

Clarifying the Effective Factors of Hidden Curriculum of Schools on Establishment of the Aims of Religious Education of Elementary School Students (Case Study of Ahvaz City)

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Abstract

Current research aims to clarify the effective factors of hidden curriculum of schools on the establishment of the general goals of religious education in elementary period.

This research is practical in regard to classification of the researches on the base of purpose and approaches the issue in phenomenological manner.

Statistical population of the research includes all the principals, teachers and boy students of fifth and sixth grades of elementary schools in Ahvaz city and the samples of the research are selected through purposive sampling.

Data are gathered through unstructured interview conducted by means of open answer questions and have been continued as much as saturation of the data.

Grounded theory procedure or theory derived from data is used to analyze the data and to achieve intended model (theory) of the research and it includes four stages: 1-Coding 2-conceptualizing 3-Categorizing 4-Compiling the theory (model) of findings : In the next stage, 15 concepts of these codes are extracted and in the third stage, the mentioned concepts are organized in form of 5 categories(factor) : cognitive environment , social environment, physical environment, administrative environment, religious environment, and in the last stage, research theory (model) is formed on the base of discovered categories

Keywords: hidden curriculum, religious education, elementary education period

1. Introduction

Education is among the common concerns of human societies. Countries and nations define their educational goals on the base of their own mindset and political and philosophical school and this leads to a difference in style and procedure and goals. (Hajji Karim Nazari, 2009)

School is the main base of education as one of the most important instructive, educational and social institutes .The kind of school instruction has a particular effect on the social life of one nation .No instructive institution, even in the most descriptive developmental and political definitions and interpretations, isn't separated from the goals and missions and social and cultural backgrounds of its own society. (Khaniki, 2002)

Undoubtedly, achieving the goals of educational system in regard to religious instruction requires the exact and proper application of all tools and equipment's. In recent years, curriculum has always been one of the most important tools in achieving the goals of educational systems in different countries .Researchers findings acknowledge the reality that unlike the common assumption, curriculum as a field of specializations isn't confined to a collection of predetermined experiences and learnings or official explicit curriculum. There are other factors that, as well as official and explicit curriculum, affect the intellectual, value and behavioral structure of the students. These factors are so called the unintended curriculum or hidden curriculum.

2. Literature Review

Phillip Jackson (1968) is generally acknowledged as the originator of the term hidden curriculum in his book

Life in Classrooms. He argued that the hidden curriculum emphasized specific skills: learning to wait quietly, exercising restraint, trying, completing work, keeping busy, cooperating, showing allegiance to both teachers and peers, being neat and punctual, and conducting oneself courteously (Jackson 1968, pp. 10-33).

Different perspectives on the hidden curriculum have been articulated over the past 48 years.

Robert Dreeben (1967) argued that the structure of family life alone could not adequately prepare children for the adult world. He examined the norms of school culture and concluded they taught students to "form transient social relationships, submerge much of their personal identity, and accept the legitimacy of categorical treatment" (Dreeben 1968, p. 147).

Henry Giroux (2001) identifies hidden curriculum as what is being taught and how one learns in the school as he also indicates that schools not only provides instruction but also more such as norms and principles experienced by students throughout their education life (Fulya Damla Kentli, 2009, 84).

Michael Apple (2004) describes hidden curriculum as those attitudes, values, and beliefs that conveyed to students as part of the overall school culture but are not explicitly stated in the curriculum document (Michael Apple, 2004, p. 15).

Dickerson (2007) "The hidden curriculum consists of those things pupils learn through the experience of attending school rather than the stated educational objectives of such institutions" (Dickerson, 2007, p. 14).

Joanna Konieczka (2013) argued that the hidden curriculum as a socialization of schooling can be identified by the social interactions within an environment. Thus, it is in process at all times, and serves to transmit tacit messages to students about values, attitudes and principles. Hidden curriculum can reveal through an evaluation of the environment and the unexpected, unintentional interactions between teachers and students which revealed critical pedagogy (Joanna Konieczka, 2013, pp. 250-251).

