How to Improve Effectiveness in Public Schools

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Abstract: The aim of this study is to search effectiveness level of the primary schools, to examine the relationships between the levels of effectiveness and to study whether there is a meaningful relationship between independent factors and level of effectiveness or not. Inputs, climate, teaching, conditions and outputs are taken into consideration as the factors of the effectiveness. While the level of the effectiveness in the primary schools is found in medium level in the sample of 25 primary schools but mean levels are different. Meaningful differences are observed in some of the independent factors. The relationships between some factors are determined as strong positive in coefficient Pearson Correlation.

Introduction

The researches on the school effectiveness started to find out an answer to the question of "how can we use the facilities of schools to increase the success of students?" at the beginning. How the schools could be more productive and increase their success by using their facilities was discussed. The studies focused on the effectiveness of schools because of the failures of schools and the failures of preparing the students to the society. The indirect pressures held by the politicians, local governors and parents on the schools led to an increase in the numbers of school effectiveness researches (Bergin and Solman, 1995).

Today's schools are very beyond the classical view. The function of today's school can be described as humanistic, social, cultural and educational (Cheng, 1996; Şişman, 2002). By the global developments, international competitiveness, economic relationships and the rapid changes in the information fostered changes in the structure and running of schools. The schools are affected from these external improvements. That is why, the schools must not deny the global goals of international relationships.

Educational reformists, politicians and the school management specialists always have always been interested in the successes of the schools and constructing them better as much as possible. (Balcı, 2002).

The researches on the effectiveness of schools are closely related with the educational system in both developed and developing countries. The evaluations on the effectiveness of the schools between the locally and centrally governed are expected to be different (Schiefelbein, 2000).

The self improvements and managements of the schools are affected negatively in the countries having strong central governments, since the schools are expected to overcome the standards of central governments. It is inevitable that there are different school effectiveness evaluations between the locally governed schools and school based ones. The schools strictly dependent on central government are resembled to a plaything from a

distance. The successful results of school effectiveness are seen on school based systems (Gamage, Sipple and Partridge, 2002).

The schools can represent their authentic characteristics and carry out best management styles and effective works in school based approach (MacBeath and Mortimore, 2001). Private schools like public ones can be regarded as more lucky in the implementation of effectiveness. Besides, being independent in private schools with more competitiveness and market oriented schools are in the competition of offering best service to the students and consequently to their parents. Having autonomous structures in the management of schools increase their effectiveness (MacBeath and MacCall 2001, Bedi and Garg, 2000). Thus, the effectiveness of private schools are higher than the publics.

Factors of Determining School Effectiveness

In this research 18 key factors are used to evaluate the effectiveness of the schools. Factors are divided into five categories related to each other. School inputs come into system influenced by the educational, cultural, economic and politic factors.

This study was implemented to evaluate the effectiveness of public primary schools in Turkey which is a developing country with a very strong central government and not willing to transfer the power to the schools. Despite the lack of political pressures on school effectiveness, parents have some complaints about the schools for preparing the students insufficiently to the society. The government has been struggling to solve the problems about the quantity before the quality. Because the number of the students in the classrooms is more than 40's and binary education is very common. The business of the schools can be seen as a very important barrier in school effectiveness studies.

Designing a continuous improvement is significant to change the structure of today's schools for effectiveness (Zamuda, Kuklis, Kine, 1996). The partial implementations and changes do not achieve the desirable outcomes. There is a strong relation with the existing culture and school effectiveness (Cheng and Wong, 1996). So the existing culture must have the characteristics of self renovation and development.

The aim of this study is to determine the effectiveness level in primary schools and to research the intensity of the relation between the dimensions and to find out if there is a relation between the independent factors and the dimensions of effectiveness.

Method

This is a descriptive research and the survey of effectiveness was used as a survey instrument. The instrument was applied on 25 public primary schools and 20 teachers participated voluntarily in each school to the scope of the research. Firstly, the teachers were trained for the aim of the instrument and how to handle it. These teachers applied the questionnaire questions to the 20 voluntary teachers in their schools. They gave the questionnaires to the voluntary teachers by explaining the rules for the application. Later, they collected the

questionnaire by giving academic support in case of necessity. 468 questionnaires of the total 500 were collected back available.

Questionnaire form including 50 items was applied to the voluntary teachers. Questionnaire form contains five sections except demographic information part: inputs, climate, teaching-learning process, conditions and outputs. The answers to the questionnaire were examined generally and later analyzed as for dimensions, means, frequencies and the percentages. The correlation among the dimensions was analyzed by determining their effectiveness levels after T-Tests and Anova Tests about gender and similar factors.

