An Analysis of the Primary School Teachers' Usage of Instructional Software

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***Abstract*—This research is a descriptive study and examines instructional software usage and teacher's attitude towards instructional software. The data was gathered using mass sampling of 471 teachers from 17 primary schools in the city center of Elazig and Malatya, Turkey. Teachers signify that they can use computers for different aims as well. On the other hand, it is observed that many teachers fail to use instructional software in their lessons. In general, researches show that teachers find them favourable and useful. Moreover, teachers think that these IT classes and instructional software must be developed. Teachers think that if these instructional software are used during lessons, the concepts of lesson topics will be easier; performance of the students and their success will be positively affected.**

***Index Terms*—Computer technology, Information and communication technology, Instructional software, Primary school teachers**

I. INTRODUCTION

Many recent educational researches have emphasised the importance of conversations in the classroom [1][2][3][4]. This naturally raises the question of the role of Information and Communication Technology (ICT) in supporting teaching and learning conversations. ICT is an indispensable part of the contemporary world. In fact, culture and society have to be adjusted to meet the challenges of the knowledge age. The persuasiveness of ICT has brought about rapid technological, social, political, and economic transformation, which has eventuated in a network society organised around ICT. The field of education has not been unaffected by the penetrating influence of information and communication technology. Undoubtedly, ICT has impacted on the quality and quantity of teaching, learning, and research in traditional and distance education institutions. In concrete terms, ICT can enhance teaching and learning through its dynamic, interactive, and engaging content; and it can provide real opportunities for individualised instruction. ICT has the potential to accelerate, enrich, and deepen skills; motivate and engage students in learning; helps to relate school experiences to work practices; helps to create economic viability for tomorrow's workers; contributes to radical changes in school; strengthens teaching, and provides opportunities for connection between the school and the world [5] [6]. ICT can make the school more efficient and productive, thereby engendering a variety of tools to enhance and facilitate teachers' professional activities [7].

Restructuring our schools is a never-ending process. For education itself, is a process, and the schools are representative of that continual change. The school structure must be changed again. The first goal for restructuring our schools is to change our philosophy so that education starts with the needs of the child. Instead of having a child fit a curriculum, it is important that we believe the curriculum must fit the child. It will not be assumed that the below-average child has all the needs.

The second goal for restructuring the schools is to change the learning environment. Composition of learning groups, room arrangement, schedule of learning experiences, and the appropriateness of guided tasks, will be flexible, based on individual needs of children. No longer will each child have a slate that is the same size to be filled with the same kind of writing as last year, to be shared during recitation with the teacher. The restrictions of the slate will be replaced by the expansion of technology.

- Change the function of classrooms. They should be interfaced with media centers. The learning environment will be wherever children are learning. Whether analyzing data from a science project or word processing feelings through poetry, the computer will play a part. It will create an environment to emphasize thinking - not just ideas, but also the relationship, the application, and the meaning of ideas. Computers will be used with interactive video. The multimedia of the future will necessitate that classrooms be flexible for learners to gather and share. Distant learning and communications networking will bring other "classrooms" closer to particular students. The "I" and "You" of classes will become "We" as technology expands the bridges of cultural and global understandings, and leads to pathways of problems solved together.
- Change the role of teachers. Technology will be used to help identify what children needs have, how to meet those needs, and then how to evaluate and assess those needs are indeed met. Technology will help teachers adapt curricula to individual learner characteristics. Teachers will not be dispensers of knowledge, but rather the catalysts to empower students to be their own teachers. The goal will be to help students learn to retrieve information quickly and spend time and energy in doing things with it.
- Change the expectations for learners. Children will be given larger blocks of time to question, absorb, think, use, apply, synthesize, and dream. No longer passive, students will become more active in the learning

process. They will be encouraged to use higher level thinking skills, experience problem-solving situations, and assume individual responsibility to learn and help others learn.

How can technology play a part in these changes? What is inappropriate? Passive games that require no thinking are inappropriate. Emphasis on computer "time" is inappropriate. It is not the time, but the process of relating ideas that is important. What is appropriate? We have barely begun finding the answers to this question. Teachers will use computers for recordkeeping, analysis of information, and preparation of materials. Students will use computers to retrieve information, become participants that are more active, analyse and apply data, save time, and motivate themselves as responsible learners. Technology can simplify and expedite routine tasks. It can expand and enhance the curriculum and the teaching/learning process. It can provide rich, meaningful experiences that help people reach their potential.

