TÜRK FEN EĞİTİMİ DERGİSİ
Yıl 7, Sayı 3, Eylül 2010

Journal of
TURKISH SCIENCE EDUCATION
Volume 7, Issue 3, September 2010

http://www.tused.org

Science Process Skills Levels of Primary School Seventh Grade Students in Science and Technology Lesson

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Received: 13.03.2009 **Revised:** 02.08.2010 **Accepted:** 12.08.2010
The original language of article is English (v.7, n.3, September 2010, pp.15-28)

ABSTRACT

The aim of this study was to determine the science process skill achievement level of primary school seventh grade students in a Science and Technology lesson and relations among academic background of the parents, monthly income of the parents, having a computer, having own room and students' science process skill levels. To this end, "Science Process Skills Test (SPST)" was prepared and used as a data collection means by the researchers. The Cronbach Alpha reliability coefficient of the test was found 0,88. The sample of the study consists of 828 seventh grade students from 21 primary schools which are choosen by chance from Kocaeli Province Center (within Turkey). Scanning model has been used in the study. The data were analyzed by using frequency, percentage, arithmetic average, standard deviation values, and t-test and ANOVA analyze techniques. According to the research findings, it was found that students' science process skill levels were in middle level. As a result, primary school seventh grade students' science process skill levels did display differences according to parents' academic background, their monthly income, having a computer, having own room, but the students' SPS do not change in terms of gender.

Key Words: Science and Technology Lesson; Science Process Skills, Seventh Grade Primary School Students

INTRODUCTION

In this day and age, which is the information era, the main aim of the education is to show the accession ways of knowledge to the students rather than transforming the existing knowledge. Thus, the person learning by comprehending can improve his Science Process

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© ISSN:1304-6020

*This study includes a part of the master thesis of Nurhan ÖZTÜRK which has been handled by the counselling of Özden TEZEL and M.Bahaddin ACAT in 2008.

Skills (SPS) and solve the problems which encountered in new situations. SPS provide students to learn by doing, experiencing and associating science subject with daily life. SPS are skills which make the learning in Science and Technology lesson easy, develop students' curiosity and make them active, introduce the laboratory atmosphere by driving the students to make research and facilitate to convey the learning from Science and Technology lesson to the real life.

SPS are skills which we use to create information, think on problems and formulate the results. These skills are used by the scientist during their studies. We can make them learn and understand their life by enabling the students gain these important skills. These skills are fundamental of the thought and research in the science content (Erdoğan, 2005).

When the literature has been examined, it is seen that the researchers approached SPS differently. Monhardt and Monhardt (2006) claimed that these skills get the students learn thinking like scientist. SPS have been defined by Çepni et al., (1997) as basic skills which facilitate learning in science, make students active, improve the feeling of taking responsibility in their own learning, raise the stableness of the learning, and also show research methods and ways.

Aydoğdu (2006) describes SPS as basic skills which facilitate learning, and, teaching discovering methods, make students active, improve their responsibilities and help them to understand practical studies. Aydoğdu indicates that these skills are dominantly used in the laboratory. In the Science and Technology lesson curriculum, the SPS have been defined as thinking skills which are used by scientist creating information, thinking on the problems and formulating the results (MEB, 2006).

SPS help children to learn the nature of the science well, contribute to their mental growth positively. These skills are used and needed in every part of the daily life. For example, a farmer can try out to take efficiency from his field by forming hypothesis and testing it though he has not take any science training. A financial councilor can make a prediction and draw graphic in order to predict the exchange rate. A conscious consumer, is an individual whose observation skill is developed, can use deduction and data explication appropriately (Tan & Temiz, 2003).

One of the most important reasons to teach children science is that they can obtain knowledge and skills which they can use for life by learning science. Also, they can attain with science skills like improving creative and critical thinking skills, making the conceptual systems understandable which consist of the base of the science thoughts, understanding the process dimensions of the science, improving the self confidence in understanding the questions and the problems, having the ability of analyzing the answers and solutions. Developing attitudes such as sensitivity about environment problems and curiosity of the children is possible with science teaching (Yılmaz, 2005).

SPS have been a major theoretical force in science education. Whether the argument is philosophical or practical, the solution is usually the same; SPS need to be strongly emphasized in elementary, middle, and secondary science curricula and classrooms (Padilla & Okey, 1984).

