardner, 1993). Divergent thinking is known to be important for diversity by 15% of the teachers in the study. There were some teachers who did not see any connection among the divergent thinking and the creation of original ideas. It was observed that the divergent thinking in the classrooms did not prove to be working as the student did not react to the method. In another study conducted on the idea of creativity in the curriculum, it was noted that 30% of the teachers preferred creativity as the creative production of thoughts (Fryer & Collings, 1991). There were some teachers who defined creativity as intelligence. On the contrary it was debated in one study that creativity and intelligence have an insignificant relation with each other. Anneralla (1999), founded that the most important elements of creativity while developing the curriculum are self-expression, imagination and innovation.

Teacher's Perception on Technology Integration

A study evaluated the elementary teacher's views in two different times. The first time it was measured in the beginning of the students teaching knowledge and the next time the evaluation was done after the end of student teaching. In the study, self-efficacy was evaluated by means of likert scale. A semi structured was used to demonstrate the efficacy beliefs of the teachers followed by a selected sample size. The findings showed that self-efficacy plays a vital role in enhancing the students teaching knowledge and experience (Al-Awidi & Alghazo, 2012). Therefore, UAE is a determined country and is trying its best to offer an advanced level education to its people. To fulfil this objective the government is also giving importance to the educational programs and to use of technology to train the people with the abilities required for incorporating technology in the school settings.

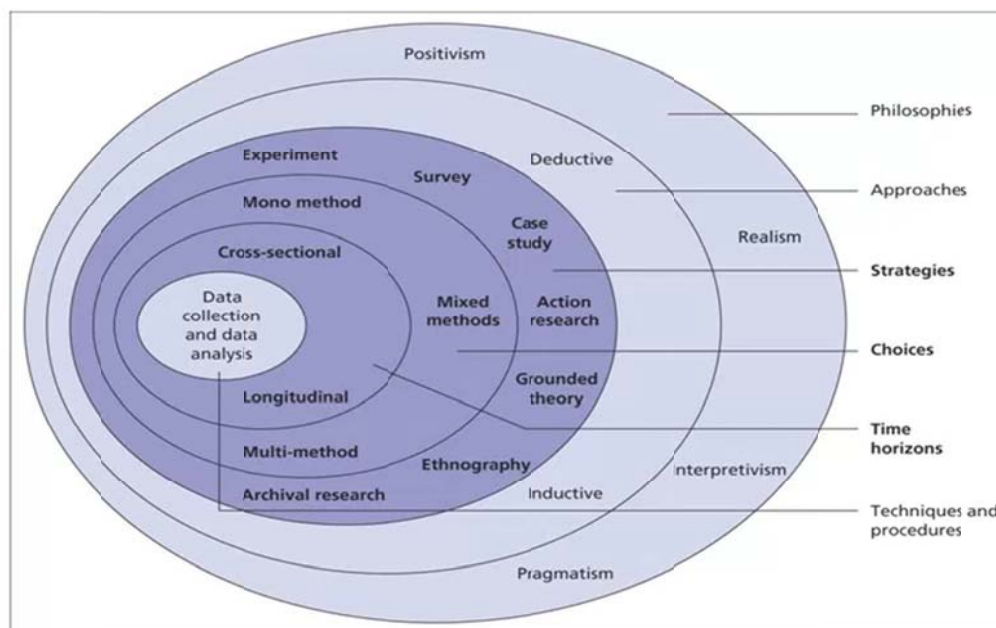
3. Research Methodology

Research Methodology contains several methods and tools. It is dependent on two methods including qualitative and quantitative method. The research methodology contains the assessment of the variables among the dependent and independent variable (Grossoehme, 2014). It assists in assessing the patterns and tactics that are used to implement the study. Hence, the methodology will also involve ethical consideration with the aim to recognize the

thought of the researcher.

Research Design

The research design has several layers that are identified by peeling off the research onion. The onion consists of the inner and outer layer that contains many layers including the philosophy, choices, strategy, approaches, time horizon and the collection methods (Saunders et.al, 2015).



