The Effect of Constructivist Instruction on Prospective Teachers’ Attitudes toward Human Rights Education

Kerim Gündoğdu

K.K. Faculty of Education, Department of Educational Sciences, Atatürk University, Erzurum

Turkey

Correspondence: Assist. Prof. Dr. Kerim Gündoğdu, Atatürk University, Turkey. E-mail: gundogduk@gmail.com, kerim@atauni.edu.tr

© Education & Psychology I+D+i and Editorial EOS (Spain)
Abstract

Introduction. This study investigates the effect of employing constructivist methods and materials on the attitudes of prospective teachers’ (psychological counseling students) toward human rights education.

Method. The research employed a quasi-experimental pre test-post test control group design. The experimental group, consisted of 23 male and 22 female, received constructivist instruction, and control group, consisted of 17 male and 23 female, received traditional instruction in the Human Rights course in Fall 2008. The Human Rights Education Attitude scale was used to collect data about prospective teachers’ attitudes toward human rights at the beginning and after the course. Then, after a semester, the scale was readministered to understand the level of permenance of prospective psychological counselors’ attitudes toward human rights.

Results. The results show that attitudes of the prospective psychological counselors toward human rights education in both experimental and control groups increased. However, the difference in the experimental group, used constructivist approach, was statistically significant than those in the control group, used traditional approach. Besides, the results of the follow up study showed that attitudes of the experimental group were significantly higher than those in the control group in terms of permenance.

Discussion and Conclusion. This study showed that authentic learner-centered activities based on a constructivist approach are more effective and have long lasting effect on the attitudes on learners toward human rights. Therefore, such instruction can be widely used as an effective tool both for cognitive and affective development of learners.

Keywords: Constructivism, human rights education, psychological counseling education, attitude development

Received: 12/28/09  Initial Acceptance: 01/07/10  Definitive Acceptance: 03/18/10
Incidencia de la instrucción constructivista en las actitudes de futuros profesores respecto a la educación en derechos humanos

Resumen

Introducción. Este estudio investiga el efecto del empleo de métodos y materiales constructivistas sobre las actitudes de los futuros profesores (orientación psicológica a los estudiantes) hacia la educación sobre derechos humanos.

Método. La investigación empleó un diseño cuasiexperimental con grupos experimental y control y medidas pre-post. El grupo experimental, formado por 23 hombres y 22 mujeres, recibió capacitación constructivista, y el grupo de control, conformado por 17 hombres y 23 mujeres, recibió capacitación tradicional en el curso de Derechos Humanos en otoño de 2008. Se utilizó la escala de Actitud en Educación sobre Derechos Humanos para recopilar datos sobre las actitudes de los futuros educadores con respecto a los derechos humanos al comienzo y después del curso. Más adelante, después de un semestre, se volvió a implementar la escala para entender el nivel de permanencia de las actitudes en relación los derechos humanos.

Resultados. Los resultados mostraron que las actitudes de los futuros profesores hacia la educación sobre derechos humanos tanto en los grupos de control como en los experimentales aumentaron. Sin embargo, la diferencia en el grupo experimental, el cual utilizó un enfoque constructivista, fue significativamente mayor en comparación con el grupo de control. Además, los resultados del seguimiento mostraron que la permanencia de las actitudes del grupo experimental fue significativamente mayor que la del grupo de control.

Discusión y conclusiones. Este estudio confirmó que las actividades con un enfoque constructivista son más efectivas y tienen un efecto más duradero sobre las actitudes hacia los derechos humanos. Por tanto, tal capacitación se puede utilizar ampliamente como una herramienta efectiva tanto para el desarrollo cognitivo como afectivo de los aprendices.

Palabras claves: Constructivismo, educación en derechos humanos, actitud, capacitación

Recibido: 28/12/09   Aceptación Inicial: 07/01/10   Aceptación Definitiva: 18/03/10
Introduction

In the 21st century, high demands will be placed on the field of education to teach students about globalization, multiculturalism, democracy, and human rights issues, as well as science and technology. As Carter and Osler (2000) state, schools need to recognize their students’ current status as citizens, rather than simply preparing them for future citizenship. Education can additionally provide another important way to turn a rhetorical commitment to democracy and human rights into reality. In democratic societies, school is the basic institution through which human rights is taught and sustained. To satisfy the demands of the century, it seems inevitable to establish learning environments that meet the requirements of having of hands-on life experiences, working in collaborative teams and providing complex tasks that enhance higher level thinking skills of learners. As Jonassen (1995) states modern societies based on democratic life and the professions require people to solve problems, instead of memorizing facts and information. In that sense, educators choose constructivist learning theory to prepare young generations in authentic learning environments in which learners will be immersed in learning that accurately reflects the real world (Butts, 2008).

