Analysis of the opinions of primary school teachers about new orientations in education

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Abstract

This study was carried out in order to determine the opinions of primary school teachers about the modern teaching methodology used in education and about how they use those methods. In order to determine the opinions of the teachers about the modern methods in education, an attitude scale of likert type was designed of 32 articles. This scale was then conducted on total 160 teachers; 86 female, 74 male. The data were then analysed through percentage, frequency and mean values, and then t-test and one-way ANOVA variance analysis were carried out depending on the variants in order to determine whether there is a significant difference between the opinions. As a result, it was understood that the teachers didn’t have adequate information about “The New Orientations in Education”. While no significant different was found among the opinions of the teachers about the new orientations in education in terms of gender, place of work, school of graduation and whether in-service training had been taken or not, the difference was significant in terms of seniority.

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1. Introduction

Living, adapting to the society, progress and modern society are all based on the concept of “education”. In order to understand the importance of modernization for education while adapting to the modern society, we should first understand the concept of “education”. Education is the process of forming terminal bio-chemical changes in brain through physical stimulus (Sönmez, 2003).

“Education is a regular interaction to bring about certain changes in human behaviour in terms of knowledge, skills, understanding, interest, attitude, character and other important personal characteristics” (Çelep, 2004, quote: Yıldırım, 1983). It can also be defined as the process of bringing about terminal behaviour change in the individual through his/her own experience and intended culturing (Demirel, 2003). It is also a process of causing intended change in the individual’s behaviours through his/her own experience (Ertürk, 1975).

Education is considered to be the key to change and to the skill of adaptation to innovations, thus being the base of national development. It is a well-known fact that information society is composed of well-educated individuals (Özden 2004). Information spreads rapidly thanks to the change in technology. As a result of informational interaction, it increases and changes rapidly. In order to follow this change, people have to use their skills and talents effectively.

Today, education bears different meanings than the traditional ones. It has gained a meaning beyond basic areas like just reading, writing and mathematics (Çağlar, 2001). Since student-centred teaching has replaced teacher-centred teaching as a part of constructivist teaching in our education system, teaching students to learn themselves has come into prominence. Attracting Gürbüz Ocak.

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the individual to the centre of learning environment is thanks to such a modern educational understanding that isn’t limited to giving individuals rights and responsibility to choose what they want to learn but also provides them an opportunity to participate actively into the most suitable method and learning activities (Oktay, 2001). While traditional education has a teacher and subject centred structure, modern educational understanding places the student into the centre. Today, education is no longer regarded just for the future of the state but also for optimum development in the individual, because the future of the state depends on optimum development in all of its citizens (Özden, 2002).

Especially in primary school period, students are active in need of being warned and guided. Therefore, primary school teachers shouldn’t expect them to sit at their desks still listening to them without moving for the whole lesson; rather, they should arrange such a learning-teaching environment that will enable students interact with each other and with their teachers easily and effectively, because a student will learn with pleasure when he/she is active rather than sitting at his/her desk passively. Hence, teachers arrange their stimulators as attractive as to keep their students stimulated (Senemoğlu 2000).

Turkish education system also suffers from various problems due to rapid informational changes. According to Gedikoğlu (2005), one of them is too much emphasis on memorizing. The system, instead of making students memorize enormous amount of information, should focus on digesting little but functional information. The main aim shouldn’t be loading information but rather teaching how to reach for and use this information creatively and effectively. Considering all these changes and expectations, such concepts as “learning to learn” and “life-long learning” have gained more importance.

“In order for individuals to keep up with the social life that has been complicated with rapid technological developments, they should be equipped with modern information and skills, which shows that every individual should undergo qualitative basic education as long as possible.” (MEB, 15th National Education Council, 1996)

We need to find out such a method that will maximize learning and make teaching more effective and functional. Our primary task is to conceptualize the learning outcome so as to deal with the primary importance of meaningfulness. This is such an understanding of education that accepts the priority of multi-dimensional life and regards learning as an art of achieving teaching in life. (Ülgen, 2002)

In this research, a study was done on the importance of every student-centred learning where experiential learning comes into prominence. Teachers’ opinions about theories of multiple-intelligence, project-based learning, constructivism, problem-based learning, cooperative learning, brain-based learning, critical thinking, reflective thinking, effective learning, creative thinking, mastery learning, lifelong learning, internet-based learning, layered curriculum, distance instruction and quantum learning were asked. Whether the teachers are adequately trained about these methods; that is, whether they have sufficient knowledge about them was researched. Also, whether these teachers use these new methods instead of the traditional direct method was researched as well.