Result

Kocaeli City is the targeted population of the research. 500 of the 2000 total primary school teachers in the city participated randomly as a sample. The differences in the rates of teachers according to the gender are close to the each other. % 50.4 of the sample is female and % 49.4 is male (Table I). The range in age group is between 28-33 with the frequency of % 35.5. 22-27 age interval followed this group with frequency of % 25. As it seen on the table I, the teachers participated in the research are relatively young. As to the occupational experience, the rate of 1-5 year interval is % 36.8. The experienced teachers with 6-10 years are in the rate of % 31. According to this data, the teachers participated in the research have the experience of more than 1-10 years in % 60.

Variables	**F**	**%**
Gender		
Female	**236**	**50.4**
Male	**232**	**49.6**
Age		
22-27	**117**	**25.0**
28-33	**166**	**35.5**
34-39	**85**	**18.2**
40-45	**51**	**10.9**
46-above	**49**	**10.5**
Branch		
Pr	**179**	**38.2**
Science and Math Branch	**85**	**18.2**
Social Sciences	**138**	**29.5**
Fine Arts	**30**	**6.4**
Other	**36**	**7.7**
Job Experience		
1-5	**172**	**36.8**
6-10	**145**	**31.0**
11-15	**56**	**12.0**
16-above	**95**	**20.3**

Tablo I. Frekance and Percentage of Independent Variables by Gender, Age, Branch,

Experience

The studies about school effectiveness were held on five dimensions. These dimensions: school inputs, school climate, conditions, outputs of learning-teaching process and the outputs of this process. The three of the five dimensions were divided into sub-dimensions among each other. School inputs were examined in the sub-titles of "support of parents and environment", "support of educational system", and "sufficient material support". The dimensions of school climate were examined in the sub-titles of "the expectation from the students", "positive teacher behaviors", "order and discipline", "schedules", and "rewards and reinforcements". Finally, conditions were examined in the sub-titles of "effective leadership", "qualified teacher power", "flexibility", and "autonomy". Learning-teaching process and process outputs were taken up as a single dimension.

The highest effectiveness level is in "conditions" with the mean of 3.29 on 5 (Table II). Following the mean of conditions, learning-teaching process is the second highest one with the mean of 3.22, school climate mean is 2.87, school inputs mean is 2.86 and school outputs mean is 2.81. The average mean was found as 3.01 (Table II). The effectiveness level of schools is seen as average from the obtained data. Especially, learning-teaching process, school climate and the process outputs are found below the average. The lowness in the school inputs can be explained with the lack of sufficient support from the parents and environment, the problems in the relations between school, parents and environment, unsuitable educative conditions of educational system and insufficient support of material for educative purposes.

The lowness of effectiveness level in school climate can be explained as the lack of qualitative schedules for the teachers and students needs, the communication problems between teachers and students, discipline problems in class and school level, old schedules, insufficient rewards and reinforcements for students and teachers.

The lowness in educative conditions can be stem from ineffective leadership, inflexibility of working conditions and compulsion.

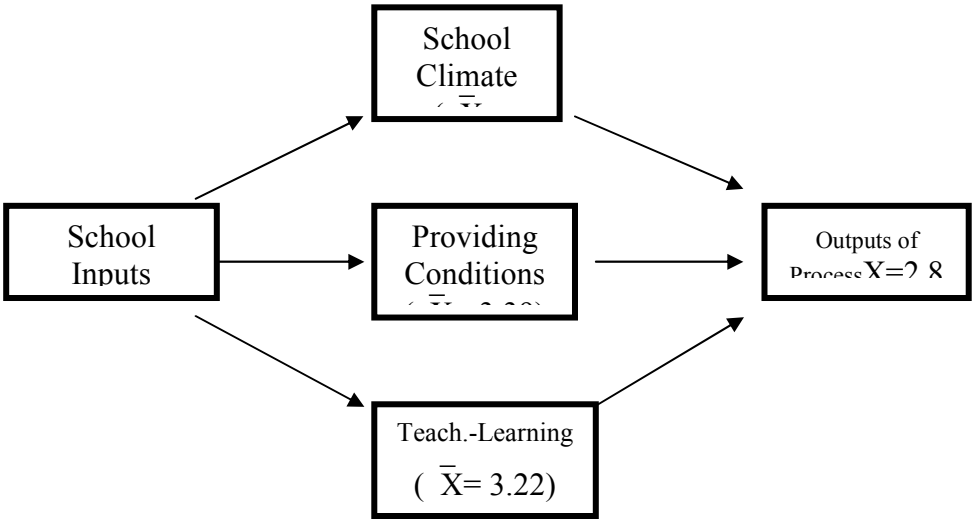
The lowness in the learning-teaching and process outputs can be result from the poor commitment of teachers to the school, methods and techniques of poor quality, overcrowded classes, binary education, the lack of enough effort for students' success and perfection.