Researchers consider different factors involved in the production of the hidden curriculum. Many of the researchers focused on social aspects of hidden curriculum such as Jackson, 1968; Ausbrooks, 2000; Myles and Andreon, 2001; Fitzroy, 2007; Chikeung, 2008; Dogany, 2002; Gobergolia, Gobble and Cawth, 2012; Guskey, 2012. Some other researchers concentrated on cognitive side of hidden curriculum on the contents and illustrations of the subject matter. They believed that sometimes the contents and illustrations of the subject matter have hidden and implied messages, which sometimes these messages are against the aims, of formal curriculum, such as stereotype encounters, racism, and sexual discrimination (Margolis, 2000; BergenheGouwen, 2009; Redish, 2009; Stephen Son, 2009; ShurifahThuraiy, 2010). Some other researcher such as Smith and Montgomery 2008, which had focused on cognitive aspect of hidden curriculum, showed that schools do not give equal attention to different subjects. In their opinion subjects such as Mathematics, Biology and Technology have more importance. They had given more time to these subjects in their curriculum. Teachers and students give special importance to these subjects and they do not consider the others as important. Another group of researcher studied the physical aspects of hidden curriculum such as Margolis, 2001; Dexie, 2003; Weber, 2009; Ferriter, 2009. The results of their research showed those beautiful, well decorated classrooms, with good lightening and enough physical equipment's, for teaching is factors of academic achievement.

Islamic Republic of Iran believes that Islam religion is a plan for ((pure life)) in this world and salvation in that world , therefore , it has adopted a particular structure for governing the society and embrace the religious education as the most basic responsibility and organize all economic , social and cultural programs in this manner.(Ministry of Education , 2006)

Since elementary period is the most important educational period in all education systems of the world and personality and multilateral growth of person is more formed in this period, sensitivity of this period is more than the others. (Safi, 2004)

According to the twenty years outlook document of Islamic Republic of Iran, elementary period is considered as the basic part of public and official education system of this country. Based on this outlook, elementary schools are also considered the main origin of achieving high goals of public and official education system of Iran. (Ministry of Education, 2011)

The general goals of religious education of elementary period in Iran are accumulated under the three scopes of: cognitive (knowledge and information), sentimental (tendencies and emotions) and functional (behavior and action). (Ministry of Education, 2006)

Despite emphases done in the upper documents of Iran about outstanding position of religious education, the authorities have not paid enough attention to the effect of hidden curriculum. This is while the students during

their own education are always in a close communication with the elements of this curriculum. Identifying and analyzing hidden curriculum can be used by the authorities of education as a educational tool. (Bayanfar & Maleki, 2011)

Today, in Iran, people in charge and the authorities pay more attention to the official and intended curriculum and an important dimension of curriculum, namely hidden curriculum, affecting severely the major part of goals and content of education system of Iran is overlooked. (Fallah, Vahid, Barimany & Niazazar, 2012)

We may acknowledge the saying by John Dewey (Dewey, J) about the education of our country that the greatest fallacy of education is that people in charge of education think that children learn what they present at schools. (Mehrmohammadi, 2001)

In the current research, given the pivotal position of religious education in education system of Iran on one hand and according to the importance of elementary period as primary origin of movement toward achieving the goals of religious education of students in Iran on the other hand , it is attempted to clarify the effect of elements or components of hidden curriculum on achieving the general goals of religious education in elementary period while designing a model for decreasing the negative effects and consequences and increasing the positive effects and consequences of this kind of curriculum on achieving the goals of religious education in the mentioned period.

3. Methodology

The current research, based on the purpose, is classified as practical that approaches the issue in a phenomenological manner and grounded theory procedure is used to analyze the data obtained from interview with samples of the research.

The statistical population of the research includes all the elementary schools pertaining to boys in four districts of Ahvaz city in school year 94-95 that two districts of the mentioned districts were selected through cluster random procedure in two stages and then, 5 schools were selected out of each district and the samples of the research were selected through purposive sampling from among principals, teachers and students of these schools.

In this research, the tool has been unstructured interview by means of open answer questions for gathering the required data. Each interview took at most 70 and at least 40 minutes. All the interviews were conducted in one of the decent work rooms allocated to this affair in association with the management.

