Evaluation of Teacher's Knowledge with Anthropological Theory of the Didactic Approach: A Case Study

By

Mehtap Yurdatapan and Yusuf Savas
Marmara University, Faculty of Ataturk Education, Department of Science Education,
Goztepe/Istanbul, Turkey

Abstract

This study aims to determine the content of the teaching of reproduction in living things within the didactic system for 6th class pupils in primary education by focusing on "teacher and knowledge". In this study which is a case study, study group consists of two teachers who work at the same school but have different degree education and experience. Observation and interview have been used from data sources which have an important role in case studies. At the result of study, it has been found that the effect of HSE exam (The High School Entrance Examination) on teachers who work at a school where HSE exam scores are higher is bigger than that of curriculum at the constituting the content of teaching regarding reproduction in living things. The teacher's bachelor of degrees and the duration of their experience have not created a difference in teaching style and choice, it could be said that the constitutional effect of school is much more decisive.

Keywords: *Reproduction, science education, anthropological theory of didactic (ATD), science and technology teachers,*

1. Introduction

The material of education and teaching is knowledge and its relation with each individual has a different feature. Then, what is the knowledge needed at school and during a lifetime? While Chevallard (1985) says that "The knowledge is knowledge that is accepted as logical and reasonable by institutions and society" he mentions that the character of knowledge is evaluated according to culture and period. Therefore it could be said that it is inevitable for the concept of knowledge to change and contain innovations according to different periods and features in fields in where knowledge is.

While the scientific knowledge which arises from the studies of scientists, universities and research groups, has been communicated toschools and used by teaching programs, it is exposed to some willed changes. These changes arise with effect on many factors that have various functions (the type of society, the form of government, the situation of education system etc.). While scientific knowledge is used as the content of teaching. Mathematics educators Chevallard and Joshua are the first ones who to mention this transformation on the giving an example in "The Concept of Distance" at 1982. Thus the definition of "Didactic Transposition Theory" has been suggested. Chevallard (1985) explained this definition as "the whole of the transformation that knowledge has undergone until it becomes knowledge". This definition leads him to make a distinction between the scientist's knowledge and the knowledge that is taught and to examine the running of these two.

Yves Chevallard (1992) has suggested a new theoretical approach called anthropological didactic to extend the didactical transposition theory and to solve the general problems of transferring the knowledge which is reference for teaching.Chevallard has built this theory on the concepts of object, individual and institution. The first main concept is the concept of object and it is symbolized with "O" in the system. In order for an object to exist, at least one person has to identify it. According to this, number 7, the concept of father, the concept of young father who travels with his child or the idea of standing for his rights,

being brave, the concepts of mathematics, the concepts of science namely each of every production made deliberately by human activity is object. The second main concept is the concept of individual and it is symbolized by "X". Each person, including children, is accepted as an individual. The system of X's personal relation certainly develops in time: The object which does not exist for him starts existing and the existence of others starts ceasing and finally X's individual relation changes. To explain the constitution and evolution of X individual's cognitive realm requires introducing a third concept. This concept is the concept of institution and is symbolized with 'I'. An I institution contains the whole of social order that has only very little development within social field. Namely, it is an X individual who is engaged with different situations of p (position) provided within I. Then, a class is an institution (where teachers and students have two main situations) (Chevallard, 2002). Generally, in the school environment, objects is knowledge, individual is either a student or a teacher, institution is class, school or subject (Saglam 2008).

In theory, after these three main concepts, personal and institutional relations arise. According to this, an object (O) exists for an individual (X) or for an institution (I) while it is recognized by them. To be more accurate, the matter is the personal relation between individual and object R(X,O) or the institutional relationship between institution and object R(I,O). The personal relation classified as fourth main concept of didactic theory is "defined as the whole of knowledge, perception and skills of a person regarding a subject. In other words, personal relation is the whole of interaction between knowledge and individual". (Chevallard, 1989). Therefore, if only we accept that X knows O from the moment O exists for an X individual, then that X individual has a personal relation regarding O. In the anthropological theory of didactic, learning is described as the change of an X individual's personal relation to O. This change starts to exist if personal recognition does not exist and improves if it exists. (Chevallard,1992). This lesson changes knowledge of individuals but not an individual itself. In order to mention learning in anthropological didactic theory, it is necessary to introduce the institutional relation which is fifth main concept. If O which is some sort of object is being recognized by an I which is some sort of I, then this O, is an object within I and I institution has an institutional relation to this O object shown with R(I,O). (Chevallard, 1992). Therefore, when a X individual comes into an I institution, X becomes a personal of this I institution and the personal relation of X who is a personal of I, to O R(X,O) needs to change and improve under the condition of R(I,O) which is the institutional relation of I institution (Chevallard, 1992).

