Primary School Teachers' and Administrators' Opinions About Success of "E-School" Application in Turkey

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Abstract: In this research that aims revealing the strong and weak points of e-school application; it has been tried to identify the views of teachers and administrators about the success of e-school application. The research sample consists of 602 primary school teachers and administrators who are working in Tokat and its districts in Turkey. The data has been collected by a scale called "e-school application evaluation questionnaire" which has been developed by the researchers. According to the result of the research it has been determined that the views of teachers and administrators on the efficacy of e-school application do not show any clear difference according to the their genders, titles, their interest on computers or the location of the school; however, the teachers who are in charge of administration find the e-school application beneficial when compared with the other teachers. As a result of the research it has been identified that the views of the teachers and administrators on the usefulness of e-school application do not show any clear difference according to the their genders, titles, their interest on computers or the location of the school; however, senior teachers find the e-school application useful.

Keywords: E-school application, Administers, Teachers, Internet.

1. Introduction

Ministry of National Education has started to use the internet based school management system, of which pilot application was implemented in 2006 in Turkey, in all the primary schools at home and abroad, which is connected with the ministry in 2007 – 2008 term. This school management system is called "e-school". e-school application is used in national scale. Although this system is related to both information technologies and education fields, an independent research has not been done about this subject in both fields. As there is not any research done on e-school so far and the e-school application is being used in all the schools that are connected with the ministry, the researcher tends to make a research on this issue. Also it has been thought that the fast growing technology has an important role in the education and the researches that will be done in this subject will be beneficial. It can be stated that Cradler's (2000) view which is "Most of the educators counts the technology as an important element of the learning and teaching process" has supported this study. The aim of the research is to identify the views of the primary school teachers and administrators about this application.

2. Literature Review

This section looks at the various definitions of learning style, a framework for categorizing the types of instruments used

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to assess learning style, as well as prior researches on learning style.

2.1 Internet and Education

As the computers become an indispensable element of human life, it has become compulsory to use them in education. The complicated structure of the computers has made them collect more features than the other education technologies that are used in the education environments. Due to these features, the computers have a lot of benefits for usage in educational environments. According to Rıza (2001) these are providing self-confidence to students, generating a confident environment for learning, giving quick feedback, meeting students' individual needs, helping unsuccessful students, making changes in the writings easily, providing writing skills, reaching rich information resources directly, ability to presenting the knowledge in new methods and giving an opportunity to team works (Yılmaz & Horzum, 2005). Due to these benefits, the computers are being used in the activities in educational institutions, laboratories, administrative issues and extracurricular activities and it has become an indispensable technology. The superiority of computers in saving the information, keeping the information and re-using the information has revealed the need for sharing these information with others. To share the information is possible with computer network which will connect the computers to each other. This network is called internet (Yılmaz & Horzum, 2005). The aim of developing the internet is not for the use of education undoubtedly, it was originally the idea of USA Ministry of Defence to use internet as network which will never disconnect in case of any war. In spite of this aim, education is the field that benefits from internet the most. The education can be provided via internet in a different and efficient way. By starting to use internet in education a lot of new concepts has emerged: One of them is e-education. Shortly, e-education is a way of using internet as a mean in learning and teaching activities. Whether e-education is used as a support for the classical learning techniques or it is evaluated as an alternative, it helps the learning process to be quick and the information learned to be permanent. According to Gülbahar (2005, p.2) when web based traditional education environment is designed in order to increase student responsibility, communication and orientation, it has been concluded that it can widen the limits of learning and teaching process (Akçakaya & Tanrısever, 2007). McCorkle (2003) stated that implementing the lessons from web pages will give opportunity to the students to use the web pages as a means of supplementary for lessons (Akçakaya & Tanrısever, 2007). The most important factor for the supplementary and Project based web pages to reach success is that the pages designed is regarded as attractive by the students. If the students do not find the materials prepared attractive and interesting, there can be problems in reaching the goal. At the same time, that the web pages that are prepared relevant to the purpose have rich materials can provide permanent learning (Akçakaya & Tanrısever, 2007).
E-enabled learning is that the teaching applications are reflected on the teaching and learning processes by using internet Technologies. Owston (1997) and Horton (2000) stated that e-enabled learning provides a lot of benefits both to the learner and teacher (Kılıç, Karadeniz, & Karataş, 2003). These are;

- The materials which are arranged for e-enabled learning environment are immediately updated.
- Being independent from time and location, the learners are provided to reach teacher, information resources and other learners.
- It provides more flexible learning environment for the learners who have different learning styles.
- It decreases the cost in reaching resources.
- It increases social interaction and cooperation.
- It reinforces the teaching done in class.
- It provides that the learners are active.
- It gives opportunity to reach correct data.
- It provides deep learning experience.
- It gives time for the learners to think by increasing their thinking skills and decide (for example; discussion groups).
- It brings in the skill of distinguishing the information resources.