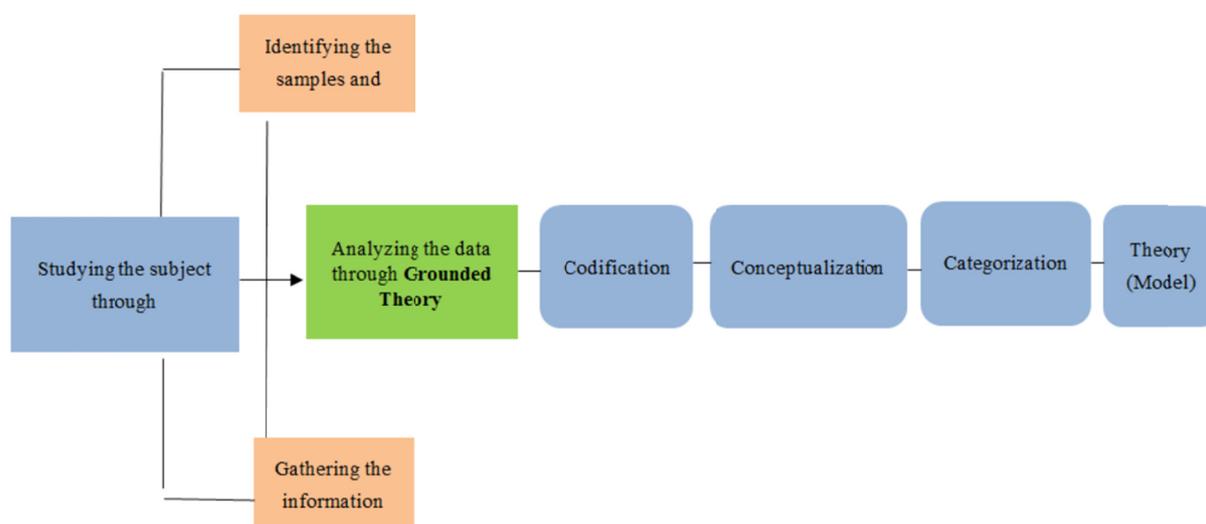


Figure 1. Progress diagram ended up in field model of the research

4. Findings of the Research

Gathering the data through interview with samples ended up in saturation of the data and not receiving any kind of new information after interviewing with the thirty fifth person. Then, the gathered data were analyzed through grounded theory procedure or theory derived from data in 4 stages. In the first stage, while investigating exactly

the raw data obtained from interviews , the answers were extracted in the form of short phrases and a joint code was determined to raw data almost similar to each other and 86 codes were finally obtained .In the second stage ,conceptualization was conducted ,in a way that some joint codes pointing to one concept were formed in one concept.15 concepts were extracted at the end of this stage .In the third stage ,classification was conducted and some close concepts were categorized in one form .At the end of this stage, concepts were organized in the form of 5 categories(elements) : cognitive environment , social environment , administrative environment , religious environment , and at the last stage ,based on the discovered categories ,theory (model) of the research was formed.

Demographic information of research statistical population samples:

Table 1. Frequency distribution of interviewees according to position

Position	Frequency	Frequency percentage	Cumulative frequency percentage
Principal	5	%14.29	%14.29
Teacher	10	%28.57	%42.86
Student	20	%57.14	%100
Total	35	%100	%100

Table 2. Frequency distribution of interviewees according to gender

Gender	Frequency	Frequency percentage	Cumulative frequency percentage
Man	32	91.43%	91.43%
Woman	3	8.57%	100%
Total	35	100%	100%

Table 3. Frequency distribution of principals and teachers being interviewed according to academic degree

Academic degree	Frequency	Percentage
Junior college diploma	2 persons	13%
B.A	9 persons	60%
M.A	4 persons	27%
Total	15 persons	100%

Table 4. Frequency distribution of the students being interviewed according to their school grade

School grade	Frequency	Frequency percentage	Cumulative frequency
Fifth grade	11	55%	55%
Sixth grade	9	45%	100%
total	20	100%	100%

According to results inserted in table 5, the concept of "content of the lesson" is obtained as a result of merging codes in rows 1 to 7, the concept of "teaching method" as a result of merging codes in rows 8-15 and the concept of "evaluation procedure" as a result of merging codes 16-20. This three concepts together formed "cognitive environment" category or element as one of the effective factors of curriculum on achieving the goals of religious education at elementary schools .Findings of the research about introduction of the cognitive environment as one of the effective elements of hidden curriculum at schools are similar to the standpoints of some of the pundits such as Stephenson (2009) , Redish (2009) and Bergenhenegouwen (2009) that concentrated on the content-cognitive dimension of this curriculum .They believe that the content of textbooks are hidden subjects and purposes that are not also similar to the goals of the explicit curriculum.