Anthropological approach of didactic events allows to extend and enrichment substantially the concept of transposition didactic. For instance, an object of knowledge is turned into institution as scientific knowledge by scientific circles and the same object of knowledge is turned into institution as knowledge to be taught by educational staff. Anthropological approach allows comparing objects of knowledge with different institutional relations (Yildirim, & Sahin, 2009).

It has been seen that there are some types of exams for accessing high quality schools in developing countries due to their number is very limited although young population is very high. Pupils in Turkey have to be successful at entrance exams to high schools in order to access a high quality high school. Therefore it is thought that the affect of exam as well as curriculum can be found on teaching given at schools.

This study aims to determine the content of the teaching of reproduction in living organisms within the didactic system for 6th class pupils in primary education by focusing on "teacher and knowledge". In another words, study has tried to understand the interaction of personal relation of teachers with the institutional relation of schools where they work on constituting the content of teaching regarding reproduction in living organisms presented at the level of primary education.

2. Methodology

Study has been carried out to reveal the concepts that teachers have regarding the subject of reproduction under the roof of anthropological didactic theory. In the case study which has been carried out with teachers who consist of study group, an answer has been sought for the following question: "What kind of relation is there between concepts of reproduction that teachers have and the content of textbooks/curriculums regarding these concepts?" The sentence of "Teachers prepare content under the influence of HSE exam and/or textbooks while presenting the concepts of reproduction as course content" has been determined as hypothesis.

Research Method
Case study has been used from qualitative research methods as a research method with the aim of examining data in more detailed and deeper way. Typical case sampling has been used from purposive sampling while determining study group. According to this research, two science and technology teachers who work at the same primary school in a good region from the socio-economical aspect have been selected. Structure validation has been increased by using more than one data type during in data collection (interview and observation). All the details regarding data collecting, assessment and accessing to the results have been explained in relevant sections of study to increase the internal validation and reliability.

Study Group
Huang and Li (2010) indicated in their studies that mathematics teachers' teaching experiences affect their educational choices. In this study, it was tried to identify the educational choices of two teachers with different teaching experience. Interviews have been made with science and technology teachers who work at state primary school in a good region from socio-economical aspects in a major city to determine the study group. During these interviews, the study group has been determined by considering following criteria:
- Are two teachers to be selected working at the same school?
- Are the durations of teaching experience of the two teachers to be selected different?
- Are two teachers to be selected giving lessons for 6th class pupils?
- Are the two teacher's degrees to be selected different?

Study group consists of two teachers who are voluntary within teachers whose answers to the questions above are yes. The teacher's situations consisting the study group have been given in table 1.

Table 1. General Feature of Teachers Consisting Study Group

Feature	T_1 (Teacher 1)	T_2 (Teacher 2)
Years teacher spent in teaching	20	5
Graduation from faculty/department	Science Literature /Biology	Education/ Science Teacher
School where they work	Identical	Identical
Class teacher gives lesson	6A	6B

Determination of Hypothesis with Anthropological Didactic Approach
According to anthropological didactic theory, study object (O) is "The concept of reproduction in human and animal within the knowledge of reproduction in living organisms in science and technology classes". "6-year Science and Technology Education at primary schools in Turkey" consists of institution (I). In addition, teachers whose case study has been carried out in depth consist individual (X). In study, from a wider perspective, object (O) has been accepted as Science Education (S) and when it was reduced to

particular it has been accepted as Reproduction Living Organisms (RLO). The institution (I) is the school where selected teachers work. Because of the noosphere of Turkish educational system, the effect of HSE exam (I_S) or programs (I_P) generally has been seen in the institutional relation regarding object of knowledge of schools. It could be said that the institutional relationship of school is convenient for that exam since selected school is based on a good region from socio-economical aspects.

Primarily, the personal relations of two teachers consisting study group to object of reproduction have been determined. This relationship for T_1 in general is R (T_1, S), and in particular it is R (T_1, RLO). For T_2, in general it is R (T_2,S), in particular it is R (T_2, RLO). The institutional relations for primary education where T_1 and T_2 work have been determined as R(I(T_1), S) and R (I(T_2), S).