Constructivism and constructivist teaching-learning process

Constructivist theory was derived from the progressive, inquiry-discovery based approaches and generated from many educators’ ideas, including Dewey, Piaget, Vygotsky and Montessori. This is an approach which enables learners to get understandable, usable and real-life based information through establishing active, authentic, collaborative and situated learning (Cruickshank, Jenkins & Metcalf, 2003). Woolfolk (2000) defines constructivism as a way of teaching and learning aiming to enhance learner understanding and as the process of emphasizing the active role of the learner to make sense of information better.

Jonassen (1994) also describes constructivist learning environments as contextual, interactive, purposeful, collaborative, complex, reflective and active. Teacher encourages students and shows them the alternatives instead of imposing ideas on them. S/he helps students improve their research and study skills and monitors the learning process of the groups (Abdal-Haqq, 1998; Demirhan & Demirel, 2002).
Constructivist learning environment is different than traditional environments. Some authors (Airasian & Walsh, 1997; Driscoll 1994; Jonassen & Rohrer-Murphey, 1999) imply that constructivist instruction should be implemented in an authentic environment that allows learners to construct the knowledge. Besides, the support of modern technology is highly recommended to enable learners to scaffold their learning for themselves in a constructivist environment.

Current literature (Audigier, 2000; Butts, 2008; Goodman, 1989; LeBlanc & Skaruppa, 1997; Passe, 1996; Radz, 1983) implies that an environment which has a collaborative culture, and supports students’ affective skills and independence is ideal for democracy and human rights education. Regarding the characteristics of such an environment, Lester and Onore (1990) state that a democratic constructivist classroom is based on student independence and self-regulation. In addition, a constructivist learning environment implies a setting in which learners can collaboratively construct knowledge through problem solving and the use of learning tools and knowledge sources; they should ideally provide support to each other in this learning process (Abdal-Haqq, 1998; Boud, 1995; Hill & Hill, 1990; Jonassen, 1994; Kesal & Aksu, 2005; Tynjala, 1999; Yurdakul, 2004). Research findings have shown that when the environment is structured to allow learners to work cooperatively, their attitudes toward their work and friends in the groups increase positively (Hill & Hill, 1990). Besides that, constructivist learning environment also allow learners to participate in the evaluation process. Regarding this, Boud (1995) states that if students are left out of the assessment and evaluation process they are in fact isolated from taking responsibilities either. In addition to this, Coll, Rochera, Mayordomo and Naranjo (2007) explain that providing students with information about their own learning, as well as including them into this process, is quite worthwhile (Coll, Rochera, Mayordomo & Naranjo, 2007).

The constructivist learning environment in teacher training can bridge the theory and practice meaningfully, and provide opportunities for prospective teachers to develop higher order thinking skills that are needed for an environment geared toward democratic thinking and acting. In such an environment, classroom power and control are shared, because the empowerment of students is at the centre of the constructivist philosophy for teachers. The empowerment and independence of students can only be achieved if they are encouraged to be active and asked questions in class (Cochran, DeRuiter, & King, 1993; Rowland, 2003). Studies related to the constructivist leaning environment in teacher training institutions in Turkey
have gained increasing attention over the past decade. Some of these studies (Akar, 2004; Bay & Karakaya 2009; Bay, Kaya, Gündoğdu & Karakaya, 2009; Erdamar-Koc, Demirel, 2008; Kesal & Aksu, 2005; Yurdakul, 2004) have been conducted to determine the effectiveness of such environments.

