WEBQUEST USAGE IN DEMOCRACY, HUMAN RIGHTS AND CITIZENSHIP EDUCATION

Associate Professor Dr Cemil YÜCEL
Eskişehir Osmangazi University, Faculty of Education, Eskişehir, Turkey
cyucel@ogu.edu.tr

ABSTRACT
The purpose of this study is to assess the performances of social studies teacher candidates in using WebQuest applications in Human Rights, Democracy and Citizenship Education. WebQuests are tools that are used to create constructivist learning environments for students by using web resources. WebQuests allow students to do internet research while minimizing the risk of getting lost on the net. The study employs five different WebQuests about human rights, democracy and citizenship prepared as part of a bigger research project. The five different WebQuests about sensitive social issues were completed by teacher candidates over the course of 12 weeks. The subjects of the study were 120 students allocated to four experiment groups at two state universities in Turkey. The students completed the WebQuests in groups. The assessment criteria for the WebQuests were incorporated as rubrics. According to rubric assessments, all teacher candidate groups displayed mid and low level performance. However, it is thought that the use of WebQuest as a web-based instructional tool in a constructivist approach in higher education may be helpful.

Keywords: WebQuest; Teacher training; Citizenship education; Web-Supported learning

INTRODUCTION
The internet is now an amazingly and rapidly developing and changing phenomenon. Therefore, the use of the internet in learning and teaching processes in schools is inevitable. Its usage cannot be independent from schools and learning activities.

Although the use of technology in education is nothing new, internet use for educational activities has created a new and different research and application area. Distance education through the internet is an explicit example of it. The use of the internet in formal education at elementary and secondary levels is becoming more and more important. For the time being, distance education is only offered to undergraduate and graduate students in an effective way, because their cognitive level is thought to be more suitable.

The possible role of internet use at school, the advantages and disadvantages entailed, the design and quality of internet-based activities at school, and the productivity and success of the applications are very important issues that have been drawing researchers’ attention. In this respect, the WebQuest applications are significant for internet-based learning and teaching activities (Erişti, Şişman & Yıldırım, 2008).

WebQuest in Teacher Training
As in the rest of the world, there has also been a paradigm shift in Turkey over the last fifty years. The most critical period in this paradigm shift in our country was the 2004-2005 academic year when the education system was changed dramatically. The philosophy of education was channelled towards the constructivist approach, which emphasizes self-teaching rather than teaching (Yaşar, 1998), students rather than teachers, (Özden, 2005), and forming knowledge rather than memorizing knowledge. The WebQuest applications suggested by Dodge (1997) are among the instructional activities used in the constructivist approach. He describes constructivist instructional activities in WebQuest applications as learners’ responsibility through filtering knowledge with a questioning mind, and interacting with other learners. According to Dodge (1995), a well designed WebQuest application helps students reach high level cognitive learning objectives; such as analysis, synthesis and evaluation. WebQuest applications classified as long term or short term applications must have the following basic processes: introduction, research project, defined internet sources, defined steps, instruction, and result (Dodge, 1995).

Zheng, Stucky, McAlack, Menchana and Stoddart (2005) claim that at the backstage of learning, the WebQuest applications are supported by four basic structures – critical thinking, knowledge application, social skills, and constructive learning. With these applications, students access resources designed and/or limited by the teachers themselves instead of randomly surfing the net through large chunks of information, which is a very important skill. Thus, WebQuest can provide productive learning environments for students without exposing them to information pollution (Skylar, Higgins & Boone, 2007; Şen &Neufeld, 2006).
Yang, Tzuo & Komara (2007) find that WebQuest as a learning approach and learning tool in teacher training programmes makes a great contribution to prospective teachers’ understanding of students’ individual differences and different learning styles. It is concluded that compared to other traditional learning-teaching methods, teachers use critical thinking and problem-solving skills more often with WebQuest applications. Moreover, WebQuest applications encourage students and teachers to make more use of technology in classes (Yang, Tzuo, Komara; 2011). Another study similarly shows that using WebQuest applications as a learning-teaching activity in teacher training programmes helps teacher candidates reach higher learning levels (Allan & Street, 2007). It is thought that using WebQuest applications in social studies education – especially in human rights, democracy and citizenship education – is very important. Today’s children as the future’s “digital citizens” should acquire such basic skills as having wider networks, being more collaborative, having a global awareness, needing less paperwork, being fluent in web languages, and being in contact with knowledge organizers globally (Froelich, 2009). In this context, the structure and qualities of WebQuest applications will ease and support the acquisition of these skills.