As Chevallard explains in his theory, if it is accepted that teachers are good samples for their schools, it could be said that RT_1 and RT_2 are convenient to R ((I_S), S). According to this, it should be R (T_1,S) ~ R ((I_S),S) for T_1 and R (T_2,S) ~ R ((I_S),S) for T_2. According to theory, the personal relationship of an X individual to an O objects changes depending on p position on institutions to which it has personal relationship. For instance, we have an O object, an I institution and a p position on this institution. In this situation, there is an institutional relation belonging to O object (in this teacher's example) in the p position in I institution and p position is defined as RI(p,O). In this case, there are two possibilities (Chevallard, 1992):

- If RI(p,O) = Ø, I institution does not accept O object and X individual in the p position is not obliged to know O object.
- If RI(p,O) ≠ Ø, I institution accepts O object and X individual in p position is responsible for this object.

In this case, in order to be qualified as a good example of that institution, X has to have a personal relation close or very close to institutional relation which is determined by I institution for p position. So, if R(X,O) ~ RI(p,O), then X is a good example of that institution.

As a result, the relation between teachers T_1 and T_2 and "Science and Technology Education" should be convenient to institutional relation of exams as closed to institutional relation. According to theory, it should be described as R(T_1,S) ~ R(I_S, S) for T_1 and R(T_2,S) ~ R (I_S, S) for T_2. In this situation, it could be said that T_1 and T_2 have close or very close personal relation to institutional relations which is determined by I institution for p position and they are good examples of that institution as R(T_1,S) ~ RI(p,O) ve R(T_2,S) ~ RI(p,O).

The Evaluation and Collecting Data
Within qualitative research methods, observation and interview have been used since this study is convenient to the pattern of qualitative research. Before teachers consisting study group have been observed, the teaching criteria of "Reproduction, Growth and Development" has been determined. While determining criteria, the 2005 curriculum has been examined and its features have been revealed regarding the subject of "Reproduction, Growth and Development". It has been tried to reveal the choice of teachers by forming analysis charts according to determined criteria. In this way, it has been tried to reflect the relation between the choice and teacher's level of teaching. 11-hour-lesson of T_1 and 12-hour-lesson of T_2 from teachers consisting study group has been attended and recorded by a researcher and data has been analyzed through transcription of research records. Furthermore the researcher has taken notes during courses that he/she attended and data has been collected by making interviews with teachers. In this study, basically observations have been made and all the data has been collected during these observations. The lessons of each teacher were attended by researcher during the unit of growing and reproduction in living organisms for 6th class pupils and field study has been used within types of study which is not structured from observation technics (Yildirim & Simsek, 2003).

The data that has been obtained during lessons has been evaluated with qualitative data analysis methods by being examined according to the determined criteria. Content analysis has been carried out by evaluating data obtained observation and interview.

Records obtained from video camera have been analyzed by research in computer environment. Record obtained from the lessons of two teachers of the study group has been turned into text by using word program. The concepts that teacher use has been determined from these texts. In addition, method-technics and expressions that are used by teachers in lessons were determined in these records. The reliability of data has been guaranteed by matching records and notes that the researcher has taken in classes. With the teacher's interview, their opinions about sources that they used in the period of preparing the lesson were determined.

3. Results

Analysis of data about T_1 and T_2

Because of that socio-economical level of region, the school where teachers work has a higher average than the rest of Istanbul and relatively high HSE exam scores, it has been thought that a major part of pupils benefits from extra education program such as private courses, lessons, study centers, etc. Therefore, it could be said that teachers could stay under the influence of HSE exam as convenient to institutional relation of school in the education provided by teachers belonging to the study group. The expectation of T_1 and T_2 regarding teaching period is given in table 2.The resources of school where T_1 and T_2 work is above the overall. Although there are tools such as required equipment for tests, computers, videos, projectors, overhead projectors in science-technology laboratory, T_1 is not expected to apply often enough to these equipments with the reasons both with the HSE exam and that his graduation is Science-Literature Faculty, in other words, that he did not take his pedagogy education at the level of high education. On the other hand, since having graduation from Education Faculty, T_2 has a bigger chance to apply to equipment such as overhead projectors, test equipment, projectors.Since they are thought to stay under the influence of HSE exam, T_1 and T_2 are expected to apply the teaching strategy via a presentation during the lesson.