Besides these benefits of e-enabled learning, there are some limitations like the other learning environments.

- It requires the teacher to spend more time. (After making a pre-preparation, it saves time.)
- The learners are required to spend more effort when compared with the traditional learning. (Online discussions, brainstorming and problem solving activities take more time than face-to-face teaching.)
- It requires time and technical facilities for the teacher and learners to be internet literate.

- The teachers can have hesitations against using a new technology.
- The cost is high when the sub-structure is generated the first time.
- It is possible to experience problems about technical and sub-structure issues and in such cases technical support can be insufficient (Kılıç, Karadeniz, & Karataş, 2003).

It is expected that a well-designed distant education applications should minimize the differences of students' physical location and individual needs. Face-to-face education dimension should be taken into account as an element that can help to realize the equality approach in education applications. The equality approach covers that the learning experiences of the students who have distant education should be equal with the experiences of the students who have formal education, the distance should be overcome and equal educational experiences should be presented. In order to provide this, Soefijanto (2004) stated that the designers should take the advantages that increase the attention of the face-to-face education students into account (Eşgi, 2006).

2.2 What is E-School?

E-school is a central and online school management system. Owing to this application of which centre is in Ankara, it is started to keep all the records belonging to the student, teacher and administrators in only one database. Owing to this application, the school managers do not need an additional computer programme in order to simplify their Works. Owing to the application the students' verbal, written and Project grades are put into system by the teachers, the parents can learn the grades of the students from the internet as online, school managers can print the ration cards automatically from the system without asking for grades from teachers. Also the identity information of the students can automatically be taken from MERNIS and it can automatically controlled from the system if the students who are 7 years old are registered in a school or not. Also in this system the transfer of the students extramurally can be done online and the retrospective grades of the students are kept in the system.

E-learning or distant education can be identified as a web-based education system that is presented on a platform which has an internet/intranet or a computer network. The most important difference of e-learning from the traditional education perception proposes a radical change although it seems as if the technological dimension it includes. This perception is a model that centralises the individual, motivates the individual in reaching information and gives priority to the individual. With E-learning the education activities are realised without the need to bring the teachers and students together. e-learning generally realises in two ways: a. Persons' receiving education on their own from the computer. b. A group of students and a class teacher's meeting in a class online in computer environment synchronously (Şenel & Gençoğlu, 2003). In the developed countries e-learning is especially preferred by the adults. It is a profitable possibility in mid and long term for the business places in house training. So the employees do not need to stay away from the work place long hours. With this method, the employees are able to repeat the subjects that they do not understand enough and learn better by listening, seeing and doing interactive applications with multimedia materials. As it is still a new method, discussions about its long term educational results and standards continue and there are institutions and organisations that benefit from e-learning in our country and they get positive results. When the resources regarding e-learning is applied by integrating with face-to-face, traditional education environment and methods, more positive results will be gained. As short term goal supporting in house training of education administrators and teachers with new information and communication technology media (Şenel & Gençoğlu, 2003).

One of the most important steps of education is measure and assessment activities. Doing this in a correct way increases the quality of education. The developments in the technology present a lot of conveniences in the education. Since 2007 – 2008 education term, Ministry of National Education has presented e-school application which can be reached via internet for the teachers to use. In this research that aims to reveal the strong and weak points of this new application, it is tried to identify the views of teachers and administrators about e-school application. With this study, it is aimed to give feedback to programme managers of Ministry of National Education, about revealing the strong and weak points of the application and contribute to its improvement. The problem of the research is: "What are the views of primary school teachers and administrators about the success of e-school application?"

3. Research methodology

3.1 Participants

In this research, as an existing situation is determined, it is a study of scan model. The findings received with the data

collection instrument are analysed by examining. This study's population consists of teachers and administrators who are working in the primary schools in Tokat/Turkey. The researchers have applied the scale to teachers and administrators (%15 of the population) by the way of sampling with random method