The purpose of this study is to identify seventh grade students' SPS achievement levels in Science and Technology lesson and to explore the effects of personal features on students' SPS. The study tries to answer the following research questions:

1. How are primary school seventh grade students' SPS achievement levels in Science and Technology lesson?
2. Whether primary school seventh grade students' SPS achievement levels in Science and Technology lesson differentiate according to;

a. Gender,
b. Mother's education background,
c. Father's education background,
d. Parents' income,
e. Student's owning a computer,
f. Student's owning a room at home?

METHODOLOGY

In this study relational survey model was used, because it was thought that relational survey model would be suitable for addressing the research questions. The investigated SPS in the present study are: Observation, Classification, Variable Definition, Prediction, Measure and Data Explication, Number and Space Relations, Formulating Hypothesis, Decisions, Modelling, Changing Variables and Controlling, Recording Data, Experimenting, and Inference. These skills are decribed as below:

Observation: Observation is known as a common technique for collecting information which has been used in all disciplines. Observation is to determine the properties of a situation or an object by using any of the sensory organs. Making observation takes place on the basis of the SPS.

Classification: Classification is grouping the defined criteria of the objects or events according to the similar or different groups by using some methods and system. The previous knowledge of the students is important in classification skill (Tatar, 2006). By this way, students can make relation between previous knowledge and faced new concepts.

Identifying Variables: This process includes recognition of the features of the factors or components of the event, which varies or not in different circumstances. Identifying of variables, states all the factors that can affect the experiment. Identifying of variables process is in the core of the making experiment (Çepni et al., 1997).

Predicting (Guessing before): Predicting is to guess the most likely outcome of a future event based upon a pattern of evidence (Tatar, 2006).Science research is a process of consistent guessing, and data are collected in order to disprove or support the guess. And for this process experiment or observation is used (Tan & Temiz, 2003).

Measurement and Data Explication: Measurement is the conversion of the observation into quantitative data. The comparison and counting are the simplest way; it includes the use of units in order to determine the measurable quality, capacity, time and mass of the linear dimension. Measurement knowledge is a critical factor in learning and it does not develop without experiment. Data explication includes seeing the relation between events or facts by organizing and analyzing the acquired data (Çepni et al., 1997).

Number and Space Relations: In learning processes of space, students try to describe and understand the objects according to plane and three dimension shapes. Students who have gained these skills can understand abstract concepts better. They can revive the possible shape of the substance in their mind and think their three dimension shapes.

Formulating Hypothesis: Hypothesis is a proposal whose accuracy has not been proven, but based on scientific proves. Hypothesis is used to create theory and law. Hypothesis usually focuses on the experiment. Also, hypothesis gives a hint about method which will be used in an experiment (Çepni et al., 1997).

Making Decision: This process includes reaching a result by using all the basic processes mentioned. Here, the decision of a problem must be investigated. A decision can be reached by using research methods (Çepni et al., 1997).

Formulating Models: This process of information or data; with graphic, shape or tables includes arrangement appeal to sensory organs. Student whose formulating model skill is developed cannot think up the models in order to explain the relations among events, objects and thoughts.

Changing and Controlling Variables: In most of scientific research the events which influenced the variables are researched and tried to find the impact of the variable on another variable (Tatar, 2006).

Recording Data: To be able to reach the results from the experiments, it is necessary to save the data. The data is saved like charts, tables, graphics, histograms, models or other regulatory form (Çepni et al., 1997).

Experimenting: This process skill includes many other process skills. The main point of making experiment is to establish correlation between variables by setting up a hypothesis and with the help of it. Extract and test predictions, identifying variables, editing the collected information, using variables, and controlling are determination of the system's limits, sub-systems, components, inputs and outputs, variables which are open to change through the interaction (Erdoğan, 2005).

Inference: Inference is formulating assumptions or possible explanations based upon observations or experiences. How much the observations are better so the results will be certain. In this study, it was thought that survey method would be suitable for determining the existing students' science process skill achievement levels.

a. Sample: The population of this study consists of seventh grade students from primary schools which are bound to Kocaeli National Education Directory. The population consists of 110 primary schools. There are total 7787 seventh grade students in the population. It is seen that 828 students are enough for representing the population with 0, 05 tolerance. The sample consists of seventh grade students from 21 primary schools which are choosen by chance from Kocaeli Province Center.

b. Data Collecting Means: SPS test which consisted of 26 questions was prepared for the students as a data collecting mean for this research. Expert opinions were taken for every question while they were having prepared, necessary arrangements were made and availability of the test was determined for being used. The Cronbach Alpha reliability coefficient of the test was found 0,88. SPS test consists of questions related to observation, classification, variable definition, prediction, measure and data explication, number and space relations, formulating hypothesis, decisions, modeling, changing variables and controlling, data recording, making experimenting and inference skills.