A. Accepting New Roles for Teachers in the Classroom

Technology integration brings changes to teachers' instructional roles in the classroom. The teacher's roles in a technology-infused classroom often shift to that of a facilitator or coach rather than a lecturer. Technology use also tends to foster collaboration among students. As students become more self-directed, teachers who are not accustomed to acting as facilitators or coaches may not understand how technology can be used as part of activities that are not teacher-directed. This situation may be an excellent opportunity for the teacher not only to learn from the student but also to model being an information seeker, lifelong learner, and risk taker [8].

Learning the new roles and ways of teaching that go hand-in-hand with technology integration requires that teachers have opportunities to participate in an extended process of professional development. Teachers need time to acquire technology skills and new teaching strategies for integrating technology into the classroom. Except for occasional in-service programs, teachers often have no time built into the school day for their own professional development. When professional development activities are conducted after school, teachers may not have the energy necessary for engaging in learning. Some researchers suggest that the ideal time for teachers to participate in professional development activities is during the summer, when students are not a consideration and teachers do not have as many demands on their time. However, teachers are more likely to apply new instructional strategies if they receive feedback and support while trying the new strategies in their classrooms [9][24][25].

B. Types of Instructional Software

We must first ask what type of learning material is needed for universal global education. There will not be a unique answer to this question; however, we would argue that the following ingredients are essential:

- Individualization: The material must adapt to each student. If we are to pursue global education, we will have a great many different types of students. Each student will have unique abilities and learning problems. The learning material must recognize these, and so must treat each student as an individual.
- Affordability: The material must be affordable, both by individuals and by countries. In making this calculation, we must take into account all expenses for development and delivery of the learning materials, including profit if the materials are developed by a for-profit organization.
- Collaborative Learning: The material must allow collaborative learning. We imagine a group of two to three students sitting around a computer. This is especially important for students in some countries who are not familiar with computers.
- Mastery: The learning material should strive for success and mastery for all students. Failure is notnacceptable.
- Languages: The material must be available in many different languages of the world with many different writing systems. This cannot simply use direct translations since each culture has its own ways of expressing the same concept or feeling.
- Culture: Learning units should match and respect the culture of each group. This includes not just the types of materials to be used but also how the materials will be presented.
- Motivating: The learning units must be intrinsically motivating. Many of the usual student "threats, such as grades, may not be available. Again, what is motivating may depend on the student's culture. This goal is especially important for the countries in which only certain types of students will get attention from a human instructor.
- Delivery: Delivery mechanisms must be available for reaching everyone, even very poor students. This must include environments without schools [10][19][20].

Educational institutions use many types of instructional software. In this subject, A lot of programs are available for all ages of students and cover most academic subjects. Several major categories of programs are available and you need to determine which ones are appropriate for your child [11] [12]:

- Drill and practice software enables children to learn and practice their recall of factual information; e.g., learn their spelling words, learn basic math facts, improve their vocabulary, learn the names and locations of states and capitols, etc.
- Tutorial software provides in-depth teaching of a subject area and enables children to develop an in-depth understanding of new information. While many tutorial software programs are excellent in a more structured school environment, many are not sufficiently motivating for home use.
- Learning software simulations and strategy games enable children to acquire new information, but more importantly allow children to apply the information they know and learn.
- Exploratory software and reference products allow children to explore areas of interest, but are generally not in a game format; for example, electronic encyclopedias, science or geography exploration, etc. In addition, numerous software tools available support children's learning in a variety of areas. Software tools include word processors, creativity, music, graphics

and desktop publishing software, and databases, to name few.

C. Choosing Appropriate Instructional Software and Evaluation

Glenn emphasize that one barrier to technology integration is the difficulty many teachers face in finding and using appropriate software for instruction. Teachers may need guidance in locating multimedia software and Internet sites to support the school's learning goals, either because they are unfamiliar with these media or because they feel overwhelmed by the profusion of software on the market and sites on the Internet. Lack of time and experience to make good decisions about what particular products or sites have the potential of fostering learning goals can make technology integration a frightening prospect [13].

Teachers who have successfully used a technology-enhanced activity should be encouraged to model the activity for their peers; they can emphasize how the specific piece of software helped achieve the goals and objectives of the curriculum. Modelling can be used when teachers visit each other's classrooms, at staff meetings, and at professional development workshops. It enables teachers to observe expert performance and broadens their awareness of what is possible. Modelling can provide emotional support as well [14] [15] [16].