3.2 Instrument

The instrument used in this study was developed in order to use in this research and with the help of this scale it is tried to identify the views of the teachers and administrators. In order to develop the scale, the researchers have prepared a questionnaire which consists of 7 open ended questions in order to ask to the teachers and administrators about e-school application. In line with the findings received from the interviews made with 50 people in total that comprises 40 teachers and 10 administrators, the draft scale comprising 58 statements has been prepared. This draft has been sent to the instructors, assistants and doctorate students who are working in the department of computer teaching. After receiving learned opinion, the scale which has been revised has been applied to 60 teachers and administrators for the purpose of pilot application. As a result of the pilot application the reliability of the scale has been found appropriate (Cronbach Alpha is .85). When the data gained is examined, it has been thought that the scale can be divided into two groups. In order to understand the conformity of the scale instrument to the factor analysis, KMO (Kaiser-Meyer-Olkin) sample proficiency test has been made to the scale. KMO sample proficiency test is an index that show the conformity of the factor analysis. While KMO value is accepted as 0,5 - 1,0, the values under 0,5 are the indicators that the factor analysis is not appropriate for the data set. The value (.89) resulting from KMO sample proficiency shows that the scale is appropriate for the factor analysis. Factor analysis has been applied to the scale comprising of 58 statements. The factor analysis has been repeated three times by removing the statements which have low factor load value and do not show accumulation in the factors. As the statements 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 30, 33, 34, 35, 39, 40, 41 and 43 which form the second part are lower than .30, they have been removed from the scale. As the load values of the statement 11, 14, 26, 28, 29, 32, 36, 37 and 38 are equal or they show similar distribution, they have been removed from the scale. As a result of the application, it has been observed that in the first factor 16 statements and in the second factor 14 statements have been collected. When a factor analysis has been made for the remaining 30 statements, it is seen that 2 factors explains 46,5% of the total variance in total. When the factor rotation results are examined, it is seen that the statements 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57 and 58 have higher values in the first factor and the statements 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15 and 31 have higher values in the second factor. When the statements are examined it is seen that rotated load values change between .35 and .84. It is observed that the communalities of the two factors defined regarding the materials change between .13 and .72. Also the alpha values of the scale's factor have been examined. It has been understood that for the first factor cronbach alpha value is .93 and cronbach alpha values of the statements forming the first factor change between .92 and .94. For the statements in the first factor the correlation values change between .34 and .79. It has been understood that for the second factor cronbach alpha is .85 and cronbach alpha values of the statements forming the second factor change between .84 and .85. It is observed that the correlation values for the statements forming the e-school usefulness factor change between .37 and .58 in the table above. For the total scale comprising of 30 statements, it is observed that the reliability coefficient is .90. The findings of the research have been obtained by applying the developed scale to 602 teachers and administrators. The data collected with data collection instrument have been evaluated with the help of SPSS 15 package programme. In the evaluation of the data mean and standard deviation techniques have been used.

4. Findings and discussion

The views of the teachers and administrators about the success of e-school application have been mentioned separately according to both factors of the scale below. The findings revealed in line with the views received from the teachers and administrators about the scale's e-school application efficacy (16 statments) and e-school application usefulness (14 statements) have been given below. The mean and Standard deviation points belonging to 16 statements about the views of the teachers and administrators attending to the research and working in Tokat regarding e-school's benefits have been shown in the following table.

Table 1. Mean and Standard Deviation of the Statements constituting the First Factor

Statements	$\bar{X}$	S.S.
E-school's Benefits	4,29	0,49
1. E-school's presenting the student information regularly simplifies my work.	4,19	0,68
2. Keeping the grades in e-school is so beneficial.	4,44	0,56
3. Keeping the behaviour notes in e-school is so beneficial.	4,32	0,75
4. Keeping the information of attendance and absenteeism is so beneficial.	4,30	0,77
5. Keeping the books that the students read in e-school is so beneficial.	3,69	1,22
6. Keeping the school programme in e-school is so beneficial.	4,24	0,71
7. Keeping tje school staff list in e-school is so beneficial.	4,24	0,71
8. Keeping photographs in e-school is so beneficial.	4,26	0,67
9. Making SBS applications in e-school is so beneficial.	4,36	0,62
10. Keeping parents information in e-school is so beneficial.	4,35	0,60
11. Providing the ration cards in e-school is so beneficial.	4,42	0,58
12. Providing certification of appreciation / achievement in e-school is so beneficial.	4,43	0,58
13. Providing student patient examination certificate in e-school is so beneficial.	4,25	0,70
14. Taking various reports from e-school is so beneficial.	4,27	0,70
15. Taking class lists from e-school is so beneficial.	4,43	0,56
16. Transfer outgoing/incoming proceedings in e-school are so beneficial.	4,39	0,60

When the findings above are examined, it is observed that the teachers and administrators who attend to the research have chosen "Agree" for the 1st and 5th statements and for the other 14 statements "Definitely Agree" has been chosen. According to the research, three statements that the teachers and administrators have graded the most are: "Keeping the grades in e-school is so beneficial.", "Providing Certifications of appreciation/achievement in e-school is so beneficial" and "Taking the class lists from e-school is so beneficial." Four statements that the teachers and administrators give grade the least are: "Keeping the books that the students read in e-school is so beneficial.", "e-school's presenting the information of the students regularly simplifies my work.", "Keeping the school programme in e-school is so beneficial." and " Keeping the school staff list in e-school is so beneficial.". Mean answers that the teachers and administrators give to the statements in this section change between 3,69 and 4,44.