Source: (Saunders, 2015)

Figure 1. Research design

Philosophy

The research philosophy is known to be the foremost layer of the research onion that reflects that the research philosophy depends on the pragmatism, realism, positivism or interpretivism (Saunders et al, 2015). The present study relies on the pragmatism approach as it is the mixture of the qualitative and quantitative research and the data collected in the study is the mixture of primary and secondary data. The primary data will be taken in the form of the interviews and the responses will be further encoded in the study. Moreover, the secondary data has been collected from multiple research papers, articles and other academic papers. The present study is relying on the mixture of qualitative and quantitative research due to the fact that it is evaluating the data through the pragmatic approach. The study has gratified the profound roots of the models and strategies of the innovation in order to evaluate that which is the best way to innovate the educational system and what are the problems while going through innovation and change.

Approach

The second layer is the research approach used by the researcher. Approach illustrates about the decisional method of the study taken into account. The approach can either be deductive or inductive (Saunders et al, 2015). As the study has considered the present model, therefore it implies that the research is based on the deductive approach.

The deductive approach also helps to reduce the risk factor. The deductive approach taken here implies that the research has taken present research model. The present research model considered by the researcher in the study is taken from the past strategies and models of innovation and change.

Strategy

The research strategy, being the third layer of the research onion, is based on experiments, case studies, grounded theories and action research (Saunders et al, 2015). The study has been conducted by the researcher by means of grounded theory and primary study. Moreover, the researcher has also gathered the data from previous studies to incorporate the innovation strategies and in literature review and data analysis. The strategic approach of the research is based on archival research which means that the study is based on past records and documents as a source of data. The past records and documents in this study are the previous research papers that are related to the innovation strategies for the creative education and risk factors involved while implementing the change in the school setting.

Choices

The research choice is the fourth layer of the research onion demonstrating three research choices that can be taken into account by the researcher in the study including mono-method, mixed method and multi-method (Saunders et al, 2015). The entire process of data collection and analysis depends on research choice.

The concerned study is relying on the qualitative and quantitative approach; the research choice used is the mixed-method. The study has used the mixed method by gathering the data from multiple research articles and primary data. The research articles chosen as a secondary tool for the study is based on the research papers related to innovation and change implemented by different schools.

Time Horizon

The time horizon of the research demonstrates the extent to which the research has been completed. It can be cross-sectional or longitudinal (Saunders et al, 2015). The researcher has the time constraint to conduct the study which implies that the researcher has used longitudinal approach of time horizon as the detailed study would have taken a longer time and the researcher has a minimal time and specific target audience for the study.

The longitudinal study is taken by the researcher to conduct the study means that the research has focused on the specific target market for the study and the study is purely based on the

deep observation which makes the research observational in nature.

Data Collection

There are multiple methods for the data collection under the context of qualitative and quantitative analysis such as collecting data by focus groups, life history and narrative inquiry, action research and gathering of data from past papers. The present study depends on the innovation management strategies for creative teaching environment; the gathering of data has been done by the scholarly research papers and previous studies. For the quantitative approach, the study has taken the interview of the teachers by asking their views with respect to innovation.

The data collection is purely based on the quantitative and qualitative approach; it implies that it is exploratory in nature. This means that the data is mainly concerned to get insights on the underlying strategies related to innovation and its impact on the creative educational environment. The mixed approach allows the researcher to dig about the theories in a deeper manner. Moreover, the researcher has also focused on the documental revision approach. The study personally visited schools and placed permission letter to conduct an interview and administering survey questionnaires. The permission letter was given by university to conduct the ethical practices so, Head of the schools gave appropriate recess time to conduct interviews with the teachers and administer the survey questionnaires among the teachers. First, the researcher conducted interviews and did the thematic analysis to find the themes and sub-themes. After making the themes and sub-themes, the researcher developed two main contextual factors (i.e., teacher perceptions and creative curriculum) which were interrelated. Therefore, the researcher prepared survey questions by checking the content and face validity of the survey questions/items by two PhD professional in education and 1 English professor. By means of documental revision, the researcher has used the existing and authentic past papers and case study as a source of information to be used in the research investigation.