The personal information form which was prepared by the researchers, consists of 6 questions related to personal information, gender, mother education background, father education background, parents' income, having a computer and having own room. This form takes places in the SPS test.

c. Collecting the Data: SPS Test and the Personal Information Form were applied to the students by the researchers with the permission document taken from the Kocaeli Province National Directory. The implementation was done in the second term of 2007-2008 academic years, during two weeks between 26 February-7 March 2008 at Science and Technology lesson.

d. Analyzing the Data: In the first phase of the data analysis the status of the sample according to personal information was evaluated. For this, in the tables average scores related to variable level and standard deviation of them were referred. The data analysis was done by using SPSS 13.0 statistic program. In the prepared questions about the scientific process the scoring was set as true (1) and false (0). The total score for the entire test is 26. The total score for each skill is up to the number of questions that belong to it. The scientific process skill levels of the students were evaluated both over the total of all skills and by taking the average of the answers on individual skills. The questions on "scientific process skills test" answered by the students consisted of 26 questions; arithmetic mean, minimum-maximum scores and standard deviation values of the answers were calculated. Also, the frequency (f), percentage

(%), average (M) and standard deviation (SD) values of the students' answers of the question related to thirteen skills were calculated. In the test which was prepared to determine thirteen different skills level of the students, there are two questions for observation, classification, identifying of variables, predicting, measurement and data explication, number and space relation, formulating hypothesis, formulating models, changing and controlling variables, recording data, and experimenting; there are three questions for making decision and there is one question for inference skill. The average of the answers which was given to the questions prepared on thirteen skills was found over the number of questions. In the second phase on the scientific process skills levels; in order to determine whether or not there are differences in terms of the mother and father educational status and total family income status, one-way variance analysis (ANOVA) was used. As a post-doc analysis of ANOVA, Tukey multiple comparison tests were used in order to determine the differences on the groups whose number is more than two. T-test was used to determine whether differences occur between the groups according to students' gender, having a computer and having their own room in terms of scientific process skill levels.

FINDINGS

1) Primary School Seventh Grade Students' SPS Level

In the questions about the scientific process the scoring was set as true (1) and false (0). The total score for the entire test is 26. The total score for each skill is up to the number of questions that belong to. The scientific process skill levels of the students were evaluated both over the total of all skills and by taking the average of the answers on individual skills. As regards to scores of students' receive from the total of all the answers to questions on "scientific process skills test" which consists of 26 questions; arithmetic mean, minimum-maximum scores and standard deviation values were given in Table 1.

The arithmetic mean of the students' answers regarding the SPS test is 15, 39. According to these data it can be said that the students' SPS achievements are in the middle level.

Table 1. *Arithmetic Mean Score, Minimal-Maximum Points and Standard Deviation Values Related to Total Science Process Skills*

	f	M	Minimal	Maximum	S.D.
The Total of Skills	828	15,39	2,00	26,00	4,671

Also, the frequency, percentage, average and standard deviation value of the students' answers of the question related to thirteen skills were given in Table 2. The average scores of the answers related to thirteen skills were found over the number of questions. When Table 2 is examined, the mean score of the answers about observation is 1,51 on 2 points. According to this finding, it can be said that the students' observation skill has been achieved at high level.

The mean score of the answers about classification is 1,48 on 2 points. According to this finding, it can be said that the students' classification skill has been achieved at high level.

The mean score of the answers about variable definition is 1,02 on 2 points. According to this finding, it can be said that the students' variable definition skill has been achieved at middle level.

The mean score of the answers about prediction is 1,11 on 2 points. According to this finding, it can be said that the students' prediction skill has been achieved at middle level.