That the teachers and administrators who attend to the research have chosen "Definitely Agree" for the 14 statements and chosen "Agree" for two statements regarding the e-school's benefits show that they have positive thoughts about the benefits of e-school.

The mean and Standard deviation points belonging to 16 statements about the views of the teachers and administrators attending to the research regarding e-school's usefulness have been shown in the following table.

Table 2. The Mean and Standard Deviation of the Statements constituting the Second Factor

Statements	$\bar{X}$	S.S.
E-schools usefulness	3,65	0,55
1. E- school application is designed as clear, simple and comprehensible.	4,19	0,62
2. When using E- school programme I can easily use menus.	4,21	0,65
3. When using e-school programme I can easily use the modules.	4,12	0,71

4. The colours used in E- school programme is chosen carefully and they do not strain eyes at all.	3,88	0,81
5. There is not any extra information that distracts attention in E- school programme.	3,91	0,88
6. There are not any unnecessary proceedings in E- school programme.	3,56	1,08
7. The fonts and size of the fonts are chosen very well in E- school programme.	3,89	0,77
8. I can easily open e-school programme in every kind of programme such as Mozilla, opera which are the alternatives of "internet explorer".	3,14	1,03
9. E- school programme is loading so quickly in my computer.	3,00	1,16
10. The computers in my school can easily open E- school programme.	2,76	1,28
11. I can connect to E- school programme from every computer around.	3,72	0,99
12. Out of school I can use E- school programme.	4,11	0,71
13. I can use e-school programme without losing any time.	3,24	1,11
14. Technological sub-structure of e-school programme is sufficient.	3,30	1,02

When the findings above are examined, it has been observed that the teachers and administrators who attend to the research have chosen Definitely Agree for 7% (1/14) of the statements, chosen "Agree" for 57,2% (8/14) of the statements and chosen "Undecided" for 35,7% (5/14) of the statements. According to the research three statements that the teachers and administrators give grade the most are: "e-school application is designed as clear, simple and comprehensible.", "Technological sub-structure of e-school programme is sufficient." and "When using E- school programme I can easily use menus.". Three statements that the teachers and administrators give grade the least are: "The computers in my school can easily open E- school programme", "E- school programme is loading so quickly in my computer." and "I can easily open e-school programme in every kind of programme such as Mozilla, opera which are the alternatives of internet explorer." Mean answers that the teachers and administrators give to the statements in this section change between 2,76 and 4,21. That the teachers and administrators that attend to the research have chosen "Agree" for 8 statements and "Undecided" for 5 statements regarding e- school's usefulness shows that they do not have a certain opinion about the usefulness of e- school and they do not have a negative opinion in general.

5. Concluding remarks

According to the results obtained from the research, the teachers and administrators has found e- school successful in terms of its benefits and usefulness. When the scale statements which have low average are examined, some feedbacks can be submitted to the authorities from the ministry. The teachers have difficulty in finding a computer which has a sufficient capacity and a high speed internet in order to Access to e- school application. Therefore, a sufficient number of (more than one) computers which have very good internet connection can be set up in the teacher's room. Also it is possible to bring e-school application into conformity with alternative internet browsers such as Mozilla Firefox. e- school application asks for repetitive information (name of a book, activity, name of a writer, etc.) frequently from the teachers. The features such as Automatic completion, selection wizard can be added to the teachers' grade and information entries. The teachers and administrators cannot receive any technical support about the problems that they encounter in e- school application. A formatter who is responsible from e- school system can be assigned to Provincial and District Directorates of National Education in order to help the teachers to solve the problems that they encounter. There are some limitations and faults in e- school application such as not being able to enter exam grades after 15 days, logging off automatically in 10 minutes, being locked up by not enduring the intension in the system in the ration week. The limitations in entering information to the system can be bended or left to a superior (School manager, branch manager). As this research is the first one done about e- school, we believe that it will help the researches about school management programme to be done in the future. The scale used in the research which has been done and developed by implementing validity and reliability studies can be applied in different countries by translating into other languages. We believe that there will be different statement about this subject and the scale developed and therefore we will have opportunity to compare the research findings.

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