1.1. Aim of the Research

It is about the dynamic personality of teachers that enables permanent learning. This dynamic personality depends on their awareness of new applications in education in the rapidly changing world. Today, new orientations have replaced the traditional meaning of education through conceptual researches. Teachers should also get themselves rid of the traditional understanding and be aware of and use modern methods (multiple-intelligence, project-based learning, constructivism, problem-based learning, brain-based learning, critical thinking, reflective thinking, lifelong learning, internet-based learning, …) that have been determined to optimize learning by several researches. This research was conducted to determine the opinions of primary school teachers about the new methods in education and to what extent they make use of them. These opinions were then analysed through certain variables (gender, place of work, seniority, school of education, whether training has been undergone about modern methods in education) and it was determined whether there was a significant difference between them in terms of these variables.

1.1. Assumption & limitations

It was assumed that each of the 32 articles in the questionnaire of “New Orientations for Teachers” was understood correctly and answered frankly by teachers. The study was limited to 160 teachers at 10 primary schools.

2. Method

2.1. Population & sampling

The population of the research, in which survey method was used, is composed of primary school teachers working in the city centre of Tekirdağ and town of Malkara in 2007–2008 education period, while the sampling consists of total 160 teachers- 86 female and 74 male- working at 10 primary schools chosen randomly from the city and the town.

2.2. Development of data collecting tool

The questionnaire of new orientations developed by the researchers was used as data collection tool in the research. This questionnaire was developed to determine the opinions of teachers about the new orientations in education and to what extent they use these new methods in their lessons.

During questionnaire development, interviews had been conducted with teachers about new orientations and articles were prepared by taking samples from the problems experienced during application of these new methods. A pool was formed of 50
articles about the general feelings, attitudes and opinions. After the questionnaire was analysed and evaluated by experts, in the light of ensuing suggestions, some articles were excluded from the questionnaire while some others were rearranged. Thus, the scale had its final form of 32 articles. Reliability and validity tests were conducted on Five-point Likert Scale.

The choices were “Totally Agree, Agree, Partly Agree, Disagree, Totally Disagree” and teachers were asked to tick whichever they thought reflected their thoughts and feelings the best about the articles. For Factor Analysis, the data gathered from students were analysed through statistical operations. In order to determine structural validity of the articles, factor analysis was done. According to the results of factor analysis, 32 articles whose factors loads were 0.40 or more were considered to be suitable for the questionnaire. As a whole, Cronbach Alpha reliability coefficient of the scale was found to be 0.90, which shows that the scale is reliable.

2.3. Application of data collecting tool

The questionnaire was rearranged through necessary analysis and then handed out to 180 teachers by the researcher. They were taken back tomorrow, but only from 160 teachers.

2.4. Data Analysis

Statistical analysis was used in data analysis. The scale was scored as 5, 4, 3, 2, 1 starting from “Totally Agree”. The score range showing the rate of students’ opinions about the articles is as follows: Totally Agree: 4.21–5.00, Agree: 3.41–4.20, Partly Agree: 2.61–3.40, Disagree: 1.81–2.60, Totally Disagree: 1.00–1.80.

The following statistical operations were used for data analysis: (f) frequency and (%) percentage techniques were used for descriptive statistical analysis about personal characteristics Independent groups t test and Anova test were used to determine whether there is a significant difference between groups that were formed according to their gender, place of work, term of office, school of graduation and whether training had been undergone about modern methods in education in terms of the opinions of teachers about the importance of modern methods in education and their knowledge on these methods. The level of significance during data analysis was accepted to be 0.05.

2.5. Discussion

In this section, personal information of the teachers within the context of the research, the analysis results belonging to teachers’ opinions obtained from the questionnaire of “New Orientations for Teachers” and interpretations of these results were presented.