STUDY
The aim of this study is to observe the performances of teacher candidates in completing WebQuests duties given in Human Rights, Democracy, and Citizenship Education courses.

Method
In this study, document analysis was utilized to analyze and evaluate WebQuest homework and presentations obtained from student groups involved in ‘a web-supported effective human rights, democracy and citizenship education project’ Quantitative data was generated and commented through rubrics. Details about rubrics are provided in subsequent sections.

Research Group
The research group consisted of 120 teacher candidates studying in their second year at social studies departments of two state universities. The data came from these students who were assigned to four experimental groups for “a web supported effective human rights, democracy and citizenship education project.” The project was designed to measure the possible effects of internet usage in instruction. The main point of interest in this section of the data was related to WebQuests.

Obtaining Documents
The documents used in this research were collected in the course of the “web supported effective human rights, democracy and citizenship education project” which was in quasi-experimental Solomon four-group research design. With the experimental groups, the classes were conducted with the support of internet activities. In class, the students were required to do group work. They were asked to use five WebQuests in four themes, i.e. two WebQuests about peace and war, one about democracy, one about globalization, and one about the media. These WebQuests were about (1) Peace and Violence, (2) Violence against Women, (3) Classroom Constitution, (4) Globalization, the Internet, and Culture, and (5) Media Literacy. Each WebQuest assignment required web research homework, which was evaluated by rubrics utilized for this study.

The content of homework in WebQuests:

1. In “Peace and Violence,” the students were asked to do research with the examples given, analyze the causes of violence disrupting society and peace, suggest measures for fighting against violence, and explain judicial processes about violence. Then, they were asked to write a report on violence with all its dimensions and prepare the lists of recommendations for solutions to violence.
2. In “Violence against Women,” the students were asked to prepare a presentation regarding violence against women in Turkey. They completed tasks including types of violence, works of governmental and non-governmental organizations (NGOs) for protecting women.
3. In “Democracy,” the groups were asked to write up “a classroom constitution.” The content of this theme included rules of governing, rights and freedoms, main rules in classroom, creating units representing the legislative, executive, and judicial organs.
4. In “Globalization,” the groups were asked to prepare a PowerPoint presentation about globalization. The content of globalization includes the meaning and dimensions of globalization, its advantages and disadvantages, and its effects on national culture.
5. In “Media Literacy,” the groups were asked to define the concepts of "literacy", "information literacy", "information technologies and technological literacy", "computer literacy", "network (internet) literacy", "electronic literacy", "critical thinking skills" and "education and literacy". Then, they were asked to relate them to “communication", “communication tools", "mass communication", "mass media", "public relations", and "digital media".
"media", "message", "media education", "media literacy", "disinformation" and "propaganda" on a PowerPoint platform.

**Data Analysis**

Two different rubrics were used to analyze the WebQuest assignments. For the WebQuests on globalization, internet and culture, media literacy, peace and violence, and violence against women, the same rubric was used, with a different one used for the classroom constitution. These rubrics had five steps. Each step was graded low (1 point), medium (2 points), and high (3 points). The rubric used for the WebQuest assignment on Peace and Violence, Violence against Women, Globalization, and Media Literacy is given in Table 1.