Table 2. *Frequency, Percentage, Mean and Standard Deviation Values of the Answers Given to Questions Related to Skills*

SKILLS	QUESTIONS	DISTRIBUTION	f	%	M	S.D.
Observation	1	True(1)	677	81,8	1,51	0,64
		False(0)	151	18,2		
	13	True(1)	581	70,2		
		False(0)	247	29,8		
Classification	3	True(1)	565	68,2	1,48	0,65
		False(0)	263	31,8		
	10	True(1)	667	80,6		
		False(0)	161	19,4		
Variable Definition	6	True(1)	473	57,1	1,02	0,76
		False(0)	355	42,9		
	24	True(1)	376	45,4		
		False(0)	452	54,6		
Prediction	5	True(1)	427	51,6	1,11	0,70
		False(0)	401	48,4		
	20	True(1)	498	60,1		
		False(0)	330	39,9		
Measure and Data Explication	2	True(1)	627	75,7	1,46	0,68
		False(0)	201	24,3		
	18	True(1)	582	70,3		
		False(0)	246	29,7		
Number and Space Relations	4	True(1)	494	59,7	1,07	0,73
		False(0)	334	40,3		
	11	True(1)	395	47,7		
		False(0)	433	52,3		
Formulating Hypothesis	16	True(1)	588	71,0	1,21	0,75
		False(0)	240	29,0		
	22	True(1)	421	50,8		
		False(0)	407	49,2		
Decision	23	True(1)	690	83,3	1,73	0,88
		False(0)	138	16,7		
	25	True(1)	313	37,8		
		False(0)	515	62,2		
	26	True(1)	436	52,7		
		False(0)	392	47,3		
Modeling	14	True(1)	706	85,3	1,48	0,64
		False(0)	122	14,7		
	21	True(1)	525	63,4		
		False(0)	303	36,6		
Changing Variables and Controlling	15	True(1)	141	17,0	0,52	0,61
		False(0)	687	83,0		
	17	True(1)	293	35,4		
		False(0)	535	64,6		
Recording Data	12	True(1)	710	85,7	1,59	0,63
		False(0)	118	14,3		
	19	True(1)	610	73,7		
		False(0)	218	26,3		
Experimenting	7	True(1)	321	38,8	0,82	0,72
		False(0)	507	61,2		
	8	True(1)	365	44,1		
		False(0)	463	55,9		
Inference	9	True(1)	262	31,6	0,31	0,46
		False(0)	566	68,4		

The mean score of the answers about measure and data explication is 1,46 on 2 points. According to this finding, it can be said that the students' measure and data explication skill has been achieved at high level.

The mean score of the answers about number and space relations is 1,07 on 2 points. According to this finding, it can be said that the students' number and space relations skill has been achieved at middle level.

The mean score of the answers about formulating hypothesis is 1,21 on 2 points. According to this finding, it can be said that the students' formulating hypothesis skill has been achieved at middle level.

The mean score of the answers about decision is 1,73 on 3 point. According to this finding, it can be said that the students' decision skill has been achieved at middle level.

The mean score of the answers about modeling is 1,48 on 2 points. According to this finding, it can be said that the students' modeling skill has been achieved positively.

The mean score of the answers about changing variables and controlling is 0,52 on 2 points. According to this finding, it can be said that the students' changing variables and controlling skill has been achieved at low level.

The mean score of the answers about recording data is 1,59 on 2 points. According to this finding, it can be said that the students' recording data skill has been achieved positively.

The mean score of the answers about experimenting is 0,82 on 2 points. According to this finding, it can be said that the students' experimenting skill has been achieved at low level.

The mean score of the answers about inference is 0,31 on 1 point. According to this finding, it can be said that the students' inference skill has been achieved at low level.

When all of the skills are examined it is seen that the maximum point is at data recording skill with 1,59 on 2 points and the minimum point is at changing variables and controlling skill with 0,52 on 2 points. By considering these findings it is seen that the students' data recording skill is in the highest level and their changing variables and controlling skill is in the lowest level.

2) The Differentiation Situation of Students' SPS Achievement Level in Science and Technology Lesson According to Gender

Table 3. *The Findings Related to Difference between Female and Male Students' SPS* ***(*p<0.05)***

GENDER	f	M	S.D.	t	Sig.
Female	402	15,67	4,512	1,716	,086
Male	426	15,11	4,806		

The results of t-test which was used to determine whether differences occur in students' scientific process skill levels according to students' gender were given in Table 3. This test was performed using the average of the total science process skills.

As shown in Table 3, there is no significant difference (p>0,05) between the male and female students' total SPS scores. That finding shows that the students' science process skill levels do not differentiate meaningfully in terms of gender.

3) The Differentiation Situation of Students' SPS Achievement Level in Science and Technology Lesson According to Mother Academic Background

The results of variance analysis (ANOVA) which was used to determine whether differences occur in students' science process skills in terms of mother academic backgrounds are presented in Table 4.