<table>
<thead>
<tr>
<th>No</th>
<th>EXPRESSIONS</th>
<th>CHOICES</th>
<th>F. L</th>
<th>Totally Agree</th>
<th>Agree</th>
<th>No Idea</th>
<th>Disagree</th>
<th>Certainly Disagree</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I use multiple intelligence theory in my lessons.</td>
<td>0.55</td>
<td>f</td>
<td>1</td>
<td>4</td>
<td>15</td>
<td>97</td>
<td>43</td>
<td>4.11</td>
</tr>
<tr>
<td>2</td>
<td>I have access to required materials to make use of multiple intelligence theory.</td>
<td>0.44</td>
<td>f</td>
<td>7</td>
<td>33</td>
<td>37</td>
<td>64</td>
<td>19</td>
<td>3.34</td>
</tr>
<tr>
<td>3</td>
<td>I believe that project based learning contributes to lessons.</td>
<td>0.77</td>
<td>f</td>
<td>4</td>
<td>11</td>
<td>26</td>
<td>87</td>
<td>32</td>
<td>3.83</td>
</tr>
<tr>
<td>4</td>
<td>I believe that my students can achieve the change our age requires through project based learning.</td>
<td>0.79</td>
<td>f</td>
<td>1</td>
<td>11</td>
<td>39</td>
<td>80</td>
<td>29</td>
<td>3.78</td>
</tr>
<tr>
<td>5</td>
<td>I have adequate knowledge about the instructional applications of constructivism.</td>
<td>0.66</td>
<td>f</td>
<td>3</td>
<td>17</td>
<td>38</td>
<td>84</td>
<td>18</td>
<td>3.61</td>
</tr>
<tr>
<td>6</td>
<td>I use the teaching strategies of constructivism in my lessons.</td>
<td>0.52</td>
<td>f</td>
<td>0</td>
<td>11</td>
<td>39</td>
<td>80</td>
<td>29</td>
<td>3.74</td>
</tr>
<tr>
<td>7</td>
<td>I have adequate knowledge about problem based learning.</td>
<td>0.62</td>
<td>f</td>
<td>4</td>
<td>10</td>
<td>24</td>
<td>96</td>
<td>26</td>
<td>3.81</td>
</tr>
<tr>
<td>8</td>
<td>I believe that through problem based learning, students are exposed to real life situations they are likely to face in their professional career.</td>
<td>0.66</td>
<td>f</td>
<td>2</td>
<td>10</td>
<td>25</td>
<td>85</td>
<td>38</td>
<td>3.92</td>
</tr>
<tr>
<td>9</td>
<td>I use cooperative learning method in my lessons.</td>
<td>0.57</td>
<td>f</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>97</td>
<td>56</td>
<td>3.28</td>
</tr>
<tr>
<td>10</td>
<td>I believe that through cooperative learning approach, students develop positive attitudes towards lessons.</td>
<td>0.79</td>
<td>f</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>93</td>
<td>56</td>
<td>3.27</td>
</tr>
</tbody>
</table>
I believe that through brain based learning, meaningful learning is achieved.  

I believe that through brain based learning, what has been learned becomes more permanent.  

I believe that through critical thinking method, students become sensitive to every subject area.  

I use critical thinking method in my lessons.  

I have adequate knowledge about reflective thinking method.  

I believe that our education system has the qualifications that will support reflective thinking.  

I believe that effective learning method develops student’s thinking mechanism.  

I have adequate knowledge about effective learning methods.  

I believe that through creative thinking approach, individuals are raised according to the requirements of the age  

I believe that our education system has the qualifications that will support creative thinking.  

I use mastery learning method in my lessons.  

I believe that mastery learning approach is useful for students to develop positive attitudes towards lessons.  

I believe that lifelong learning approach can be adopted by students.  

I believe that our education system has the qualifications that will support lifelong learning approach.  

I use internet based learning method in my lessons.  

Our school has enough equipment to apply internet based learning approach.  

I have adequate knowledge about layered curriculum.  

I use layered curriculum in my lessons.  

I have adequate knowledge about distant learning program.  

I believe that our education system has the qualifications that will support distant learning program.  

I have adequate knowledge about quantum learning method.  

I use quantum learning method in my lessons.  

As seen in Table II, while teachers express that they totally agree with the 12th article “I believe that through brain based learning, what has been learned becomes more permanent” with 4.93 average; they say that certainly disagree with the 31st and 32nd articles about quantum learning with 2.64 average. Accordingly, it is possible to say that the teachers in the sampling have little knowledge about quantum learning, whereas their knowledge about brain based learning is more. The teachers totally agree with the 1st article “I use multiple intelligence theory in my lessons” with 4.11 average. Accordingly, it can be argued that in our schools applications of multiple intelligence are sufficient thanks to intensive emphasis on it with new programs.

Because the value of relevance as a result of t-test is bigger than 0.05, there is no significant difference between the opinions of male and female primary school teachers about the New Orientations in Education (P>0.05). That is, gender isn’t a decisive variant in teachers’ opinions, so male and female teachers have similar opinions about the new orientations.
The value of relevance as a result of t-test conducted to determine whether there is a significant difference between the total scores obtained from the opinions of teachers according to their place of work is bigger than 0.05, so there is no significant difference between the opinions of those working in the city centre and in town about the New Orientations in Education (P>0.05). That is, place of work isn’t a decisive variant in teachers’ opinions.