II. RESEARCH METHODOLOGY

A. Research Questions

The purpose of this study was to analyze the views and attitudes of teachers towards the use of educational technology in teaching/learning process. Within this scope, answers to following questions have been sought:

- What are the contributions of in-service training to the teachers'skills in using computer?
- What are the aims of teachers using Computing?
- What is their level of using computer, satisfaction and being aware of instructional software about their fields?
- What are the teachers' opinions about instructional software?
- Are there any significant differences among the views of the teachers' related to the preference of the use of instructional software, according to the work-year variable?

The questionnaire were developed by the researcher and administered to the teachers one by one. Since the items in the questionnaire were used individually in the data analysis, the total score was meaningless. The survey was designed to provide basic information on the ways in which ICT is currently being used, how competent teachers feel themselves to be, their views on their own needs and priorities for further development, the kind of training which will help them develop further, and the factors which tend to encourage or hinder of ICT the take up. The questionnaire was distributed to the subjects at the academic year 2004/2005. Data analyses were carried out with the Statistical Package for Social Sciences using frequencies, percentages, and One-Way ANOVAs. The subjects responded on a five-point Likert type scale (1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5= strongly agree).

Whether or not there was a significant difference in term of service was analyzed in comparison with homogenous variances by using F test; and *LSD* (Least Significance Test) was used in order to determine that the significant difference observed in the articles that have significant differences appeared depending on the difference between which groups. In situations that variances are not homogenous, firstly, *Kruskal Wallis H* test was applied, and in order to determine that the significant difference observed in the articles that have significant differences appeared depending on the difference between which groups, an analysis was done by using *Mann Whitney U* test over double combinations.

B. Application of the Investigation and Collecting the Data

The questionnaire was divided into two sections. Section 1 consisted of demographically information dealing with gender, age, educational qualifications years in teaching. Section 2 included the opinions of primary school teachers' related to instructional software.

III. FINDINGS

The sample used for this study consisted of randomly selected 549 teachers in the primary schools in county east region of Turkey. Four hundred seventy one surveys were returned yielding % 85.8 return rate. The sample of the study consists of a total of 471 primary teachers 212 (45%) female and 259 (55%) male at average age of 38 (see Table 1 below).

TABLE 1.
DEMOGRAPHICAL INFORMATION OF TEACHERS

Demographical Information		**TOTAL**	
		N	**P**
Gender	Female	212	45.0
	Male	259	55.0
Age	20-30 ages	100	21.2
	31-40 ages	154	32.7
	41-50 ages	175	37.2
	51 ages and more	42	8.9
Years in teaching	1-5 years	71	15.1
	6-11 years	101	21.4
	12-17 years	88	18.7
	18 years and more	211	44.8
TOTAL		**471**	**100**

N: Number of teachers who attend the study, P: Percentage of teachers who attend the study

93.4% of the instructors in the sampling group received in-service training on the field of computer, a low rate of them, like 6.6%, did not join any in-service training

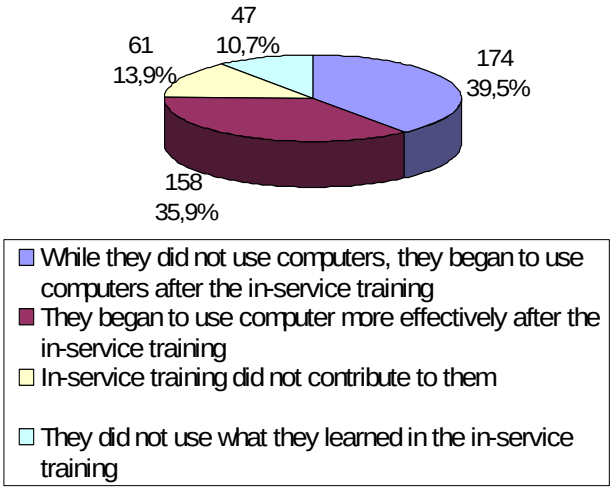

Figure 1. The contributions of in-service training to the teachers'skills of using computer

Among the teachers in the sampling group, 39.5% stated that while they did not use computers, they began to use computers after the in-service training , and the teacher who used computers limitedly (35.9%) stated that they began to use computer more effectively after the in-service training. 13.9% of the teachers stated that the in-service training did not contribute to them and 10.7% stated that since they did not use what they learned in the in-service training, it did not contribute to their computer using skills. It can be said that teachers generally benefited from the in-service training and they improved their computer using skills.

According to teachers' own opinions, they consider their level of computer using; 4.7% consider as very satisfactory, 32.0% consider as satisfactory, 46.5% consider as partially satisfactory, and 16.8% consider as unsatisfactory. It takes attention that the frequency of being partially satisfactory level is high. This tendency reveals that studies should be done during and after the in-service training in order to make the teachers raise their sufficiency level. According to teachers' own opinions, their level of computer using is seen in the Figure 2.