Table 5. Information of extractive structure of cognitive environment category of hidden curriculum

Row	Joint code	Concepts	Category
1	Comprehensibility of content of lesson	Content of lesson (codes 1 to 7)	
2	Without accumulation of subjects		
3	Without multiplicity subjects		

4	Correlation of the content with the main issues of society		
5	Noticeability and tangibility of content of lessons		
6	Attractiveness of content		
7	Conformity among general goals and selective content of lesson		
8	Indirect teaching of concepts of lesson		Cognitive environment
9	Active learning of students		
10	Cultivation of thinking ability of learner		
11	Stimulation of inquisitiveness of students	Method of teaching (codes 8 to 15)	
12	Without domineering and rigid behavior of educator		
13	Moderation in assigning home works		
14	Answerability of ambiguities and uncertainties of learner		
15	Application of language and literature peculiar to children in teaching		
16	Attention to individual differences of students in evaluation		
17	Evaluation according to persistent activities of students		
18	Application of a variety of evaluation congruent with subject	Evaluation procedure (codes 16 to 20)	
19	Application of evaluation as a tool and not as a goal		
20	Decrease of importance of grade in evaluating achievement of goals		

According to results inserted in table 6 , the concept of "communication between teacher and student " was obtained as a result of merging the codes 1 to 7, the concept of "communication of students with together "was obtained as a result of merging codes in rows 8-11 and the concept of "communication of school personnel with students was obtained as a result of merging codes 12-14.This three concepts with together formed "social environment "category or environment as one of the effective elements of hidden curriculum on achieving the goals of religious education at schools.

The findings of the research about identifying the social environment as one of the effective elements of hidden curriculum at elementary schools are similar to the findings of pundits such as Borg (2002), Hebert (2000), Myles and Andreon (2001), Margolis (2002), Cannelly (2008), and Chikeung (2008) that have concentrated on the social dimension of hidden curriculum. In their opinion, hidden curriculum includes those ideas, beliefs and insights that students obtain passively, directly from environment and in their relations with other students, teachers and school authorities and generally from the atmosphere of their own school.

In this regard, Portly (1993) believes that, in fact, in an invisible school, children of a country receive information through communication with each other and are exposed to special education that is usually programed and not predetermined.

Table 6. Extractive structure information of social environment category of hidden curriculum

Row	Joint code	concepts	Category
1	Amity and intimacy of teacher with students		
2	Teacher respect for self-esteem of learner		
3	No discrimination of teacher among students	Communication (Relationship between teacher and students) (Codes 1 to 7)	
4	Mutual respect of student for teacher		
5	Student trust in teacher		
6	Teacher attention to language diversity of students		
7	Teacher attention to cultural diversity of students		Social environment
8	Moral impacts of students on each other	Communication of students with each other	
9	Students impacts on belief of each other		

10	Cultural impacts of students on each other	(Codes 8 to 11)
11	Educational impacts of students on each other	
12	Manner of personnel at school environment	
13	Tone and oral literature of school personnel	Communication of school personnel with students(Codes 12 to 14)
14	Extent of beliefs and Compliance of personnel with religious commands	

According to results inserted in table 7, the concept of "school building" was obtained as a result of merging codes in rows 1 to 3, the concept of "public and technical equipment of school "was obtained as a result of merging codes in rows 4-14 and the concept of "space and design of class was obtained as a result of merging codes 12-18. This three concepts together formed "physical environment "category or element as one of effective elements of hidden curriculum on achieving the goals of religious education at grade schools.

The findings of the research about physical environment as one of the effective elements of hidden curriculum of schools are similar to the findings of Weber (2009), Brandapaul (1997) ,Ferriter (2000) that have concentrated on the physical dimension of hidden curriculum. In their opinion, physical environment features of school, the equipment and tools that are used, all will affect the motivation, sentiments and presumptions of students. Weber and Ferriter, in their own research, investigated the effects of physical environment of school on the educational success of students, they, in their own studies, concluded that quite beautiful, decorated and bright class rooms with decent physical equipment for teaching the lessons are among the effective elements on educational success and advancement of students (Bayanfar and colleagues, 2010). In this regard Getzles (1974) has described the physical environment of classroom in various kinds of schools, and believes that each structure inspire children mind with a particular assumption of ideal student. According to Deutsch (Deutsch, 2004), style of school building and setting of class room can also contain implied messages.