Table 4. *The Findings Related to Students' SPS in Terms of Mother Academic Background* ***(*p<0,05)***

		Sum of Squares	df	Mean Square	F	Sig.	Difference Between Groups
THE TOTAL OF SKILLS	Between Groups	1444,367	3	481,456	23,895	,000	primary-high school
	Within Groups	16602,632	824	20,149			primary-university
	Total	18046,999	827				secondary-university
							high school-university

According to Table 4, it is seen that the level of students' science process skill differentiate significantly in terms of mother academic background. According to Tukey test results which was done to determine the difference, it is seen that there is differentiation in favor of ones whose academic level is high between the group of where mother academic level is lowest and the group of where mother academic level is highest. When this is taken into consideration it can be said that while mother academic level increases, the students' science process skill levels also increase.

4) The Differentiation Situation of Students' SPS Achievement Level in Science and Technology Lesson According to Father Academic Background

The results of variance analysis (ANOVA which was used to determine whether differences occur in students' science process skills in terms of father academic backgrounds are presented in Table 5.

According to Table 5, it is seen that the level of students' science process skill differentiate significantly in terms of father academic background. According to Tukey test results which was done to determine the difference, it is seen that there is differentiation in favor of ones whose academic level is higher than the group where the father academic level is high between the group of where father academic level is lowest and the group of where father academic level is highest. When this is taken into consideration it can be said that while father academic level increase, the students' science process skill levels also increase.

Table 5. *The Findings Related to Students' SPS in Terms of Father Academic Background* ***(*p<0,05)***

		Sum of Squares	df	Mean Square	F	Sig.	Difference Between Groups
THE TOTAL OF SKILLS	Between Groups	2122,434	3	707,478	36,608	,000*	primary-high school
	Within Groups	15924,565	824	19,326			primary-university
	Total	18046,999	827				secondary-university
							high school-university

5) The Differentiation Situation of Students' SPS Achievement Level in Science and Technology Lesson According to Parents' Income

The results of variance analysis (ANOVA) which was used to determine whether differences occur in students' science process skills in terms of parents' income are presented in Table 6.

Table 6. *The Findings Related to Students' SPS in Terms of Parents' Total Income* **(*p<0,05)**

		Sum of Squares	df	Mean Square	F	Sig.	Difference Between Groups
THE TOTAL OF SKILLS	Between Groups	1604,138	3	534,713	26,796	,000*	0–400 / 401–750 0–400 / 751–1500
	Within groups	16442,861	824	19,955			0–400 / 1500 and more 401–750 / 751–1500
	Total	18046,999	827				401–750 / 1500 and more 751–1500 / 1500 and more

According to Table 6, it is seen that the level of students' science process skill differentiate significantly in terms of parents' income. According to Tukey test results which was done to determine the difference, it is seen that there is differentiation in favor of ones whose parents' income is high between the group of where parents' income is low and the group of where parents' income is high. When this is taken into consideration it can be said that while parents' income increases the students' science process skill levels also increase.

6) The Differentiation Situation of Students' SPS Achievement Level in Science and Technology Lesson According to Having a Computer

The results of t-test which was used in order to determine whether there is a difference in students' science process skills in terms of having a computer by the students. are presented in Table 7. T-test was performed using the average scores of the total science process skills.

According to Table 7, t =6,168, it was found a significant difference between the students' SPS of whom have computer or not at p< 0,05 importance level. That finding shows that the students' science process skill levels do differentiate significantly according to having a computer. According to the t-test results which were done to determine the difference, it is seen that there is differentiation in favour of ones who have computer.

Table 7. *t-Test Results of Total Scores of the Students' SPS According to Having Computer* **(*p<0,05)**

HAVING COMPUTER	f	M	S.D.	t	Sig.
Yes	570	16.04	4.694	6,168	,000*
No	258	13.93	4.281		

7) The Differentiation Situation of Students' SPS Achievement Level in Science and Technology Lesson According to Having Own Room

The results of t-test which was used in order to determine whether there is a difference in students' science process skills in terms of having their own room by the students are presented in Table 8. T-test was performed using the average scores of the total science process skills.

Table 8. *t-Test Results of Total Scores of the Students' SPS According to Having Own Room*

HAVING ROOM	f	M	S.D	t	Sig.
Yes	546	16.16	4.645	6,753	,000*
No	282	13.90	4.360		

*p<0,05

According to Table 8, t =6,753, it was found a significant difference between the students' science process skills of whom have own room or not at p < 0,05 importance level. This finding shows that the students' science process skill levels do differentiate significantly according to having an own room. According to the t-test results which were done to determine the difference, it is seen that there is differentiation in favor of ones who have own room.