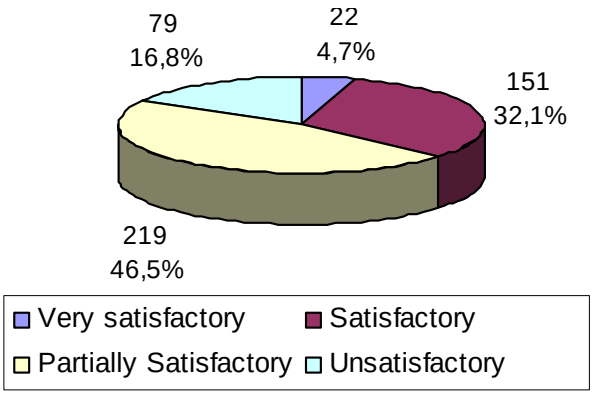

Figure 2. Primary teachers satisfactory levels using computing

Teachers remain the gatekeepers for students' access to educational opportunities afforded by technology: they cannot and should not be ignored. Providing technical skills training to teachers in the use of technology is not enough. Teachers also need professional development in the pedagogical application of those skills to improve teaching and learning. Traditional one-time teacher training workshops have not been effective in helping teachers to feel comfortable using technology or to successfully integrate it into their teaching. Instead, a new paradigm is emerging that replaces training with lifelong professional preparedness and development of teachers. This approach includes pre-service and in-service training, as well as ongoing pedagogical and technical support and mentoring.

While technology increases teachers' training and professional development needs, it also offers part of the solution. ICTs can improve pre-service teacher training, by providing access to more and better educational resources, offering multimedia simulations of good teaching practice, catalyzing teacher-to-trainee collaboration, and increasing productivity of non-instructional tasks. ICTs can also enable in-service teacher professional development at a distance, asynchronous learning, and individualized training opportunities. Finally, ICTs can overcome teachers' isolation, breaking down their classroom walls and connecting them to colleagues, mentors, curriculum experts and the global teacher community on a continuous basis[22] [23].

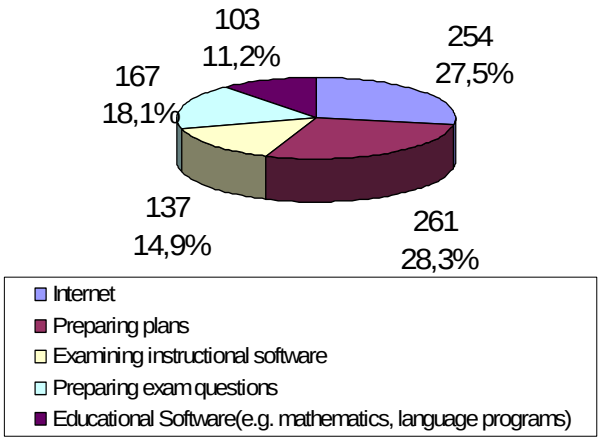

Figure 3. Teachers' aims of using Computing

As illustrated in figure 3, 27.5% of the participants uses computer for internet, 28.3% of them uses computer for preparing plans, 14.9% of them uses computer for examining the instructional software, 18.1% of them uses computer for preparing exam questions, and 11.2% of them uses computer for instructional software. That the teachers do not use computers for examining the course software very much reveals that they do not use software efficiently in the lessons.

It is seen that 38.4% is aware of, 34% is partially aware of, 27.6% is not aware of teachers' level of awareness instructional software is low. This exposes that the need of implementing studies and arrangements will encourage teachers to use the software about their own fields (See figure 4).

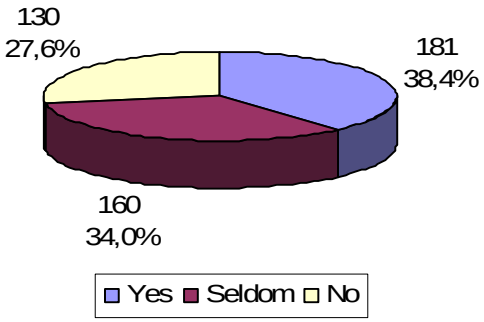

Figure 4. Teachers' level of being aware of software about their fields.

As illustrated in figure 5, it is seen that 7.6% of the teachers uses computers in every lesson, 20.6 % uses computers once a week, 10.0% uses computers at the end of each unit, 25.9% uses computers at the end of the year, and 35.9% does not use computers at all. Teachers will decide how often to use software during the teaching period. However, the most important point is that a very high number of the teachers do not use software at all. This situation can be considered as a sign that will reveal that some problems will occur while implementing educational and instructional environments that are aimed with projects of IT classrooms.