Table IV. Evaluation of teachers’ opinions according to seniority

<table>
<thead>
<tr>
<th>Seniority</th>
<th>N</th>
<th>X</th>
<th>F</th>
<th>Relevance</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>41</td>
<td>113,0</td>
<td>4,22</td>
<td>0,007</td>
<td>0,006</td>
</tr>
<tr>
<td>6-10 years</td>
<td>34</td>
<td>115,4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15 years</td>
<td>39</td>
<td>115,0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 years and above</td>
<td>46</td>
<td>122,9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Because the value of relevance obtained as a result of Anova test is smaller than 0.05, there is a significant difference between the opinions of teachers about the New Orientations in Education according to seniority (P<0.05). The difference between the groups formed according to seniority of the teachers is significant. According to the results of Tukey test conducted to determine from which group this difference arose, the difference between the two groups- seniority of 1-5 years and 16 years and above- is found to be significant.(Table IV)

Table V. Evaluation of teachers’ opinions according to school of graduation

<table>
<thead>
<tr>
<th>Graduation</th>
<th>N</th>
<th>X</th>
<th>F</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Training School</td>
<td>4</td>
<td>129,7</td>
<td></td>
<td>2,10</td>
</tr>
<tr>
<td>Education High School</td>
<td>26</td>
<td>120,3</td>
<td>2,10</td>
<td>0,083</td>
</tr>
<tr>
<td>Education Faculty</td>
<td>86</td>
<td>115,3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Institute</td>
<td>19</td>
<td>119,9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>25</td>
<td>113,7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Anova test was conducted in order to determine the significance of the difference between the scores of groups formed according to the variant of school of graduation. According to the results of this test, the difference between the opinions of the teachers is not significant (P>0,05). (Table V)

Table VI. Evaluation of teachers’ opinions according to whether training has been undergone about new orientations in education

<table>
<thead>
<tr>
<th>Previous Training</th>
<th>N</th>
<th>X</th>
<th>T</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergone</td>
<td>102</td>
<td>117,8</td>
<td>1,237</td>
<td>0,21</td>
</tr>
<tr>
<td>Not Undergone</td>
<td>58</td>
<td>114,9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The difference between the opinions of teachers who have undergone training about new orientations in educations and who have not is not significant according to the results of T test (P>0,050). We can deduce from this fact that this training couldn’t yield a significant difference in terms of the opinions of teachers about new orientations.

Table VII. Evaluation of the teachers who have undergone training about new orientations in education in terms of this training

<table>
<thead>
<tr>
<th>.00</th>
<th>0–20</th>
<th>20–40</th>
<th>40–60</th>
<th>60–80</th>
<th>80–100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>58</td>
<td>1</td>
<td>6</td>
<td>17</td>
<td>41</td>
</tr>
<tr>
<td>Percentage</td>
<td>36,3</td>
<td>0,6</td>
<td>3,8</td>
<td>10,6</td>
<td>25,6</td>
</tr>
</tbody>
</table>
3. Results

Teachers were asked about teaching orientations that have recently been accepted by many educators throughout the world and their opinions were analysed. As a result, it was seen that there isn’t a significant difference between their opinions according to gender.

Their opinions about and attitudes towards new orientations in education do not change depending on place of work; that is, there isn’t a significant difference between the opinions of those working in the city centre and in town.

However, their opinions about and attitudes towards new orientations in education do change depending on seniority. As their seniority rises, so does the mean total score they get from the questionnaire. Accordingly, the difference between teachers working for 1-5 years and those working for 16 years and above is significant in favour of senior teachers.

The opinions of teachers about new orientations in education do not change depending on school of graduation. Depending on the difference among types of schools, it is seen that there is no significant difference in opinions and attitudes.

Whether the teachers have had training about new orientations in education or not has no significant effect on their opinions and attitudes, which shows that this training is inadequate to affect their opinions.

4. Suggestions

In education, rather than narrative skills of teachers, what counts is their knowledge and how they use this knowledge. Our study aims to improve our education through some suggestions depending on the results.

The sampling of the research was kept limited due to application limitations. The number of the sampling can be increased in further researches about new orientations. Also, other researches aimed at different echelons for every new orientation can be carried out depending on this research.

It appeared that the teachers didn’t have adequate training for new orientations; therefore, in-service training should be arranged for teachers appropriate for their working hours. However, these training programs should be improved not only in terms of quality but also in terms of quantity and they should be given by experts.

The results of the researches carried out for these orientations could be announced to teachers so as to make them more aware and conscious in the subject. The number of sample applications about new orientations could be increased and these samples could then be shared with teachers.

In education faculties, new courses about new orientations in education could be provided for teacher candidates so as to train and urge them pre-service.

References