Dimensions	**f**	X	ss	alfa
I.School Inputs	466	2.86	.63	.87
The Support from Parents and Environment	466	2.94	.67	.80
The support of Educational System	468	2.84	.83	.82
The Support of Sufficient Material	468	2.79	.77	.85
II.School Climate	462	2.87	.55	.93
The Expectations from the Students	468	2.84	1.07	.53
Positive Teacher's Behaviors	467	3.17	.78	.79
Order and Discipline	466	2.63	.50	.75

Schedules	467	2.82	.76	.74
Rewards and Reinforcements	467	2.90	.85	.74
III.Conditions	463	3.29	.63	.83
Effective Leadership	466	3.23	.89	.78
Qualitative Teacher Power	466	3.60	.70	.77
Flexibility and Autonomy	467	3.06	.76	.84
IV.Learning-Teaching Process	467	3.22	.58	.85
V.The Outputs of Process	465	2.81	.58	.65
General Mean	457	3.01	.49	.99

Tablo II. Dimensions of School Effectiveness by School Inputs, School Climate Conditions, Learning-Teaching Process, School Outputs (frekans,means,ss, alfa)

As the analysis of Table III, the differences between the effectiveness of the dimension can be realized better. The outputs of the process are the lowest mean of 2.81 while the inputs of schools are the second lowest mean of 2.86. The school climate as the process between input and output is the mean of 2.87, conditions; 3.29 and learning-teaching process; 3.22. As it seen in this table III, the effectiveness level of conditions and learning-teaching process are seen relatively higher. Maybe, this data can be result from the effective communication between the teachers, certain culture and climate of school, sufficient device and equipment for the lessons, appropriate methods and techniques. Besides, it is significant that the effectiveness means are relatively higher than the outputs in the reflection.



Tablo III. Comparisons of Means by Dimensions of School Effectiveness

The differences can be seen according to the dimensions of the effectiveness and gender in Table III. There is a significant difference in the five dimensions of effectiveness, learning-teaching process, output, input and climate according to the results of t-tests. P value is found as .024 in conditions dimension between males and females. This results shows that there is a significant difference in this dimension. There is a significant

difference between the male and female effectiveness levels in conditions, which shows that the performances of the females are higher in this dimension.

Gender		N	X	Ss	F	P
Input	Female	234	2.85	.61	.96	..326
	Male	232	2.86	.64		
İklim	Female	232	2.88	.52	2.74	.098
	Male	230	2.86	.58		
Learning-Teaching	Female	235	3.25	.58	.18	
	Male	232	3.18	.59		.743
Conditions	Female	232	3.35	.58	5.14	.024
	Male	231	3.24	.67		
Output	Female	233	2.77	.58	.31	.574
	Male	232	2.86	.58		

Tablo IV. T-test of Dimensions of School Effectiveness by Gender

Table V shows whether or not there is a relation between the teachers' job experiences and effectiveness dimensions. There is not a significant difference between conditions and job experience in the five effectiveness dimensions. However, a significant relation is found between the other effectiveness dimensions and job experience. P value in the process of experience and learning-teaching process is .047, in output process P: .000, in input process P: .012, in climate process P: .003. The reasons for the differences result from the variations of 16 and above age group as to the others. In other words, the effectiveness levels of 16 and above experienced teachers are higher than the others.