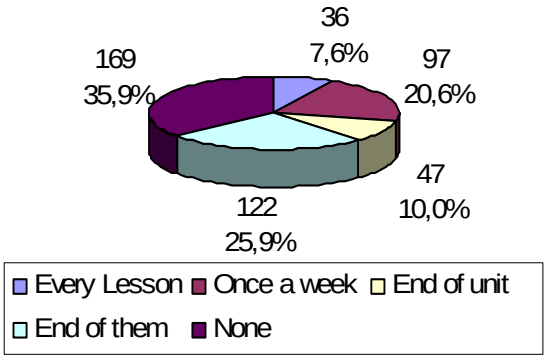

Figure 5. Frequency of using instructional software in classroom.

The branch distribution of the teachers is as follows: 45.6% is primary teacher, 8.5% is Turkish, 8.5% is physical education, 5.9% is mathematics, 5.9% is applied sciences, 5.7% is social science, 5.7% is foreign language, 3.6% is religious education and ethical knowledge, 3.4% is art & picture, 3.4 % is guidance, 2.8 % is computing and 0.8% is music. Considering these rates, it is seen that, primary teacher has the highest rate and Music has the least rate. There are many types of software prepared for branches of especially applied sciences, foreign language, art & picture and music. These software have not been examined by the teachers and are not used in the lessons actively stand out as a deficiency.

A. The opinions of primary teachers' related to instructional software

The means and standard deviations of each instructional software phase for the different statements are reported in Table 2.

TABLE II.
THE OPINIONS OF PRIMARY TEACHERS' RELATED TO INSTRUCTIONAL SOFTWARE

It.	Statement	M	df
1	While preferring instructional software, educational features of it should be considered.	4.42	.034
2	Instructional software should be easy to use for the students.	4.36	.031
3	Instructional software affects the students' achievements positively.	4.28	.031
4	To use instructional software in the lessons will enable the students to comprehend the topic more easily.	4.26	.036
5	To use instructional software in the lessons is a waste of time.	2.01	.042
6	Being used of instructional software by the students is unnecessary.	2.05	.045
7	Instructional software increases the students' performance in the lesson.	4.16	.034
8	Visuals (such as picture, graphic, and animation) in the instructional software should take the users' attention.	4.42	.030
9	That applications (simulations) and activities in the instructional software should increase the students' motivation should be taken into consideration.	4.37	.029
10	The harmony of the visuals and scripts used in the instructional software should be taken into consideration.	4.37	.032
11	Principles of material development in the instructional software should be taken into consideration.	4.25	.032
12	Usage convenience and organization of the presentation in the instructional software should be taken into consideration.	4.30	.030
13	It is important that the content in the instructional software is appropriate for the educational program.	4.40	.032
14	Clear and understandable expressions should be used for the presentation of the content in the instructional software.	4.51	.028
15	Instructional software should be updated by receiving feedback from the teachers.	4.24	.035
16	Information about problems encountered while using instructional software should be collected from the teachers and the software should be updated.	4.36	.032

To determine whether there is any of significance among teachers' views for ICT, I carried out an analysis of variance (ANOVA) on the ICT phases. They delivered opinion at a level of *strongly agree* with the statement that educational features should be considered (M=4.42). They delivered opinion at a level of *agree* with the statement that the software should be recommended by the Ministry of National Education (M=4.07).

When examined the averages of the answers that the teachers in the sampling group gave to the statements determining their views concerning the instructional software from the view of educational quality, they defend the view "*strongly agree*" with the statement that there should be usage convenience and organization of the presentation (M=4.36). Teachers delivered opinion at a level of *strongly agree* with the statement that instructional software affect the students' achievements positively (M=4.28), and to the statement that to use

instructional software in the lessons will enable the students to comprehend the topic in a more easy way (M=4.26), they delivered opinion at a level of *strongly agree.* On an average, they delivered opinion at a level of *disagree* with the statement that to use instructional software in the lessons is a waste of time (M=2.01), and to the statement that being used of instructional software by the students is unnecessary (M=2.05), they delivered opinion at a level of *disagree.* They delivered opinion at a level of *agree* with the statement that instructional software increase the students' performance in the lesson (M=4.16). We can connect that teachers' views concerning fifth and sixth articles are not certain to that they have worries about the benefits that instructional software will provide if used effectively in the process of teaching.