Table 7. Extractive structure information of physical environment category of hidden curriculum

Row	Joint code	Concepts	Category
1	School building agedness	Building of school (codes 1 to 3)	Physical environment
2	Dimensions of school building		
3	School construction plan and design		
4	Library of school, kind and amount of books	Public and technical capabilities of school (codes 4 to 11)	
5	School equipping with computer network		
6	Amount and kind of school laboratories		
7	Prayer room of school and its design and capacity		
8	Degree of cleanness and health of school environment		
9	Amount and quality of sanitary services		
10	Sufficient space for play and sport		
11	Drinking fountain and refining system of drinking water		
12	Amount of classes	Space and design of class (codes 12 to 18)	
13	Capacity of each class		
14	Coloring of classes		
15	Kind and setting of chair in class rooms		
16	Light and illumination of classes		
17	Heating and cooling system of classes		
18	Educational complementary capabilities of classes		

According to results inserted in table 8 , the concept of "style of management and leadership" was obtained as a

result of merging codes in rows 1 to 5, the concept of "collection of rules and regulations of school" was obtained as a result of merging codes in rows 6-13 and the concept of "way of programing and sorting" was obtained as a result of merging codes 14-16. These three concepts together formed "administrative environment" category or element as one of the effective elements of hidden curriculum on achieving the goals of religious education at grade schools.

The findings of the research about identifying the administrative environment as one of the effective elements of hidden curriculum at schools are similar to the stand point of (Bergman and Gustan (1987) that believe hidden curriculum includes things that are found explicitly in principles and organization of education system (for instance, order and regularity at class and group state) and in pattern of relationship and communication in education centers (for instance, repeating the lessons, hearing, complying,...).

In this regard, Townsend (Townsend, 1995) also believes that some of components of educational environment lead to a kind of hidden educational curriculum that teachers teach it unintentionally and learners learn it unknowingly. This components include social structure of class room, way of using authority by teachers, rules dominant in relations of teacher-learner, standard learning activities, structural obstacles inside institution.

Table 8. Extractive structure information of administrative environment category of hidden curriculum

Row	Joint code	Concepts	Category
1	Extent of consultant of principal with teachers	Style of management and leadership (codes 1 to 5)	administrative environment
2	Extent of principal intellectual agreement with students parents		
3	Extent of principal criticism taking and patience		
4	Possibility of students easy communication with principal		
5	Ways of encouragement and punishment at school		
6	Attention to psychological principles in compiling the school regulations	Collection of rules and regulations of school (Codes 6 to 13)	
7	Possibility of changing or amending the school regulations		
8	Extent of students familiarity with school regulations		
9	Discrimination in exerting the regulations		
10	Extent of teachers compliance with administrative order and regulations		
11	Extent of teachers compliance with administrative order and regulations		
12	Extent of personnel compliance with administrative order and regulations		
13	Extent of students compliance with regulations	Way of programing and sorting (Codes 14 to 16)	
14	Possibility of students contribution toward programing the classes		
15	Possibility of students contribution toward arranging the schedule of examinations		
16	Attention to students stand points toward sorting the class		

According to results inserted in table 9, the concept of "space and position of religious activities, was obtained as a result of merging codes in rows 1 to 11, the concept of "divine- religious beliefs and faiths of students" was obtained as a result of merging codes in rows 12-15 and the concept of "extent of practical pledge of school personnel to religious obligations" was obtained as a result of merging codes 16-18. These three concepts together formed "religious environment" category or element as one of the effective elements of hidden curriculum on achieving goals of religious education at grade schools.

Findings of the research about identifying religious environment as one of the effective elements of hidden

curriculum at schools are similar to the stand point of Michal Apple (1998) about hidden curriculum that he believes hidden curriculum is "implicit teaching of norms, values and making particular tendencies in learners. These findings are also similar to stand point of Mehr mohammadi (2008) that states hidden curriculum is suggesting learnings that learners experience in the framework of carrying out the explicit curriculum and because of attendance in the heart and context of dominant culture in education system.