Experience	N	X	Ss	F	P
Input 1-5	171	2.85	.62	3.67	.012
6-10	144	2.75	.58		
11-15	56	2.85	.68		
16-+	95	3.03	.64		
İklim 1-5	169	2.84	.56	4.66	.003
6-10	142	2.79	.48		
11-15	56	2.83	.62		
16-+	95	3.05	.54		
Learn-teach 1-5	171	3.21	.59	2.67	.047
6-10	145	3.14	.53		

	11-15	56	3.22	.59		
	16-+	95	3.36	.63		
Cond.	1-5	168	3.31	.63	.99	.394
	6-10	145	3.25	.57		
	11-15	56	3.22	.64		
	16-+	94	3.37	.70		
Output	1-5	170	2.79	.57	7.39	.000
	6-10	144	2.71	.55		
	11-15	56	2.77	.65		
	16-+	95	3.05	.54		

Tablo V. Anova Test of School Effectiveness by Experience

Pearson Correlation analysis aiming at measuring the relations between effectiveness of the dimensions generally indicates that there is a strong and average relation in the level of P 0.01 in all dimensions. A higher strong relation determined between input and climate (0.750), climate and conditions (0.750), teaching and climate (0.720). There is a relation in the direction of positive at normal level between the dimensions. As seen in Pearson Correlation analysis, a positive relation expected between the effectiveness levels (Table. VII).

Correlations

		CONDITIO	TEACHING	OUTPUT	CLIMATE	OK.ıNPUT
CONDITIO	Pearson Correlation	1	,693**	,383**	,758**	,624**
	Sig. (2-tailed)	,	,000	,000	,000	,000
	N	463	463	461	459	461
TEACHING	Pearson Correlation	,693**	1	,509**	,720**	,596**
	Sig. (2-tailed)	,000	,	,000	,000	,000
	N	463	467	464	463	465
OUTPUT	Pearson Correlation	,383**	,509**	1	,448**	,442**
	Sig. (2-tailed)	,000	,000	,	,000	,000
	N	461	464	465	461	465
CLIMATE	Pearson Correlation	,758**	,720**	,448**	1	,750**
	Sig. (2-tailed)	,000	,000	,000	,	,000
	N	459	463	461	464	462
OK.ıNPUT	Pearson Correlation	,624**	,596**	,442**	,750**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,
	N	461	465	465	462	466

**. Correlation is significant at the 0.01 level (2-tailed).

Tablo VII. Pearson Correlation of Dimensions of School Effectiveness

Conclusion

The studies related with school effectiveness must gradually increase to meet the requirements of society, to provide and implement more functional educational policies and to run the positive dynamic within

the schools. The studies up to now supplied knowledge and culture accumulation. The national and international studies in developing and developed countries obtained better self-recognizing for schools and revealed that the reality of authentic identity for each school. Every new research contributes to this subject about the accumulation of knowledge and culture. This research shows that the relations between the effectiveness dimensions and demographic indicators are perceived different. The findings of the research differentiate on the contrary with the literature about the positive correlation of "experience and age" and "organizational commitment and performance".

The effectiveness of the primary schools is held on five dimensions. These dimensions are; school inputs, school climate, conditions, learning-teaching process and student outputs. As in the means of dimensions, the highest mean is 3.29 on 5 in conditions dimension. Following the condition dimension, the second highest mean 3.22 is in teaching-learning process. Following these conditions, the mean of school climate is 2.87 and the mean of student outputs is 2.86. The lowest mean is 2.81 of student outputs with the cumulative effect of the other dimensions. These means show us the effectiveness levels in primary schools group between lower of medium and top of the medium limits. In other words, the effectiveness levels of primary schools are definitely insufficient.

As to the relations between the independent variables and effectiveness dimensions, significant relations are found between some variables. The relation between conditions and gender is significant in respect of the gender variable. The effectiveness of the females is significantly higher in the conditions dimension. Besides that, significant differences are not found between the gender and the dimension of inputs, school climate, school outputs, teaching-learning process.

ANOVA test shows that there is a significant relation between the age of independent variables and effectiveness dimensions in the level of P 0.05. The level of effectiveness of 46 and above age group is significantly higher in all dimensions found by Tukey test showing the effecting factor of age and effectiveness dimensions. A similar result in the relations between the age groups and the dimensions is found like the relation between the experience and the dimensions. Contrary of the literature about the negative correlation between age and performance or effectiveness, in this research a significant relation is found between forward ages and effectiveness as to the other age intervals.

A positive relation is seen between all of the dimensions. There is a strong relation between "climate and conditions", "climate and teaching", and "climate and outputs". The relation among the other dimensions is found positively in medium level. According to the research findings, school climate can be admitted more effective than the other dimensions.

It is beyond doubt the studies related to the school effectiveness going from general to the particular in knowledge and culture accumulation will increase the students' success by activating the internal dynamics of the schools. Furthermore, the studies assist to meet the demands of the society and contribute to the adaptation of the educational policies into the school systems functionally.

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