When looked at the teachers' opinions about their software contents, they stated that they *strongly agree* with the statement that there should be usage convenience and organization of the presentation (M=4.30), that they *strongly agree* with the importance of the harmony between the content and the educational program (M=4.40) and that they *strongly agree* with the statement that clear and understandable expressions should be used (M=4.51). About the appropriateness of the instructional software from the view of content, since they have similar features with the other instructional materials general view is at a level of *strongly agree*.

Teachers delivered opinion at a level of *strongly agree with* the statement that instructional software should be updated by receiving feedback from the teachers (M=4.24). Similarly, feedbacks that will be taken from the teachers of branches will be helpful to implement the software effectively during the process of education. In this statement, the opinions of the teachers are (M=4.36) are at a level of *strongly agree.*

The analysis helps to draw conclusions about based on teaching experience the teachers' views for ICT. The results of the analysis of variance (ANOVA) are presented in Table 3.

TABLE 3.
DISTRIBUTION OF THE DATA RELATED TO THE LEVEL OF THE INSTRUCTIONAL SOFTWARE USAGE OF TEACHERS ACCORDING TO WORK -YEAR VARIABLE.

Items	Less than 5 service years (N=71)		5-11 service years (N=100)		12-17 service years (N=83)		18-over service years (N=217)		Levene Test		Sd	F	Ssignifance level	LSD
	M	**SS**	**M**	**SS**	**M**	**SS**	**M**	**SS**	**F**	**Sig**				
1	4.51	.080	4.36	.082	4.45	.079	4.41	.050	.287	.835	3	.588	.623	-
2	4.44	.096	4.47	.059	4.24	.074	4.33	.046	1.371	.251	3	2.147	.093	-
3	4.45	.063	4.19	.073	4.31	.075	4.25	.050	.510	.676	3	2.177	.090	-
4	4.23	.112	4.21	.081	4.39	.072	4.24	.051	.599	.616	3	.934	.424	-
5	**1.68**	**.096**	**2.00**	**.094**	**1.84**	**.078**	**2.19**	**.066**	**1.747**	**.157**	**3**	**7.254**	**.000***	**a-b. a-d. c-d**
6	1.83	.110	1.93	.083	1.99	.102	2.20	.070	3.711	.012	3	3.578	.014	-
7	**4.42**	**.069**	**4.11**	**.084**	**4.08**	**.089**	**4.13**	**.047**	**.523**	**.667**	**3**	**3.580**	**.014***	**a-b. a-c. a-d**
8	4.55	.082	4.50	.064	4.41	.066	4.34	.044	.148	.931	3	2.514	.058	-
9	**4.61**	**.062**	**4.37**	**.068**	**4.39**	**.066**	**4.28**	**.044**	**1.253**	**.290**	**3**	**4.754**	**.003***	**a-b. a-c. a-d**
10	4.37	.101	4.36	.070	4.36	.076	4.37	.044	1.817	.143	3	.011	.998	-
11	4.34	.078	4.28	.071	4.20	.082	4.24	.046	.428	.733	3	.582	.627	-
12	**4.46**	**.072**	**4.34**	**.055**	**4.19**	**.090**	**4.26**	**.042**	**1.311**	**.270**	**3**	**2.759**	**.042***	**a-c. a-d**
13	4.51	.075	4.40	.057	4.41	.079	4.36	.051	1.381	.248	3	.758	.518	
14	4.68	.069	4.49	.052	4.54	.065	4.46	.046	2.611	.051	3	2.384	.069	
15	4.49	.063	4.31	.075	4.45	.065	4.35	.043	.985	.400	3	1.554	.200	
16	**4.59**	**.071**	**4.45**	**.064**	**4.28**	**.090**	**4.27**	**.045**	**1.043**	**.373**	**3**	**5.102**	**.002***	**a-c. a-d. b-d**