Table 2. The expectation towards the process of teaching of T_1 and T_2

	Expectation towards hypothesis regarding lesson of T_1	Expectation towards hypothesis regarding lesson of T_2
Class materials that are used for lesson preparation	Books for HSE Exam Preparation Teaching Books for Higher Education Text books for primary and secondary education	Books for HSE Exam Preparation Teaching Books for Higher Education Textbooks for primary and secondary education
Tools that are used during class	Blackboard Chalk	Experimental materials Computer Overhead projector Video Video projector
Method-technics that are used during class	Traditional lecture method Question- answer Computer Supportive Education	Traditional lecture method Question- answer Computer Supportive Education
The level/number of concepts that are used during class	More concept in number than textbook/ Higher level of concept than textbook	More concept in number than textbook/ Higher level of concept than textbook

In the light of video records, tools that are used during class and the method-technics and concepts that teachers use have been determined. Evaluation forms have been created in a way to contain the data of both teachers and to evaluate the data.

The Analysis of Concepts that T_1 and T_2 Use during Teaching

The map of concepts T_1 and T_2 use during teaching process has been revealed by analyzing video records. During the analysis of video records, speech of T_1, T_2 and pupils have been turned into texts. Transcripts were prepared in total of 11 classes for T_1 (11x40= 440 min.) and in total of 12 classes for T_2 (12x40=480). Analysis tables have been created about T_1 and T_2. These tables contain concepts that exist in textbooks which are prepared according to curriculum and are used by teachers during class through knowledge that are taught. The relation between curriculum via textbooks and concepts that T_1 and T_2 apply has been examined with the help of these tables. At the first column of the table, there are concepts that are determined by examining curriculum and benefiting literature on these subjects. By giving concepts that T_1 uses at the second column, that T_2 uses at the third column, existing on Textbook at fourth column, it has been targeted to mark concepts at first column with X according to the situation whether these concepts are or not. In addition, some concepts are shown with X* since they are explained in detail.

The Evaluation of Concepts That Exist In the Textbook and That T_1 And T_2 Use on the Subject of "Reproduction Growth Development in Humans"

The concepts that exist in textbooks and that were used by teachers about 'Reproduction Growth Development in Humans' were given in table 3. The number of concepts that T_1 uses is 30 and the number of that T_2 uses is 35. While the number of concepts that were used in textbooks is 28, each teacher as expected, has mentioned more concepts than the number of concepts that the textbooks contain.

Table 3. The concepts that exist in textbooks and that are used by T_1 and T_2 about "Reproduction Growth Development in Humans"

Concepts		T_1	T_2	Textbook
Reproduction	*Sexual Reproduction	X	X	X
	*Asexual Reproduction		X*	
	*Cell Division		X*	
Sperm	*Head	X*	X*	X*
	*Mid Piece	X*	X*	X*
	*Tail	X*	X*	X*
Oocyte		X	X	X
Penis		X	X	X
Testis		X	X	X
Ovary		X	X	X
Vagina		X	X	X
Uterus		X	X	X
Oviduct			X	
Vas deferans			X	
Seminal vesicle			X	
Fertilization		X	X	X
Zygote		X	X	X
Placenta		X		
Caesarean section		X		

Infertility			X	
Test tube baby		X		
Menopause			X	
Mono-dizygotic twins		X	X	
Ultrasonography		X	X	
Embryo	*Morula	X	X	X
	*Blastula			
	*Gastrula			
Family planning		X	X	X
Growth		X	X	X
Development		X	X	X
Maturation				X
Periods of development	*Infant	X*	X*	X*
	*Childhood	X*	X*	X*
	*Puberty	X*	X*	X*
	*Adulthood	X*	X*	X*
	*Old age	X*	X*	X*
Corporal change		X	X	X
Pscyhological change		X	X	X
Menstrual bleeding		X	X	X
Menstrual cycle		X	X	X
Follicular phase				
Luteal phase				
AIDS			X	X
Hepatitis B				X

Concepts that are used by T_1 and T_2 despite that they were not used in the textbook and that are not used by both teachers despite they were used in the textbook are given at table 4.The number of concepts that were used by both teachers despite these concepts were not used in textbooks is higher than the number of concepts that were not used by teachers despite these concepts were in use in textbooks. In addition, T_2 and T_1 have used more concepts than the book itself.