**Table 1:** Rubric for the WebQuest assignment on Peace and Violence, Violence against Women, Globalization, and Media Literacy

<table>
<thead>
<tr>
<th>Steps</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Step: Definition</td>
<td>Problem is defined but the factors creating the problem are not determined.</td>
<td>Problem is defined and factors creating the problem are determined but not illustrated.</td>
<td>Problem is accurately defined and factors creating the problem are defined and well illustrated.</td>
<td></td>
</tr>
<tr>
<td>2nd Step: Internet Research and Analysis</td>
<td>Internet research about the problem is inadequate, no analysis.</td>
<td>Internet research about the problem is done but no analysis of comments on the news.</td>
<td>Internet research about the problem is done, comments on the news are analyzed and comments are made about the communities’ points of view.</td>
<td></td>
</tr>
<tr>
<td>3rd Step: Interpretation</td>
<td>No interpretation</td>
<td>Inadequate interpretation</td>
<td>Very good interpretation</td>
<td></td>
</tr>
<tr>
<td>4th Step: Recommendations on the subject</td>
<td>Inadequate recommendations for preventing the problem and recommendations are not justified.</td>
<td>There are recommendations to solve the problems but recommendations are not justified.</td>
<td>Adequate recommendations for the problem are presented with their justifications.</td>
<td></td>
</tr>
<tr>
<td>5th Step: Report and presentation</td>
<td>Report is prepared but no citations are given. PowerPoint presentation does not reflect the content adequately.</td>
<td>Report is prepared with citations, but PowerPoint presentation does not reflect the content properly.</td>
<td>Citation is used when the report is prepared and PowerPoint presentation reflects the content properly.</td>
<td></td>
</tr>
</tbody>
</table>

The rubric used to assess student performances in fulfilling the tasks in “Classroom Constitution” is presented in Table 2.

**Table 2:** Rubric for the WebQuest assignment on Classroom Constitution

<table>
<thead>
<tr>
<th>Steps</th>
<th>Low</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading sources</td>
<td>Most of the resources are not read</td>
<td>Most of the resources are read, but not assimilated</td>
<td>All resources are read and assimilated</td>
</tr>
<tr>
<td>Rights and freedoms</td>
<td>Rights and freedoms are not stated</td>
<td>Rights and freedoms are partially stated</td>
<td>All rights and freedoms are stated and explained</td>
</tr>
<tr>
<td>Minority rights</td>
<td>Minority rights are not stated</td>
<td>Some minority rights are stated</td>
<td>All minority rights are stated and explained</td>
</tr>
<tr>
<td>Fundamental rules</td>
<td>Few fundamental rules are stated</td>
<td>Most of the rules are stated</td>
<td>All possible rules in classroom are stated and explained</td>
</tr>
<tr>
<td>Main establishments</td>
<td>Main establishments are not stated</td>
<td>Main establishments are stated, but their responsibilities are not stated</td>
<td>Main establishments and their responsibilities are stated</td>
</tr>
</tbody>
</table>
WebQuest homework included 17 assignments in Peace and Violence, 19 in Violence against Women, 5 in Globalization, Internet, and Culture, 7 in Media Literacy, and 8 in Classroom Constitution. The highest and lowest points are shown in Table 3.

<table>
<thead>
<tr>
<th>WebQuest theme</th>
<th>Number of assignments</th>
<th>Minimum point</th>
<th>Maximum point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peace and Violence</td>
<td>17</td>
<td>17</td>
<td>51</td>
</tr>
<tr>
<td>Violence against Women</td>
<td>19</td>
<td>19</td>
<td>57</td>
</tr>
<tr>
<td>Globalization, Internet and Culture</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Media Literacy</td>
<td>7</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Classroom Constitution</td>
<td>8</td>
<td>8</td>
<td>24</td>
</tr>
</tbody>
</table>

To improve internal consistency, the ratings were given to two different experts for analysis in case of subjective results (Yıldırım and Şimşek, 2008). The results from the experts’ judgments were compared and included in the report.

FINDINGS

The students’ points in the Peace and Violence WebQuest rubrics are presented in Table 4. For “Peace and Violence,” there was homework from 17 different student groups. The points they received for the homework were calculated by means of the rubrics and are presented in Table 4.