*indicates significance at $p < .05$

When looked at the answers belonging to the 5th article "*To use instructional software in the lessons is a waste of time*", in which there is a significant difference is seen, while teachers in the groups that is less than 5 years (M=1.68) delivered opinion at a level of *strongly* disagree, groups of 5-11 service years (M=2.00) and group that is 18 years and over (M=2.19) delivered opinion at a level of *disagree.* It is seen that there is a significant difference between these groups. At the same time, even though groups of 12-17 years (M=1.84) and groups of 18 and over (M=2.19), again those in the same groups, delivered opinion at a level of *disagree;* there is a significant difference between these. That less than 5 years group teachers' level of not agreeing with this statement is different from those in other service year groups may stem from the fact that teachers in this group can be more active and quick to follow and to adapt to the developments. When looked at the answers given for the 7th statement that "*instructional software increase the students' performance in the lesson"*, while teachers in the groups that is less than 5 years (M=4.42) delivered opinion at a level of *strongly agree*, group of 5-11 years (M=4.11), group of 12-17 years (M=4.08) and group that is 18 and over (M=4.13) delivered opinion at a level of *agree*. Again, like in the former article, in the 7th article also, it can stem from the fact that attitudes of the teachers who have 5 service years and less are different from the other groups positively. It is seen also that there is a significant difference in the 9th statement that "*that applications (simulations) and activities in the instructional software should increase the students' motivation should be taken into consideration*." Although there is a significant difference between the groups of 5 years and less (M=4.61) and group of 12-17 service years (M=4.39) and group of 18 years and over (M=4.28), they delivered opinion at a level of *strongly agree.* When looked at the

answers given for the 12th article that *"usage convenience and organization of the presentation in the instructional software should be taken into consideration"*, in which there is a significant difference also, it is seen that there is a significant difference between the teachers who have less than 5 service years and those who have 12-17 years and 18 years and over. While teachers who have less than 5 service years (M=4.46) delivered opinion at a level of *strongly agree*, teachers who have 12-17 service years (M=4.19) and 18 years and over (M=4.26) delivered opinion at a level of *strongly agree* near to *agree.* Although there is a significant difference between the answers given for the 16th statement that *"information about problems encountered while using instructional software should be collected from the teachers and the software should be updated"*, they are placed in the same answer group since they are very close to the lower and upper limits. Teachers in the groups of 20-30 years old (M=4.52) and 41-50 years old (M=4.21) delivered opinion at a level of *strongly agree.* Again in the 16th article same situation appears with the teachers in the groups of 31-40 years old (M=4.40) and 41-50 years old (M=4.21). They delivered opinion at a level of *strongly agre*

Excluding the articles in which there is a significant difference, there is a normal distribution in the articles 1, 2, 3, 4, 8, 10, 11, 13, 14, 15. Considering the service years of the teachers, in the answers of these articles, they think that students' mastery on the topics and so their achievement with their performance will increase if the software have provide qualified education and if the students use them easily. It, also, shows that all the teachers in all the groups think that visuals are important in the software; they think that principles of material development should be paid attention and that visuals should motive the students. Furthermore, it reveals that they think organization of presentation, arrangement of the content, their harmony with the educational programs and supporting them with sources adequately in instructional software are important.

According to the results of Kruskal Wallis H test, a value of $p<.05$ level is significant difference. Results of Mann Whitney U test, which was applied to determine that significant difference stem from the difference between which groups are given in the table below.

TABLE 4.
DISTRIBUTION OF THE DATA RELATED TO THE LEVEL OF THE INSTRUCTIONAL SOFTWARE USAGE OF TEACHERS AT THE BASE OF ITEMS ACCORDING TO WORK -YEAR VARIABLE.(SIGNIFICANT DIFFERENCES)

Article No	Service years	N	Average of sequences	Total of sequences	U	p
6	a	71	80.90	5744.00	3188.00	.204
	b	100	89.62	8962.00		
	a	71	72.80	5169.00	2613.00	.187
	c	83	81.52	6766.00		
	a	71	121.50	8626.50	6070.50	.003*
	d	217	152.03	32989.50		
	b	100	91.15	9115.00	4065.00	.788
	c	83	93.02	7721.00		
	b	100	145.24	14524.00	9474.00	.043*
	d	217	165.34	35879.00		
	c	83	139.20	11554.00	8068.00	.127
	d	217	154.82	33596.00		

*indicates significance at $p < .05$

When looked at the table above, in the answers given for the statement that *being used of instructional software by the students is unnecessary*, it is revealed that there is a significant difference between the teachers of 18 service years and over group and the group of 5-11 years. Even though the group that have less than five service years (M=1.83) and the group of 5-11 years (M=1.93) are near to the lower limit, they agreed with the group of 18 service years and over on the opinion of *disagree* in the same answer group. Considering the service years, all the groups think that the students should use instructional software.

IV. CONCLUSION AND RECOMMENDATIONS

When looked at the teachers' situation of examining the software prepared on their fields and being aware of the instructional software, it is seen that although there are instructional software on all the branches in the schools where IT classrooms were installed, remarkable number of the teachers were not aware of these and did not examine the software about their field. Apart from this, 35.9% of the teachers stated that they do not use instructional software at all in the lessons.