Table 4. The state of concept regarding Reproduction, Growth and Development in Humans

	The concepts that used by teacher but not exist in the textbook	The concepts that exist in the textbook but not used by teachers
T_1	* Placenta * Caesarean section * Test tube baby * Mono-dizygotic twins * Ultrasonography	* Maturation *AIDS * Hepatitis B
T_2	* Mono-dizygotic twins * Ultrasonography * Asexual Reproduction *Cell Division * Vas Deferans * Seminal vesicle * Oviduct * Menopause * Infertility	* Maturation * Hepatitis B

Evaluation on Subject of Reproduction Growth Development in Animals

Table 5. The concepts that exist in Textbooks and that are used by T_1 and T_2 about "Reproduction Growth Development in Animals"

Concepts		T_1	T_2	Textbook
Internal fertilisation		X	X	
External fertilisation		X	X	
Fertilisation		X	X	X
Internal Development		X	X	
External Development		X	X	
Development		X	X	X
Parental care		X	X	X
The form of birth	*Placental birth	X*	X*	X*
	*Birth from eggs	X*	X*	X*
Metamorphosis	*Frog	X*	X*	X*
	*Butterfly	X*	X*	X*
	*Fly	X*	X*	X*
Amphibians		X	X	X
Larvae		X	X	
Tadpole		X	X	
Young animal		X	X	X
Adolescent			X	X
Pupa				
Caterpillar				X
Pod		X	X	X
Veterinary		X		X

The concepts that exist in textbooks and that were used by teachers about 'Reproduction Growth Development in Animals' were given in table 5. The number of concepts is 18 by both teachers. As it was seen at table 6, concepts regarding with the subject of Reproduction, Growth, Development in Animals were taken in the same way by both teachers. While the number of concepts that are in textbook but not used by each teacher is the same, but they skipped a different concept for each.

Table 6. The state of concepts regarding Reproduction, Growth and Development in Animals

Teacher	The concepts that used by teacher but not exist in the textbook	The concepts that exist in the Textbook but not used by teacher
T_1	*İnternal fertilisation * External fertilisation * İnternal Development * External Development *Larvae *Tadpole	*Adolescent * Caterpillar
T_2	*İnternal fertilisation * External fertilisation * İnternal Development * External Development *Larvae *Tadpole	* Caterpillar * Veterinary

Table 7.The General Evaluation of Concepts That Exist in the Textbooks and That Are Used By T_1 and T_2 about 'Reproduction Growth Development in Humans and Animals'

TOPICS	The number of concepts that T_1 apply to	The number of concepts that T_2 apply to	The number of concepts that exist in the textbook
Reproduction Growth Development in Humans	30	35	28
Reproduction Growth Development in Animals	18	18	14
Total	48	53	42

While the number of concepts that are in textbook for two subjects mentioned above and that exists in the unit is 42 while this number for T_1 is 48 and for T_2 it is 53. It has been seen that T_1 and T_2 used the majority of concepts that are contained in the textbook; therefore they pay attention to curriculum. But it has been seen that they used the concepts that were not found in textbooks. The reason of that they used more concepts could possibly be their possibility of being asked in HSE exam is high.

As it is seen in data obtained observer's notes of researcher and video records, that T_1 and T_2 digress of text book on some topics and use some concepts despite they are stated as only for 7th and 8th class pupils shows that two teachers are under the influence of HSE exam. It might be suggested that one factor that leads this situation is that pupils who benefit extra teaching resources such as private course and lessons, study center etc. asked questions to their teacher during class regarding concepts there not found in the textbook.

The Choices of T_1 and T_2 during Teaching
Table 9. Methods-Technics that are applied to and tools that are used by T_1 and T_2 during the Teaching

	Feature	Video Records (T_1)	Video Records(T_2)
Tools That Are Used in Laboratory and Classes	Video projector	X	
	Scientific and teaching models		X
	Microscope	X	
Methods-Technics That Are Used	Traditional lecture method	X	X
	Discussion	X	X
	Case study		X
	Problem solving	X	X
	Group work	X	
	Brainstorming	X	X
	Research paper	X	X

As it was seen at table 9, T_1 has used projector and microscope on the contrary of expectations even if just a bit. On the other hand T_2 used only models while T_2 is expected to use more tools as a result of its formation. T_1 and T_2 gave lessons using almost similar methods and technics. While both teachers prefer traditional lecture method and discussion technics, T_2 have given place to sample events as differ from T_1 and T_1 has given place to group work as differ from T_2. It has been observed that both teachers prefer to give lesson using traditional methods generally using blackboard and chalk. It could be said that the reason of this is the effect of HSE exam.