Table 9. Extractive structure information of religious environment category of hidden curriculum

Row	Joint code	Concepts	Category
1	School benefiting from religious-divine books and films repository		Religious environment
2	Extent of diversity and modernity of religious-divine books and films repository		
3	Quantity and quality of holding religious celebrations and occasions		
4	Holding religious educational courses in an extracurricular manner		
5	Content and extent of religious-cultural camps and exhibitions		
6	Amount and level of Quran memorization and reading competitions at school	Space and bases of religious activity(codes 1 to 11)	
7	Amount of religious justifiable and popular persons attending at school		
8	Allocation of decent place for holding religious customs		
9	Extent of respect for religious-divine multiplicity and diversity of students		
10	Activities of school religious organizations and groups		
11	Way of holding liturgical customs		
12	Individual religious-divine beliefs and faiths of students	Religious-divine beliefs and faiths of students(codes 12 to 15)	
13	Family religious-divine beliefs and faiths of students		
14	Contradictions between religious beliefs of student and content of lesson		
15	Contradictions between religious beliefs of student and teachers beliefs		
16	Extent of school principal obligation to religious commands and duties	Extent of school authorities obligation to religious duties(codes 16 to 18)	
17	Extent of school teachers obligation to religious commands and duties		
18	Extend of school personnel obligation to religious commands and duties		

5. Theory or Model

5 variables were identified as variables of hidden curriculum according to the findings of the research (1- Cognitive environment 2- Social environment 3- Physical environment 4-administrative environment 5- religious environment). Each of these hidden variables are defined by means of 3 observable variables that are formed according to placement of some joint codes in the form of one concept and have made the theory or model of the research that is presented in Figure 2.