When the first step (definition) was reviewed, it was seen that six groups completely and accurately defined “Peace and Violence,” and these groups determined the factors causing peace and violence with examples added. The results of eight groups were rated ‘good’ by the same criteria. These eight groups made correct definitions but did not mention the factors causing the problem. Further, it was understood that three groups did not make a correct definition or mention the factors affecting the occurrence of this problem.

When the second step (Internet Research and Analysis) was reviewed by means of the rubric, it was understood that four of the groups did internet research and analyzed the comments the society made on the news and they also made comments on the society’s points of view about the subject. On the other hand, it was found that seven groups did internet research on “peace and violence” but did not analyze, and six groups were rated inadequate in internet research and there was no analysis.

When the third step (Interpretation of Peace and Violence) was reviewed, it was seen that three groups interpreted the problem completely. Four groups’ interpretations were inadequate. Ten groups offered no interpretations on the subject.

The fourth step of WebQuest homework was “Recommendations.” It was noted that four groups made adequate recommendations in their reasons. Seven groups made recommendations but did not mention the reasons. Six groups made inadequate recommendations about “Peace and Violence”, and did not give any reasons.

The fifth step of WebQuest homework was “Reporting and Presentation”. When the assignment was reviewed, it was seen that three groups made citations and reflected the content completely in their reports. Five groups made citations, but did not reflect the content adequately, and nine groups did not cite or reflect the content properly.
Total points of the groups for the “Peace and Violence” assignment were calculated through rubrics. When the total points were reviewed, the groups turned out the most successful in the definition step and the least successful in the interpretation step. Additionally, the groups’ performance was top in the definition step but medium in internet search and analysis, interpretation, recommendations on the subject, and reporting and presentation.

The total points of students in “Violence against Women” WebQuest are presented in Table 5.

In the “Violence against Women” subject, there was homework from 19 different student groups. The points that the student groups received for the assignment were calculated by means of the rubrics and are presented in Table 5. When this table was reviewed for the first step, eight groups completely defined violence against women and determined the factors causing it. They also provided explanations with examples. Three groups determined the factors causing the problem but did not give any example. Eight groups only defined violence against women, but did not indicate the factors underlying it.

<table>
<thead>
<tr>
<th>Table 5: Students’ Points for WebQuest Assignment Themed Violence against Women</th>
<th>n</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st step Definition</td>
<td>19</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>2nd step Internet Research and analysis</td>
<td>19</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td>3rd step Interpretation</td>
<td>19</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>4th step Recommendation on the subject</td>
<td>19</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>5th step Reporting and Presentation</td>
<td>19</td>
<td>8</td>
<td>9</td>
<td>3</td>
<td>35</td>
</tr>
<tr>
<td>Between 19 and 32 points low; between 33 and 46 points medium; between 47 and 57 points high</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When the second step, “Internet Research and Analysis”, was reviewed, six student groups were found to have done internet research on “Violence against Women.” They also analyzed the comments on the news about the subject, and they commented on the society’s points of views about the subject. On the other hand, six student groups did research on “Violence against Women” but did not analyze the comments on the news. Seven groups did not carry out adequate research on the internet and failed to analyze the comments.

When the third step (Interpretation) was reviewed, it was found that three groups interpreted the problem. Four groups inadequately interpreted the problem, and 10 groups did not make any interpretations on the subject.

The fourth step of WebQuest homework was “Recommendations.” It was understood that four groups put forward sufficient recommendations with their reasons for preventing violence against women. Six groups made recommendations to prevent violence against women, but did not give reasons. Nine groups made insufficient recommendations and did not provide reasons either.

The fifth step of WebQuest homework was Reporting and Presentation. Three groups used citation and reflected the content of “violence against women “completely. Nine groups made citations, but did not reflect the content properly. Eight groups did not make citations or reflect the content properly in their reports.