Sample Population

The population of the study was teachers who were teaching in schools located in Dubai, UAE. As the research entirely depends on the mixed approach analysis due to which the researcher has gathered primary data by interviews and secondary data by means of past researches. The data has taken secondary resources where the sample population for the study is the teachers. The responses provided by the teachers have been encoded in the study to have deeper analysis of their views with respect to incorporating innovation in the school settings. For the qualitative approach, data has been taken from previous past papers.

Ethical Consideration

The study has complied with all the ethical rules while undertaking the research. The data gathered in the study has been accurately cited with the name of real authors. The key objective of the research was to explore other prospects and importance of the creative educational environmental for the students who are at their early childhood. Though, if the research will not be able to consider all the standards and morals of the research it can

culminate into affecting the human essence in a negative way. Hence, the study has been undertaken with advocacy and safety by guaranteeing the confidentiality of the research to secure the data collected from past papers and primary sources.

Theoretical Framework

The aim of the theoretical framework is to demonstrate and evaluate the relationship between the dependent and independent variable (s). In the following research the concerned variables are the impact of perceived creativity, burden free learning and concept of creative learning on the development of creative curriculum.

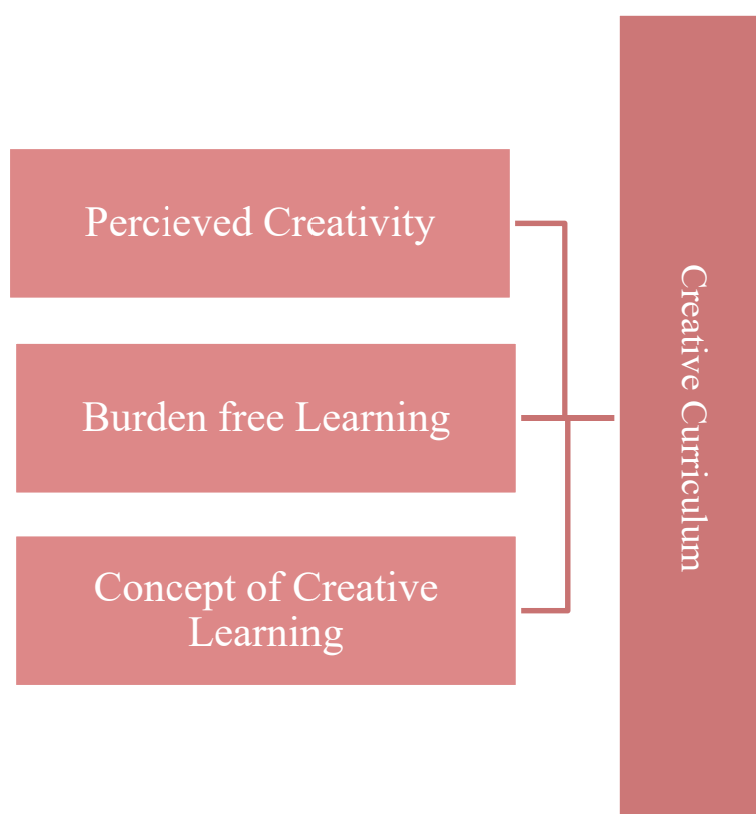


Figure 2. Theoretical framework

Explanation

The theoretical framework above illustrates about the dependent and independent variable where the dependent variable is creative curriculum and the independent variables are perceived quality, burden free learning and concept of creative learning.

4. Data Analysis

Data analysis is the way to observe and intend the data in an entirely new way. The collection of data and its evaluation are the two important actions of the researcher and for the reader as it illustrates the whole data under one roof.