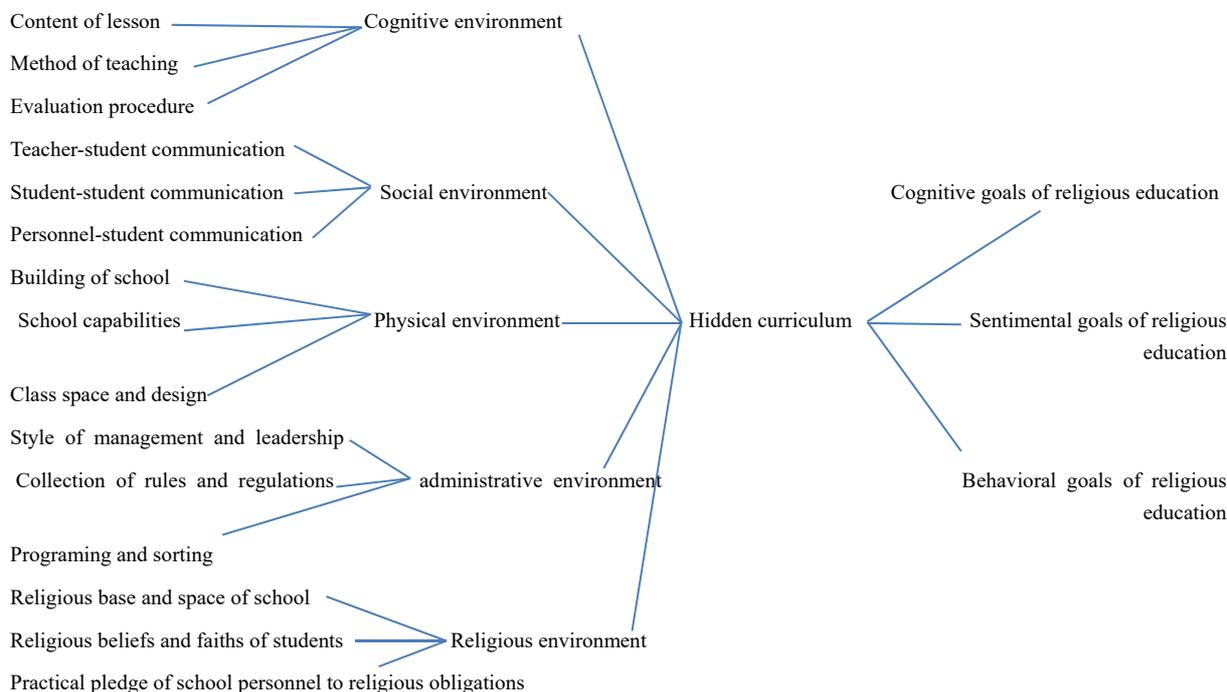


Figure 2. Theoretical model or research theory derived from analyzing the data

References

- Apple, M. W. (2004). *Ideology and Curriculum*. New York: Routledge.
- Ausbrooks, R. (2000). What is Schools hidden Curriculum teaching your child? Retrieved from <http://www.parentigteens.com/curriculum.Shtml>
- Bayanfar, F., Maleki, H., Delavar, A., & Seif, A. (2011). Clarifying the effect of hidden curriculum of schools on the academic achievement students in middle school in order to provide a model. *Journal of Educational innovations*, 37, 71-100. Retrieved from <http://fa.journal.sid.ir/searchpaper.aspx?journal=&subject=&writer=111651&year=&PDF=&Filter=>
- Bergenhennegouwen, G. (2009). Hidden Curriculum in the University. Retrieved from <http://www.sociologyindex.com>
- Chikeung, C. (2008). The effect of shared decision – making on the improvement in teacher’s Job development. Retrieved from <http://www.eric.ed.gov>
- Dickerson, L. (2007). A postmodern view of the hidden curriculum. Jack N. Averitt College of Graduate studies.
- Dixie, G. (2003). The importance of the physical environment. Retrieved from <http://books.google.com>
- Doganay, A. (2009). Hidden curriculum on gaining the value of respect for human dignity. A qualitative study in two elementary schools in Adana. Retrieved from [http://www. Educationalsciencetheory&practice.com](http://www.Educationalsciencetheory&practice.com)
- Dreeben, R. (1967). *On what is learned in school?* London: Addison-Wesley.
- Fallah, V., Barimani, A., & Niyazazar, K. (2012). Investigating the role of hidden curriculum on student learning in secondary schools. *Journal of management*, 9, 45-51. Retrieved from <http://fa.journals.ir/SearuchPaper.aapx?journal=& subject=&writer=106584&year=&PDF=&Filter>
- Ferriter, B. (2009). Cell phones art disrupting the learning environment. Retrieved from <http://teacherleaders.typepad.com>
- Fizroy community school (2007). Retrieved from <http://www.fcs,vie,edu.au/artides.asp>
- Gabergolia, C. L., & Gobble, M. E. (2012). A national perspective on teacher's efficacy in deaf education. *Journal of Deaf Studies and Deaf Education*, 17(3), 367-383.
- Giroux, H. A. (2001). *Theory and Resistance in Education*. London: Bergin & Garvey
- Guskey, T. R. (2012). The influence of change in instructional effectiveness upon the affective characteristics of

- teachers. *American Educational Research Journal*, 17, 367-383.
- Jackson, P. W. (1968). *Life in Classrooms*. New York: Holt, Reinhart & Winston.
- Kentli, F. D. (2009). *Comparison of Hidden Curriculum Theories*. Ozean Publication.
- Koniczka, J. (2013). The Hidden Curriculum. *Advanced Research in Scientific Areas*, 2-6.
- Margolis, E. (2000). Class pictures: representations of race, gender and ability in a century of school photography. *Educational policy analysis archives*, 8 (31).
- Margolis, E. (2001). The hidden curriculum in higher education. Retrieved from [http:// books.google.com](http://books.google.com)
- Myles, B.S., & Andreon, D. (2001). *Asperger syndrome and adolescence: practical solutions for school success* Shawnee mission ,ks .autismasperger publishing co.
- Redish, E. F. (2009). The hidden curriculum: what do we really want our students to learn? Retrieved from http://www.sociologyindex.com_
- Shurifah, T. S. A. (2010). The other curriculum in pesantren exploring possible triggers of radicalism. Retrieved from <http://www.pvtr.org/pdf>
- Smith, A., & Montgomery, A. (2008). Values and hidden curriculum. Retrieved from <http://www.Cainweb.Service>
- Stephen, S. A. M. (2009). Skirmishes on the border: How children experienced, influenced and enacted the boundaries of curriculum in an early childhood education. Retrieved from <http://research.vum.ac.riz>
- Weber, S. (2009). Curriculum development: A political act. Retrieved from <http://www.k12curriculumdevelopment.com>

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