When the groups’ total points for WebQuest homework “Violence against Women” were reviewed, they were found to be the most successful in the definition step but the least successful in the interpretation step. Accordingly, while the groups’ performance was low in the interpretation step, their performance in definition, internet research and analysis, reporting, recommendations, and presentation was rated medium.

The total points received by the student groups for WebQuest homework about globalization is shown in Table 6. In this subject, there was homework by five groups of students. The points that the students received for their assignments were calculated via rubrics and are presented in Table 6. According to Table 6, when the first step, definition, was reviewed, it was seen that three groups clearly defined globalization, determined the factors affecting it, and explained them with supporting examples. However, two groups defined globalization and determined the factors affecting it without giving any examples about the factors.
Table 6: Students’ Points for WebQuest Assignment Themed Globalization

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st step</td>
<td>Definition</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>2nd step</td>
<td>Internet Research and analysis</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3rd step</td>
<td>Interpretation</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>4th step</td>
<td>Recommendations on the subject</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>5th step</td>
<td>Reporting and Presentation</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>11</td>
</tr>
</tbody>
</table>

Between 5 and 8.6 points low; between 8.7 and 12.3 points medium; between 12.4 and 15 points high level

When the second step, “Internet research and analysis”, was reviewed, two groups were found to have done internet research and analyzed the comments on the news about this subject and interpreted the society’s points of view about this subject. Three groups did internet research about the subject without analyzing the comments on the news.

When the third step, interpretation, was examined, it was seen that two groups completely interpreted the subject whereas three groups interpreted it inadequately.

The fourth step of the WebQuest assignment was “recommendations on the subject”. When this step was studied, it came to light that three groups recommended sufficient precautions to prevent problems caused by globalization and they included the reasons for these precautions. Two groups recommended precautions to prevent problems but did not mention their reasons.

The fifth step of the WebQuest assignment was “Reporting and Presentation”. For globalization, this step revealed that one group used citation in reports and completely covered the content. Four groups made citations in their report but did not reflect the content properly.

When the total points of the groups for WebQuest homework were reviewed, it was found that students were best at defining, but the least successful in reporting and presentation steps. It was also found that their performance in all steps was rated as medium.

The total points of the experiment group students for WebQuest homework about “Media Literacy” are shown in Table 7. In “Media Literacy”, there was homework by seven groups of students. The points that the students received are presented in Table 7. According to this table, when the first step, definition, was reviewed, it was concluded that one group defined media literacy properly, and determined the problems and factors affecting it, with examples about them. Six groups defined media literacy, determined the problems and factors affecting it but did not present examples.

Table 7: Students’ Points for WebQuest Assignment Themed Media Literacy

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st step</td>
<td>Definition</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2nd step</td>
<td>Internet research and analysis</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>3rd step</td>
<td>Interpretation</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>4th step</td>
<td>Recommendations on the subject</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>5th step</td>
<td>Reporting and Presentation</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Between 7 and 11.6 points low; between 11.7 and 16.3 points medium; between 16.4 and 21 points high level

Studying the second step “Internet research and analysis” revealed that one group did internet research and analyzed the comments made on the news about the subject and interpreted the society’s points of view about the subject. One group did internet research but did not analyze the comments on the news. Five groups’ internet research on the subject was inadequate, and there was no analysis.
When the third step, “interpretation”, was reviewed, it was seen that one group interpreted the media events properly; one group made an inadequate interpretation; five groups did not make any interpretations about the media news.

When the fourth step, “recommendations on the subject”, was reviewed, it was found that one group made adequate recommendations with their reasons. Two groups made recommendations to the subject but did not present the reasons for the recommendations. Four groups made inadequate recommendations with no reasons presented.

The fifth step was “Reporting and Presentation”. In this step, one group did the task. They cited the references they used and reflected the content of the subject properly. One group made citations properly but did not reflect the content completely. Five groups did not cite the references and did not reflect the content of the subject completely.

When the total points of the groups for the WebQuest assignment were reviewed, it was found that students were best at defining, but the least successful in internet research and analysis steps. It was further concluded that group performances were medium in the definition step but low in all other steps.