4.1 Qualitative Analysis

From the qualitative analysis, the study has founded some known strategies and teacher's concept about creativity.

Interactive White Boards as Flexible Tool for Creative Learning

The interactive White Boards are defined as large, sensitive boards that have a computer associated digital projector. These boards were actually made for the office use but are now effectively serving in educational systems as well (Greiffenhagen, 2002). It was also reported by the teachers as interactive white boards serve as flexible and adaptable teaching material in every age group (Austin 2003), starting from nursery to higher education (Ekhaml, 2002). Moreover, the interactive white boards are also used in distant education (Abrams & Haefner 1998; Bell 2002). This adaptability spreads to the gratified of lessons and activities. Moreover, it was also reported that using graphics also benefits the handwriting skills of the children (Smith, 2001).

Teacher's Conception of Creativity

From the past researches, the study founded that divergent thinking plays a significant role in the development of the curriculum. Moreover, the most important factors are self-imagination, self-efficacy, innovation and inventiveness. It was explored that creativity includes problem solving skills and enjoyment (Smith et al, 2005). In order to develop a curriculum it was observed that some elements of creativity for the early childhood students are playfulness, independence and musical ability.

Creative Curriculum Strategies

In order to develop creative curriculum strategies, the study founded from the past researches and literature that the content of the curriculum cannot be made on the basis of the knowledge only. It depends on the matter of the subject that should be taught and it should focus on the age group of the students (Hatch, 2012). While developing the curriculum, it should be taken into account that early childhood education is child centered and exploration is the main key driver of learning and development. Early childhood learning should be done by playful and free activities allowing the children to establish individuality, control and self-sufficiency in the school settings. Moreover, while developing the curriculum, the interest and behaviour of the children should also be addressed in a promising and receptive manner. Lastly, the teachers can also develop group activities to present particular curriculum content.

4.2 Quantitative Analysis

The regression analysis in Table 1 shows a significant effect of teacher perception on implementing a creative curriculum, as indicated by the findings [$\beta=0.713$, $t\text{-value}=7.036$, $p\text{-value}=0.000$]. The high beta value suggests a strong positive influence of teacher perceptions on adopting a creative curriculum. The substantial t-value indicates this effect is statistically significant, far exceeding the typical significance threshold in social science research. The p-value of 0.000 confirms the very low likelihood of this result occurring by

chance, further validating the relationship. These findings underscore the critical role of teacher perceptions in shaping educational approaches and implementing innovative teaching methods.

Table 1. Regression analysis

Model		Standardized Coefficients	t	Sig.
		<i>Beta</i>		
1	(Constant)		.283	.779
	Teacher Perception -> Creative curriculum	.713	7.036	.000

Table 2 indicates a strong model fitness for examining the impact of teacher perception on educational outcomes. The R-value of .713 suggests a substantial correlation between the variables. The R Square value of .508 implies that approximately 50.8% of the variance in the dependent variable is explained by teacher perception, indicating a significant effect. The F value 49.510 is high, denoting the model's overall significance. Finally, the p-value of .000 confirms the statistical significance of these findings, reinforcing the model's reliability in explaining the relationship between teacher perception and educational outcomes.

Table 2. Model fitness

Model	R	R Square	F	Sig.
1	.713 ^a	.508	49.510	.000 ^b

a. Predictors: (Constant), Teacher Perception

For the quantitative analysis, the study has taken the dependent variable as creative curriculum and the independent variable as teachers' perception to investigate the impact. The data has been gathered from a total number of 50 teachers by encoding their responses and testing them later by means of multiple regression analysis. The above analysis demonstrates the sig value .000 which is less than the standard value. It implies teacher's perception has the significant impact on the creative curriculum development. Moreover, the r square value showed that there is 71% variation on the dependent variable due to the study variable. Therefore, it can be demonstrated that, teachers' perception and creative curriculum has a positive and significant relationship with one another.