DISCUSSION

According to the research findings, it was found that students' science process skill levels were at middle level when they are considered totally. Accordingly, it can be said that the scientific process skills are gained . While this finding shows parallelism with Aydınlı's (2007) research results, it does not fit with the Aydoğdu's (2006) and Temiz and Tan's (2003) research results. These differences in the level of scientific process skills by years can be explained with changing training programs conducted by NEM and giving more places to them in educational process.

According to the research findings, a significant relation between female and male students' science process skill levels has not been found when the SPS are considered totally. However it seen the mean science process skills scores of the females is higher than those of the males. This finding suits with Arslan's (1995) study which was done on primary students by not finding difference between female and male SPS. In his study Aydoğdu (2006) states that there is not any difference between female and male students' science process skill points, but male students take higher arithmetic scores than females from science process skill test. In his study Tatar (2006) states that there is not any significant difference in students' science process skills according to gender. In Walters and Soyibo (2001) study it is not found a significant relation among students' explicating data, recording data, generalization, formulizing hypothesis and variable definition skills points, and gender. These findings support each other. Finally, it can be said that female and male students' science process skill acquisition are close to each other. But, in Aydınlı's (2007) study it is found that females have higher point than the males when the science process skill mean points are taken into consideration.

According to the research findings it is found that students' science process skill level differentiate according to mother academic background when the SPS are considered totally. According to this finding it can be said that students whose mother academic level is high have high SPS. According to Aydogdu's (2006) and Aydın's (2007) studies, testing points of students' scientific process skills differentiate significantly according to their mother and father's educational levels. By considering the previous research, it can be concluded that students' scientific process skills changes according to the mother and father's educational level. Therefore, students' different life styles due to changing socio-economic variables should be taken into account by schools and the educational activities, and these activities should be organized accordingly.

According to the research findings it is found that there is differentiation in favour of ones whose parents' income is high between the group of where parents' income is low and the group of where parents' income is high when the SPS are considered totally. According to this finding it can be said that students whose parents' income is high have high SPS. This result coincides with Aydoğdu's (2006), Başdağ's (2006) and Aydın's (2007) research results. Aydogdu (2006), Başdağ (2006) and Aydınlı (2007) state that students' basic and scientific process skills change significantly according to family income in their studies. The finding of the research coincides with Walters and Soyibo (2001) and Arslan's (1995) research results.

According to the research findings it is found that there are significant differences among students' observation, classification, variable definition, measure and data explication, number and space, formulating hypothesis, decision, modeling, recording data and inference skill levels and having a computer. In Aydoğdu's (2006) study students' points taken from science process skill test differentiate significantly according to having a computer.

According to the research findings it is found that there is a differentiation about students' science process skill levels in favour of students who have own room when the SPS

are considered totally. Thus, having own room which is one of the socio-economic level indicators shows that there is a relation between opportunities offered to students and development of these skills.

CONCLUSION

1. It is seen that seventh grade students' inference skill is in the lowest level and observation skill is in the highest level. When the SPS are taken into consideration totally, it is seen that students can achieve above half of the SPS. This shows that students' SPS are above middle level.

2. It is not found a significant difference between female and male students' science process skill levels.

3. It is determined that students' science process skill levels differentiated according to mother and father academic background. While mother and father academic level increases the students' science process skill levels also increase.

4. When students' SPS are taken into consideration it is seen that there is a differentiation in favor of ones whose parents' income is high between the group of where parents' income is low and the group of where parents' income is high.

5. It is found that the difference students' science process skill levels in terms of students' having their own room and a computer is in favor of those who have these opportunities.

IMPLICATIONS

1. Students should be given opportunities to make more experiments in Science and Technology lesson to improve their inference skill because students have the lowest mean scores in inference skill.

2. It should be created debate atmosphere by using question answer technique between students after making experiments to decide what the variables of the experiment are, how they can control these variables and how to make inferences. In order to increase students' science process skill levels different teaching methods should be applied and it should be given more places to needed equipments.

3. In order to improve science process skills of the students who are in low socio-economic region, the support should be given to these students through activities done in extracurricular time by the schools

4. Parents should be made conscious of point about enriching the non-school experience.

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