**Human rights education**

Human rights education has been increasing since the 1970s, and it is seen as one of the most challenging issues in the world today. Regarding how to teach democracy and human rights, Tibbits (1996) and Kepenekçi-Karaman (2000) point out that knowledge of human rights can be taught in various interdisciplinary courses, such as history, civics, literature, religion, or ethics/moral education. However, several specific methods have been identified as most effective by scholars of human rights education; these include using active involvement and student-centered learning (Koschmann, Myers, Feltovich, & Barrows, 1993, cited in Shuttleworth, 2008; Reardon, 1995; Shiman & Fernekes, 1999; Şahin-Yanpar, 2001; Watkins, Carnell, Lodge, Wagner, & Whalley, 2000, cited in Shuttleworth, 2008), lecturing to large groups (Burgess & Taylor, 2004, cited in Shuttleworth, 2008; McIntyre-Birkner & Birkner, 2004), utilizing student role-playing (e.g., Flowers & Shiman, 1997; Burgess & Taylor, 2004, cited in Shuttleworth, 2008), teaching and learning with case studies and daily life events (Sliwinski, 2005; United Nations Educational, Scientific, and Cultural Organization, 1993), using audio-visual materials (Praveen, 2007, cited in Shuttleworth, 2008), building teams for discussions (D'Andrea-O'Brien, & Buono, 1996), and encouraging student community service to help the students to gain first-hand human rights experiences (Burridge, Hinett, Paliwala, & Varnava, 2002). Above all, Carter and Osler (2000) state that it is only through education, both experiential and cognitive, that human rights will be achieved and maintained. Although human rights are sometimes viewed as the exclusive territory of lawyers, a partnership must be developed between law and education.

Most studies concerning human rights focus on increasing knowledge acquisition pertaining to human rights and producing changes in attitudes (Levin-Goldberg, 2008). Very few studies in the literature have attempted to evaluate the efficacy of human rights courses in higher education. However, Stellmacher and Sommer (2008) did examine the efficacy of human rights education at the university level and concluded that even short-term human rights education had positive results in terms of promoting knowledge acquisition and commitment
to human rights. D’sa (2004) also found that human rights knowledge and interest can be increased with continuing exposure to human rights education. Payaslıoğlu and İçduygu (1999) conducted a survey study among university students in Turkey and found that education is an essential and promising tool to promote human rights issues. The significance of this study was their presentation of the complex issues related to human rights and human rights education. Relatively few research studies have been done on human rights education in teacher training (e.g., Banks, 2001; ElGarrai, 2000; Flowers, 2002).

Consequently, human rights training has become an integral part of the educational process, as was discussed by Hornberg (2002). Many studies in the literature focus upon the primary and secondary school levels, and most of these are surveys. Some research has been done in the field of human rights education in higher education institutions. However, the complexities of human rights education are not yet fully understood. McIntyre, Byrd and Foxx (1996) state that the constructivist approach emphasizes the growth of the prospective teacher through experiences, reflection and self-examination. Since teachers are actors who play a crucial role in teaching and modeling human rights, this study assesses the effectiveness of constructivist teaching and learning practices in influencing prospective teachers’ attitudes toward human rights education, by employing constructively designed teaching-learning environment.

**Problem Statement**

Is there a significant difference between the experimental group (trained with constructivist instruction) and the control group (trained with traditional instruction) regarding attitudes toward human rights education?

**Hypothesis**

There is a significant difference between the pre-test, post-test, and follow-up attitude scores of the experimental group and the control group.
Method

Participants

The subjects were two groups of prospective teachers (student psychological counselors) in the Department of Guidance and Counseling within a public university in Turkey during the 2008-2009 academic year. Students enrolled in the day class formed the control group; this consisted of 17 males and 23 females. Students in the evening class formed the experimental group, which consisted of 23 males and 22 females. The student teachers in many Turkish universities may also graduate from a bachelor's degree program by following specially offered and scheduled evening classes, after school hours. This is an opportunity for those who need to work to support their education. In Turkey, school counselors are treated as the ‘guidance teachers’ and are graduated as other prospective teachers to be appointed to the schools. Human Rights course was an elective course offered only to the prospective teachers in the Guidance and Counseling Department. Therefore, this research was conducted with two groups of guidance and counseling students.

Instruments

The instrument used in this survey study was the Human Rights Education Attitude Scale (HREAS), originally developed by Kepenekçi (1999). The HREAS consists of 23 Likert type items and responses ranging from strongly agree (5) to strongly disagree (1). It has two major parts. First part is the “education in the human rights field,” which is represented by 18 items. The other is “human rights in the educational environment,” which is represented by five items. The reliability of the HREAS had previously been tested; the alpha reliability coefficient for the first factor (education in the human rights field) was originally 0.90. The researcher recalculated this value as 0.93 in this study. The second factor’s alpha coefficient was originally found to be 0.73. The researcher recalculated this value as 0.88 after analyzing the data obtained from prospective teachers in this study.