5. Discussion and Findings

5.1 Discussion

The researcher has outlined the impact of teacher's perception on the creative curriculum development. The study has focused on several literature researches among which the most essential factors are perceived creativity, burden free learning and concept of creative school in the view of a teacher in developing creative curriculum. The study has also highlighted about the sub variables and the attributes of the study and their importance in the past

researches. The qualitative analysis showed that teacher's involvement is very important for the development of creative curriculum. The more the teachers are going to be involved in it, the more it will result into a creative learning for the students. Moreover, the teacher's view regarding the curriculum is equally essential as teachers are the significant actors who continuously try new ways in developing an engaging environment for the students. The study also pointed out some major strategies that contribute in the creative curriculum that includes promoting divergent thinking, enabling playful environment, using interactive white boards as an effective tool for creative learning. Apart from this, the quantitative analysis in the study demonstrated that teacher's views play a significant role in the development of creative curriculum.

5.2 Findings

Through the data analysis and literature review, the researcher explored the following key findings:

- Interactive white boards serve as the effective tool for creative learning among all the ages of the students.
- Divergent thinking was perceived as a major factor of creativity by the teachers.
- Teacher's perception has a significant impact on the creative curriculum development
- The higher degree of teacher's involvement leads to a more creative learning environment for the early childhood students.
- Early childhood learning should be done by playful and free activities allowing the children to establish individuality, control and self-sufficiency in the school settings.
- Training is essentially important to reshape the views of the teachers regarding creative curriculum
- The main drivers of creative learning are imagination, inventiveness and innovation.

5.3 Conclusion

The present study depends on investigating the role of teacher's perception in the development of creative curriculum. The study has founded that teacher's opinion and involvement plays a significant role in the creation of creative curriculum. The researcher has centrally concentrated on the main constructs of the teacher's perception that are perceive creativity, burden free learning and teacher's concept of creative school. The study has amplified the significance of the teacher's perception in creating effective curriculum for the early childhood students. Moreover, to ensure the findings, the study has also tested the data statistically as well that demonstrates that teacher's perception and creative curriculum has a significant and positive relation with each other. It was also highlighted by the researcher that in order to change the views of the teacher that are resistant to change, training is very helpful to reshape the teacher's thinking with respect to creative curriculum in the school setting.

5.4 Recommendation

The study has been taken into account in order to incorporate modern and creative learning for the early childhood students. Therefore, it has been recommended by the researcher that in order to develop the creative curriculum teachers should keep in mind that early childhood student are playful, independent and are driven by musical learning. Hence, early childhood learning should be done by playful and free activities allowing the children to establish individuality and control. Finally, the teachers should address the interest and behaviour of the children in a promising and receptive manner while making the curriculum. Lastly, the teachers can also develop group activities to present particular curriculum content. Finally, it is suggested that trainings should be provided to the teachers in order to cope up with the issue of change resistance.

5.5 Future Research

The researcher has tried to accomplish the objective of the study; however, there are some limitations that need to be addressed in the future researches. As the current study is relying on the teacher's involvement and perception while developing curriculum, the future study can focus on other attributes and variables such as the future study can focus on the learner's need and engagement and its impact on creative learning. Moreover, future research can focus on the cross-sectional analysis to touch the deeper roots of the study along with the detailed analysis.

References

- Abrams G. and Haefner J. (1998). S.H.O.W.M.E.: spearheading online work in mathematics education. Available at: <http://www.thejournal.com/magazine/vault/A2029.cfm>. Accessed 15 November 2003
- Al-Awidi, H.M. and Alghazo, I.M. (2012). The effect of student teaching experience on preservice elementary teachers' self-efficacy beliefs for technology integration in the UAE. *Educational Technology Research and Development*, 60(5), 923-941. <https://doi.org/10.1007/s11423-012-9239-4>
- Al-Hai, O. A. (1990). Evolutionary Stages of the Education System in the United Arab Emirates with Emphasis on Higher Education. Ph.D. Dissertation, University of Pittsburgh. Michigan: UMI.
- Al-Nayadi, M. A. (1989). Educator's Perceptions of the Teacher Evaluation System in the United Arab Emirates. Ed.D. Dissertation, The George Washington University. Michigan: UMI.
- Alraway, M. K. (1988). An Analysis of the Competencies Needed By Secondary School Teachers of United Arab Emirates. Ed.D. Dissertation, University of Pittsburgh. Michigan: UMI.
- Al-Taneiji, S. O. (2001). The Relationship Between Parental Involvement and School