35.9% of the participants think studies of the Ministry of National Education on this topic is enough. In other side, when the teachers' views towards IT classroom applications are examined, 55.6% think that it is a positive and necessary project and 40.8% think that it is necessary but not enough. When these two results were combined, it is seen that teachers stated that they think these studies are necessary but the studies done should be improved. That a rate near to hesitation emerges although the teachers disagree with the idea that instructional software should be used in only computing courses emerges may stem from the fact that many teachers think that instructional software should be used in only computing courses.

Although the features of the instructional software that will be used are important, teachers were hesitant about the point that by whom and by which corporation the instructional software is prepared is not important; however, they delivered opinion towards that the *features of instructional software should be paid attention is important.* When that the quality of the software depends on those who prepare them is thought, there is a conflict here. It is a fact that specialists should prepare the software so that they can be of high quality. That the teachers are hesitant about this fact is thought provoking.

It is an unwanted situation that majority of the teachers are not aware of the software although there are instructional software on all the branches especially for applied sciences and art& picture in the IT classrooms. Although there are many types of software prepared for especially 1st degree in primary education and software send to IT classrooms by the Ministry of National Education, it is thought that these software are not used properly. In other branches, that the high portion of teachers is aware of the software especially in the branches of mathematics, computing and physical education can be considered as a positive result.

It is known that there are many types of software, especially for language education, prepared for different levels. However, although there are so many software, it is so thought provoking that 44.4% of the language teachers stated that they did not examine the software on their

fields. The same situation appears also when looked at the branch of art& picture. It reveals that only 18.8% of the art& picture teachers were aware of the software on their fields. That the same situation emerges in the other branches brings up the fact that instructional software should be introduced to the teachers and teachers should be encouraged to use the instructional software.

Teachers delivered opinion at a level of *strongly agree* with the statement that *organizations should be arranged in order to introduce instructional software to the teachers and the students*, and *strongly agree* with the need of earning awareness of instructional software with pre-service and in-service training. Teachers, also, delivered opinion at a level of *strongly agree* with the topic that *instructional software should have a cost to be able to be bought and be used individually*. Instructional software are produced with teamwork by the specialists; however, it cannot be said that specialists have enough knowledge and observation about the problems that can be encountered in the process of instruction. Teachers delivered opinion at a level of *strongly agree* with the statement that feedback should be taken from them to improve the instructional software and that those feedbacks will be helpful to implement the software in the process of education more effectively.

In teachers' groups of gender, age, service years, and branches, teachers delivered opinion at a level of *strongly agree* with the statements such as the importance of the instructional software, need of arranging organization of introduction to the students and the teachers, that instructional software should have a cost that can be met, and taking feedback from the teachers to update the instructional software and to escape the problems encountered.

Usage of technology in the field of education is evaluated from the view of being a tool and due to this analysis; instructional organization and content were disregarded. However, these results show that teachers think organization of presentation, arrangement of the content, harmony of the content with the educational programs, supporting the content with sources adequately are important.

Additionally; based on the results of this study, the following major recommendations can be offered for instructional software:

- Effective supervisions should be done by the Ministry of National Education in order to enable the formator teachers to do studies introducing the instructional software and motivating rewards should be arranged.
- Educational programs on effective usage of instructional software should be developed in pre-service education in order to enable the teachers to use instructional software effectively.
- Teachers should be informed about the fact that instructional software are not only for computing courses and that there are instructional software prepared for all other branches.
- By taking feedback from the teachers, the Ministry of National Education should implement bid of buying. In this way, unnecessary investment on unnecessary software will be escaped by not buying the software that is difficult to use.
- In order to handle the difficulties that can be encountered during the adaptation of the instructional software to the educational programs, the instructional software should be introduced to the teachers who are on duty on the instructional levels and they should be used actively.
- Usage of the instructional software in the other laboratory of computers in the educational program will increase the students' achievements with the management of the schools and the Ministry of National Education buying the instructional software for IT classrooms. Furthermore, by making the IT classroom applications widespread, laboratories of computers should be modernized. So, equality of opportunity in education will be provided.
- Orientation to give information about the nature of online learning and its requirements should be provided to students to enable them to better understand and determine whether they can handle the requirements of an independent environment. Also, they should be guided to adapt to different environments and learning methods (i.e., the student-centered methods)

It is clear that the use of the informational technology will grow in the future. The new technology will create a more flexible education system, which can overcome current barriers of economics, distance and other disadvantages. The computer technology will encourage teachers and students to work together and to participate in collabration. They can work together on developing teaching and learning strategies. In future, all of the teachers will be good at using technology to help students learn and they will work 'virtual' stuation very well.

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