Procedure

At the beginning of the academic year, the researcher developed a course outline that lasts 14 weeks and consists of the same topics for both groups. Both groups received the
course outlines and all aspects, procedures, activities, and requirements in the outline were discussed in the first meeting. The course outline of the control group consisted of traditional activities, mainly instructor-centered lectures. The experimental group’s outline consisted of constructivist activities, mainly learner-centered activities. The researcher acted as the instructor in both groups in order to control teacher variability. In this study, it was also assumed that there are no different effects of the instructor’s teaching styles on the prospective teachers since both groups received the course from the same instructor, and the responses of the prospective teachers on the HREAS reflects their own opinions. The prospective teachers in both groups received the HREAS before the instruction. Then, following activities were implemented in the experimental group:

- Reflection papers and journals based on classroom discussions
- Thematic (human rights) movies and individual reports based on the movies
- Conference by a guest lawyer working in a human rights city committee & reflection paper about this
- Analysis of several case studies -- a collection of daily events found in the newspapers, other media, and on TV (women & children rights, crimes committed by police and armed forces, tortures, terrorism…etc.)
- A mini-survey administered by the student teachers in the campus about ‘rights’
- Cooperative group-presentations about rights (i.e. rights of women & children, the handicapped, patient, consumer…etc.) using projectors and other interactive technology
- A final report on an actual human rights violation
- Peer evaluation; group evaluation

While some activities (movie report, presentations and final human rights violation report stages) were subject to peer and group evaluations in the experimental group, all activities and regular exams in the control group were only evaluated by the researcher.

The prospective teachers received the same Human Rights Education Attitude Scale (HREAS) after a semester (14 weeks) in order to see the decrease or increase in their attitudes toward human rights education. Lastly, after the Fall semester, the researcher administered the same scale at the end of the Spring semester in order to observe the permanence of the attitude levels in both groups.
Design and Statistical Analysis

Since our goal was to determine the effect of a treatment by means of a measured outcome and because individual students were naturally assembled from a common population rather than randomly assigned, a quasi-experimental non-equivalent (pre-test and post-test) control-group design was used in this study (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2008; Campbell & Stanley, 1963; Creswell, 2003; Gravetter & Wallnau, 2005). The research was carried out with two groups of student teachers. One group was determined as the experimental group; they received constructivist instruction. The other was the control group; they received traditional instruction.

The data collected in the pretest, posttest and follow-up applications were analyzed using two-way ANOVA for mixed measures design.

Results

Table 1 shows the mean scores and standard deviation values of the prospective teachers in both the experimental and control groups, which were obtained from the ‘Human Rights Attitude Scale’.

Findings related to hypothesis

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pre</th>
<th>SD</th>
<th>Post</th>
<th>SD</th>
<th>Follow up</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental</strong></td>
<td>45</td>
<td>72.67</td>
<td>5.48</td>
<td>75.80</td>
<td>2.74</td>
<td>74.64</td>
<td>2.87</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>40</td>
<td>73.68</td>
<td>4.11</td>
<td>74.43</td>
<td>3.54</td>
<td>71.83</td>
<td>3.17</td>
</tr>
</tbody>
</table>

As can be seen from the table, while the mean score of the experimental group was 72.67 for the pre-test, this mean score increased to 75.80 for the post-test, and was 74.64 in the follow-up. The mean scores of the control group were pre-test 73.68, post-test 74.43, and follow-up 71.83. According to these findings, pre-test and post-test attitude scores increased both in the experimental and the control group. However, in the follow-up application, some decreases were observed in the attitude mean scores in both the experimental and the control groups after one semester (approximately 13 weeks) had passed. In order to understand
whether the pre-test, post-test, and follow-up attitude mean scores were significant, a 2x3 two-way ANOVA for mixed measures was done. The results are presented in Table 2.

### Table 2. Two-way ANOVA results of the experimental and control groups

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>SD</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>71.656</td>
<td>1</td>
<td>71.656</td>
<td>4.58</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>1298.406</td>
<td>83</td>
<td>15.643</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement (Pretest-Posttest)</td>
<td>206.123</td>
<td>2</td>
<td>103.062</td>
<td>7.56</td>
<td>.001</td>
</tr>
<tr>
<td>Group*Measurement</td>
<td>158.249</td>
<td>2</td>
<td>79.124</td>
<td>5.81</td>
<td>.004</td>
</tr>
<tr>
<td>Error</td>
<td>2261.430</td>
<td>166</td>
<td>13.623</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3995.864</td>
<td>254</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that there are significant differences before and after the treatment program among the pre-test, post-test, and follow-up attitude scores of the prospective teachers ($F_{(1,83)}=4.58$, $p<.01$). The mean scores of the prospective teachers in the experimental and control groups differ regardless of the pre-test and post-test measurements. Related to the measurement main effect, the table also indicates that there was a significant difference between the attitude mean scores in both groups from the beginning to after-treatment ($F_{(2,166)}=7.56$, $p<.01$). These findings show that there is a significant difference between the attitude mean scores of the two groups without making group and measurement separation.