Success in the United Arab Emirates. Ph.D. Dissertation, University of Colorado at Denver, Michigan: UMI.

Annarella, L. A. (1999). Encouraging creativity and imagination in the classroom. Opinion papers. (ERIC Document Reproduction Service No. ED434380).

Austin N. (2003). Mighty white. *The Guardian*, 7 January 2003.

Badri, F. A. (1991). Perceptions of English As a Foreign Language Teachers Regarding the Supervisory Practices in the United Arab Emirates' Secondary Schools. Ed.D. Dissertation, The George Washington University. Michigan: UMI.

Bell M.A. (2001). Update to survey of use of interactive electronic whiteboard in instruction. Available at: http://www.shsu.edu/lis_mah/documents/updateboardindex.htm. Accessed 10th July 2003

Brousseau, B. A. and Freeman, D. J. (1988). How do Teacher Education Faculty Members Define Desirable Teacher Beliefs?. *Teaching and Teacher education*, 4(3), 267-273. [https://doi.org/10.1016/0742-051X\(88\)90006-6](https://doi.org/10.1016/0742-051X(88)90006-6)

Brown, J. D. (1995). *The Elements of Language Curriculum: A Systematic Approach to Program Development*. Boston: Heinle and Heinle Publishers.

Cropley, A. J. (2001). *Creativity: In education and learning*. London: Clays Ltd.

Dewey, J. (1938). *Experience and Education*. New York, NY: Kappa Delta Pi.

Ekhaml L. (2002). The power of interactive whiteboards. *School Library Media Activities Monthly XVIII*, 35-37.

Elliott, B.; Brooker, R.; Macpherson, I. and McInman, A. (1999). Curriculum Leadership as Mediated Action. *Teachers and teaching: Theory and Practice*, 5(2), 171-185. <https://doi.org/10.1080/1354060990050203>

Finch, M.A. (1981). *Behind the Teacher's Desk: The Teacher, The Administrator, and the Problem of Change*. *Curriculum Inquiry*, 11(4), 321-342. <https://doi.org/10.1080/03626784.1981.11075265>

Fryer, M., and Collings, J. (1991). British teachers' views of creativity. *Journal of Creative Behavior*, 25(1), 75-81. <https://doi.org/10.1002/j.2162-6057.1991.tb01356.x>

Fullan, M. (1993). *Change Forces: Probing the Depth of Educational Reform*. London: The Falmer Press.

Fullan, M. (1999). *Change Forces: The Sequel*. London: The Falmer Press.

Fullan, M. (2001a). *Leading in a Culture of Change*. San Francisco: Jossey-Bass.

Fullan, M. (2001b). *The New Meaning of Educational Change*. New York: Teachers College Press. <https://doi.org/10.4324/9780203986561>