The Analysis of Data of Interviews with T_1 and T_2

Table 10. The Sources That T_1 and T_2 Use in the Process of Preparation for Teaching

The sources that T_1 and T_2 Use in the Process of Preparation for Class	T_1	T_2
Textbook	X	X
Books for HSE Exam Preparation	X	X
Teaching Books for Higher Education		X
İnternet		X

At the end of the interviews with T_1 and T_2, they have stated that they used pupil books, homework books, teacher guide handbook, HSE exam preparation books (for T_1) and HSE exam preparation books, internet, higher education text books (for T_2) during period of class preparation. That the number of the concepts that are used by T_1 and T_2 use is higher than text book and curriculum supports this situation.

Table 11. General Evaluation

RESULTS							
Data Obtained from Video Records (Observation)						Data Obtained from Interviews	
The Number of Concepts (Teacher/ textbook)		Tools that are used		Method—technics that are used		Class materials that are used	
T_1	T_2	T_1	T_2	T_1	T_2	T_1	T_2
48/42	53/42	Projector, Microscope	Models	Traditional lecture method Discussion Problem Solving Brainstorming Research paper Group work	Traditionallecture method Discussion Problem Solving Brainstorming Research paper Case Study	textbook HSE Preparation Book	textbook HSE Preparation Book Degree books Internet

As it was summarized at table 11, that both teachers have given place more concepts than the content of the textbook, that they have given more detail to the subject, that they have used HSE exam preparation book together with textbook and that they have found textbook inadequate for HSE exam shows the effect of exam. In addition, it has been seen that they have given more importance to traditional methods and that they have used other methods curriculum offers less often. Again, it has been seen that they have not used often class tools despite their school has them. It has been seen that they have not used the class materials, methods and technics as often curriculum suggests during class observations. That they choice this shows that they care about a teaching for exam. In the light of all this data, it could be said that both teachers give teaching as convenient to institutional relation. On the teaching choice of teachers, the institutional effect of school is shown rather than the effect of difference between their degree education and the experience. As result, it has been seen that while the relation of teachers T_1 and T_2 between "Science and Technology Education" object are close to institutional relation and it is convenient to the institutional relation of exam. In study, according to theory, for T_1, the hypothesis $R(T_1,S) \sim R(I_S, S)$ and for T_2, the hypothesis $R(T_2,S) \sim R(I_S, S)$ have been verified. According to this, it has been revealed that

T_1 and T_2 have a personal relation which is close or very close to institutional relation determined by I institution for p position and that they are a good example of that institution as $R(T_1,S) \sim RI(p,O)$ and $R(T_2,S) \sim RI(p,O)$. That the education at degree level and duration of experience that teachers have seem to have significantly effected that they determined a difference style of teaching. It could be said that the institutional effect of school is much more determinative on the choice and style of teaching of both teachers.

4.   Discussion and Conclusion

The transposition of knowledge at schools is carried out by a series of subjects consisting of politicians, academicians and teachers under historical and institutional conditions which are not easy to discern at first glance. (Bosch &Gascón, 2006).

Riff and Durand (1993) state that teacher deals with a reality limited by complicated situations. Therefore, knowledge found within official documents accompanying programs as knowledge to be taught is not exactly the knowledge to be taught at class (Develay, 1992). Between knowledge to be taught and knowledge that is being taught, there is a distinction affected by didactical studies and teacher makes this distinction by inspiring from students' skills, the instructions of his/her inspectors and his/her professional experience. (Mouly, Genet-Volet&Amade-Escot, 1995).

Abrougui (1997), has revealed in his study that multi-factors have been influential on the notions of student and teacher regarding human genetics and that the affect of school and its social environment have been seen.

In this study, it is revealed that the institutional affect of school is determinative on teachers. As it is in this study, in Yildirim (2008) study, it has been revealed that the personal relation of teachers who were exposed to different institutional relation at different schools was convenient to the institutional relation of institutions where they work now in a way to support the results of this study. Again, in a way to support the result of Ozgur's (2004) study, the teacher who works at a school whose HSE exam scores are lower adopts a style of teaching that follows curriculum and that teacher who works at a school whose HSE exam score is higher follows a style of teaching based on exam itself.

At the result of this study, in particular it has been suggested;
- that the content of exam programs and curriculums should be parallel by avoiding that worrying for success at exams such as HSE exam effects the teacher by determining the content of teaching.

- that the high importance of exams such as HSE exam on teachers effects them by determining the content of teaching should be revealed and therefore, since this effection leads opportunity inequality, authorized person and institutions should prepare curriculums and built the control mechanisms of internal class practice by giving more attention and considering these results.

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