These findings further indicate that being in different treatment groups and repeated measure factors have significant, common effects on the human rights education attitudes of the prospective teachers ($F_{(2,166)}=5.81$, $p<.01$). The changes in the attitude mean scores of the prospective teachers in the experimental group were significantly different from the changes in the attitude mean scores of the prospective teachers in the control group. Apparently, receiving constructivist or traditional instructions entails different effects on increasing the degree of appreciation for human rights education among prospective teachers. The constructivist instruction is more effective than the traditional instruction for developing positive attitudes toward human rights education in the teacher training process. Figure 1 briefly displays and summarizes the effects of each treatment program with regard to pre-test, post-test, and follow-up attitudes scores of the prospective teachers.
Discussion and conclusion

This study investigated the effects of a constructivist-based program on the attitudes of prospective teachers toward human rights education. The results show that the use of both constructivist teaching and learning activities, and traditional methods increased the prospective teachers’ degree of appreciation for human rights education. However, the use of constructivist methods and materials in the Human Rights course had a more positive impact on the student teachers’ attitudes toward human rights. The results of the follow-up application show that using constructivist methods and materials leads to more permanent effects on these attitudes. The results of this study are similar to research findings concerning effectively designed constructivist instruction. Danielaian, Umroyan and Khorozyan (2005) found that this manner of instruction strongly affects the attitudes of students in a positive direction. Related studies (Akar, 2004; Buehrer, 2000; Joia, 2002; Plourde and Alawiye, 2003; Smerdon & Burkam, 1999; Ziegler, 2000) mostly confirm the findings presented in this study: employing the constructivist approach affects students’ attitudes and achievements positively.

Rosen (2003, cited in Passmore & Melvilla, 2007) used technology in her study as a way to monitor the professional growth of prospective teachers. In this study, audio-visual settings were effectively and extensively utilized in the experimental group. It can be con-
cluded that creating an interactive, technology-based and audio-visual atmosphere leads to positive, long lasting impacts on the attitudes of prospective teachers, as the related literature confirms (Kumar & Bristor, 1999; Mechling, 2004, cited in Kim, 2006; Mihalca & Miclea, 2003; Shuttleworth, 2008; Sweeney, 2006). Therefore, teacher training institutions, and also elementary and secondary schools, should have an extensive repertoire of audio-visual aids and materials for effective human rights training. As the course used in this experiment was intended to enhance the appreciation of human rights among all the enrolled prospective teachers, several activities were included which reflect the rights of varied groups such as children, women, the handicapped, patients, workers, and homosexuals. This approach was particularly suggested by the Universal Declaration of Human Rights, the Convention on the Rights of the Child, UNESCO, and the European Council. Such activities help educators to learn from human rights activists how to more carefully address the problems of human rights violations (Brabec & Rogers, 2000). Most of the prospective teachers appeared to appreciate the invitation of the lawyer who had participated in the Human Rights Coordinating Committee of the city. This seemed to be appropriate with regard to what Burridge et al. (2002) suggest, that integrating the knowledge of law with human rights helps students to develop an understanding of the issues not only from a personal point of view, but also from a social perspective. There are very few studies on human rights education in teacher training institutions. In another experimental study, Ciges and Lopez (1998) found that the appreciation of the teachers in their experimental groups improved significantly with respect to intercultural education programs based on interaction.

In brief, the findings of this study showed that the constructivist learner-centered approach is effective and has long lasting effects on the attitudes on learners with regard to human rights. Therefore, this form of instruction may be widely used as an effective tool both for the cognitive and affective development of learners. As Akar (2004) argued, teacher training programs should be developed to use constructivist teaching and learning, and to reflect democratic thinking and acting, in order to enhance prospective teachers’ appreciation for human rights education training in all departments. Regarding future research, a further study investigating the effects of these two instructional approaches on student achievement might be useful. Lastly, the attitudes of other educators towards human rights education may be investigated to produce a holistic picture of the current state of attitudes in order to develop a needs analysis for human rights education.
References


The Effect of Constructivist Instruction on Prospective Teachers' Attitudes toward Human Rights Education


The Effect of Constructivist Instruction on Prospective Teachers' Attitudes toward Human Rights Education

öğrenme sürecine katkıları (The effects of constructivist learning approach on learners' problem solving skills, metacognitive awareness, and attitudes towards the course, and contributions to learning process) (Doctoral dissertation). Hacettepe University, Ankara, Turkey.