- Gardner, W. E. (1995). Developing a Quality Teaching Force for the United Arab Emirates: mission improbable. *Journal of Education for Teaching*, 21(3), 289-301. <https://doi.org/10.1080/02607479550038518>
- Gatbonton, E. (1999). Investigating Experienced ESL teachers' Pedagogical Knowledge. *The Modern Language Journal*, 83(1), 35-50. <https://doi.org/10.1111/0026-7902.00004>
- Greiffenhagen C. (2000). Interactive whiteboards in mathematics education: possibilities and dangers Paper Presented at WGA 11 (ICME-9): 2. The Use of Technology in Mathematics Education. Available at: <http://web.comlab.ox.ac.uk/oucl/work/christian.greiffenhagen/pub/icme9/>. Accessed 20 June 2003.
- Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of health care chaplaincy*, 20(3), 109-122. <https://doi.org/10.1080/08854726.2014.925660>
- Hatch, J. A. (2012). From theory to curriculum: Developmental theory and its relationship to curriculum and instruction in early childhood education. In N. File, J. Mueller, & D. Wisneski (Eds.), *Curriculum in early childhood education: Re-examined, rediscovered, renewed* (pp. 4253). New York, NY: Routledge
- Hattie, J. (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. London, UK: Routledge.
- Isbell, R. T., & Raines, S. C. (2007). *Creativity and the arts with young children*. Belmont, CA: Thompson.
- Karavas-Doukas, K. (1998). Evaluating the Implementation of educational innovations: lessons from the past. In P. Rea-Dickins & K. P. Germaine (Eds.), *Managing Evaluation and Innovation in Language teaching*. Pp. 25-50. London: Longman.
- Khlaifat, A. S. (1992). Higher Education in the United Arab Emirates: University of United Arab Emirates and its Development. Ph.D. Dissertation, University of North Texas. Michigan: UMI.
- Lieberman, A. (1997). Navigating the Four C's: Building a Bridge over Troubled Waters. In D. J. Flinders and S. J. Thornton (Eds.), *The Curriculum Studies Reader*, 350-354. New York: Routledge.
- Markee, N. (1997). *Managing Curricular Innovation*. Cambridge: Cambridge University Press.
- Piaget, J. (1954). *The Construction of Reality in the Child*. New York, NY: Basic Books. <https://doi.org/10.1037/11168-000>
- Pinkus, A. (2016). At the forefront of creative schools. *Independent School*, 75(2), 50-55.
- Rea-Dickens, P. and Germaine, K. P. (Eds.). (1998). *Managing Evaluation and Innovation in Language Teaching: Building Bridges*. London: Longman.

- Robinson, K., & Aronica, L. (2015). *Creative schools: The grassroots revolution that's transforming education*. New York, NY: Viking.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Saunders, V., McArthur, M., & Moore, T. (2015). Not seen and not heard: Ethical considerations of research with children of prisoners. *Law Context: A Socio-Legal J.*, 32, 108. <https://doi.org/10.26826/law-in-context.v32i0.75>
- Smith H. (2001). Smartboard evaluation: final report. Available at: <http://www.kented.org.uk/ngfl/whiteboards/report>. Accessed 20th June 2003.
- Smith, H.J., Higgins, S., Wall, K. and Miller, J. (2005). Interactive whiteboards: boon or bandwagon? A critical review of the literature. *Journal of Computer Assisted Learning*, 21(2), 91-101. <https://doi.org/10.1111/j.1365-2729.2005.00117.x>
- Suliman, O. M. (2000). A Descriptive Study of the Educational System in the United Arab Emirates. Ed.D. Dissertation, University of Southern California. Michigan: UMI.
- Tillema, H. H. & Knol, W. E. (1997). Collaborative Planning by Teacher educators to Promote Belief Change in their Students. *Teachers and Teaching: Theory and Practice*, 3(1), 29-45. <https://doi.org/10.1080/1354060970030103>
- Ucus, S. and Acar, I.H. (2017). Exploring the perceptions of student teachers about 'creative school' in early childhood education. *Early Child Development and Care*, 1-16. <https://doi.org/10.1080/03004430.2017.1307838>
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Wright, M. V. (1997). Student Teachers' Beliefs and Changing Teacher Role. *European Journal of teacher Education*, 20(3), 257-266. <https://doi.org/10.1080/0261976970200305>
- Wyse, D., & Ferrari, A. (2015). Creativity and education: Comparing The National curricula of the states of the European Union and the United Kingdom. *British Educational Research Journal*, 41(1), 30-47. <https://doi.org/10.1002/berj.3135>