The students’ total points for WebQuest homework about “Class Constitution” as part of democracy are shown in Table 8. As mentioned earlier, a separate rubric was used to evaluate the WebQuest assignment “Class Constitution.” There were five steps of evaluation. Eight student groups prepared homework on this subject. The students’ points were calculated via the rubric and are presented in Table 8.

The first step of evaluation was “Reading Resources.” When the groups’ homework was reviewed, it was found that one group read and understood the resources. Two groups read the resources but did not understand the subject. Five groups failed to read and understand the resources.

The second step of evaluation was “Rights and Responsibilities.” When the groups’ homework was reviewed, in this step, five groups did not mention any rights and responsibilities. Two groups mentioned some rights and responsibilities. One group mentioned rights and responsibilities at a satisfactory level.

The third step of evaluation was “Minority Rights.” When the groups’ homework was reviewed, it was found that five groups did not mention any minority rights. Two groups mentioned some minority rights. One group did mention minority rights at a satisfactory level.

The fourth step of evaluation was “Essential Rules.” When this step was reviewed, it was seen that five groups did not mention the essential rules. Two groups partly mentioned them. One group did this homework properly. The last step of evaluation was about “Essential Foundations.” The review revealed that only one group mentioned essential foundations. Two groups partly mentioned them whereas five groups did not mention them at all.

The total points that the groups received for class constitution WebQuest were rated via the rubric. It was concluded that group performances in this WebQuest homework were low in all steps. It was further concluded that the groups could not fulfil the task on the class constitution subject. This means that the students failed to learn the subject properly.

CONCLUSION AND DISCUSSION
An overall review of the groups’ assignments on “Globalization, Internet and Culture, Peace and Violence, Violence against Women, Media Literacy, and Class Constitution”, helps conclude that the students performed
best at the definition step. The teacher candidates’ overall scores from each WebQuest were either low or medium. They hardly ever scored at a high level in any of the WebQuests. Reaching medium and high levels requires teacher candidates to have a higher order thinking skills. The findings suggest that they either lack those skills or did not produce any work representative of those skills. This may be interpreted as students having had difficulty in reaching a higher order of thinking skills for analysis, synthesis, evaluation, and making conclusions (Halat, 2005/2007), which were all WebQuest homework objectives. In their research on teachers’ high cognitive thinking levels and their abilities to use technology, Polly & Ausband (2009) conclude that, although WebQuest applications enable them to use technology, there appears a decrease in their high level cognitive thinking skills.

Teachers’ low ability to do internet research, low performance in analyzing and interpreting data can be attributed to their inexperience resulting in low thinking level scores. In research carried out on teacher candidates, similar results are reported suggesting lower thinking abilities (Apaydin & Çelik, 2010; Beşoluk & Önder, 2010; Argon & Selvi, 2011; Şen, 2009; Gülveren, 2007).

At the end of the WebQuest applications, it is concluded that in order to prepare WebQuest homework properly it is necessary to develop prospective teachers’ high level thinking skills such as citing references, using the data effectively, interpretation, analysis, synthesis, and evaluation. In this context, in higher education ‘project based education’, ‘group work’, and ‘collective learning’ techniques can be developed as part of the constructivist approach (Dam & Volman, 2004). It is suggested that in order to make active learning happen (Halat, 2005 & 2007), WebQuest applications projects based on teaching and discussion techniques must be in place in teacher training programmes.

The medium level score, very common among groups of teacher candidates in all WebQuests applications, calls for support for prospective teachers in utilizing WebQuests. Low scores can be due to the fact that the current candidates were not familiar with such applications as WebQuest in their own education. The new generations of teacher candidates in the future will be digital natives. Their ability to use ICTs will be very high. What teacher trainers need is to incorporate WebQuests in their teaching practice with the intention to improve teacher candidates’ understanding of a particular subject. However, they should also find ways of improving students’ generic skills of research, critical thinking, evaluation and working with others regardless of classes utilizing technological devices and applications.

REFERENCES


