The characteristics of the curriculum for designing democratic educational environment

H. Eylem Korkmaz a *, Munire Erden b

aDepartment of Educational Sciences, Yıldız Technical University, Istanbul 34220, Turkey
bDistinguish Kids Education Center, Istanbul 34330, Turkey

Abstract

The aim of this study is to determine the necessary characteristics that should take place in a curriculum in order to design a democratic educational environment. Delphi Technique has been used in this study. This study concludes that in a democratic educational environment the curriculum should have features which: individualize the instruction; interest, needs and strengths; activate the attention of the learners in all decisions; simulate real-life situations; and promote active learning in order to gain necessary knowledge, skills and attitudes for democratic life and self-improvement.

1. Introduction

In a country ruled by democracy, it is necessary that formal education be democratic for three reasons: democracy is a form of government, democracy is a lifestyle, and citizens have a right to democratic life. According to Dewey (2001, 91) “a government resting upon popular suffrage cannot be successful unless those who elect and who obey their governors are educated”. In a state ruled by democracy, citizens should have the essential knowledge and skills in order to continue democracy. Again Dewey (1996, 97) says, “democracy is more than a form of government; democracy is a form of living together and the lives that are spent side by side in a community”. Dewey (2001, 91-104) defines the basic foundations of a democratic society as shared common interests that secure the protection of one another’s own interests and social interaction and change in social habits via this social interaction. In such a society, the form of the education should be such that individuals are to be given a form of education that gives a personal benefit in social relations and control and protects the social change without causing conflict. (Dewey, 2001, 91-104). This education should promote democracy as a way of life that requires knowledge, skills, attitudes and values. Finally, in a state ruled democratically, individuals have the right to experience democracy in schools, which are the social institutes of the state. While the first two reasons are related to providing individuals with the attributes that will maintain the persistency of the democratic society and the democratic state, the third reason references the right of the individual to live a democratic life.

According to Vinterek (2010, 368), democracy knowledge has three different components: democratic object, democratic skills and a democracy stance. The democratic object refers to the knowledge related to democracy; democratic skills refer to the ability to act in a democratic way; stance refers to personal attitudes and actions related
to democratic values and ethics (Vinterek, 2010: 368). The individual who is a member of the democratic society and state is expected to act in a democratic way. This requires the individual to have the object of democracy and democratic skills and stance. Therefore, education should not only compose the object of democracy, but also develop democratic skills and stance. This is only possible if all educational structures and procedures are regulated according to democratic principles.

According to Özsöy (2004, 151), “democratic education” reflects the convergence of democratic processes and the institutional and administrative structures and the aim of education. Democracy is a form of living together that is learned, not taught. Therefore, in democratic regimes, education should be presented in a form in which the culture of living together democratically could be experienced (Özsöy, 2004, 151).

Mattern (1997, 510) says that democratic education necessitates sharing the power in classroom:

“Sharing power with students means offering them real choices about course content and process... Democratic education involves increasing the level of personal responsibility assumed by students and giving the students real decision-making authority without threats of punitive reactions by the instructor.”

Hecht explains democratic education as an effort to treat the school as a microcosm. This effort is best realized by creating a democratic community where democratic procedures are applied (such as in elections and school assemblies) and through the following processes: 1) making democratic principles a part of school life; 2) accepting that the learners are sophisticated; 3) accepting that inner motivation is the starting point of learning; 4) supporting the learner’s self-discipline and responsibility; 5) encouraging the learner to create his/her own learning strategies and accepting that the learner can plan his/her own learning; 6) promoting supporting self-evaluation; 7) including content in the curriculum related to democracy; and 8) creating a teacher-student relationship based on dialog during this educational process and its applications (Hecht, [09.01.2010a]; Hecht, [09.01.2010b]).

In order to democratize the education or provide democratic education, Apple and Beane (2011, 37) suggest a focus on two main elements: creating democratic structure and processes in the school and developing a curriculum that will reinforce students’ democratic experiences. Schools should not only be places where democracy is taught, but also be places where democracy lives. In democratic schools, aside from redounding democracy within the hidden curriculum, it should be reflected in the planned curriculum (Apple and Beane, 2011, 44). Democratic education, as it can be understood from the above definitions, includes processes that engage the entire school. Morrison (2008) says that democratic education could take multiple forms, ranging from the micro level of within-class democracy to the more ideal macro-level of whole-school democracy.

In order to design a democratic educational environment in a classroom, all elements and processes related to the classroom should be taken into account. This study addresses democratic education at a micro level. It is a segment of the Delphi study conducted by the researcher on the components necessary to design a democratic educational environment in a classroom. This study focuses on the curriculum component of democratic educational environment. This curriculum component is evaluated in terms of objectives, content, instructional methods/techniques/strategies, instructional materials and evaluation elements (Ornstein and Hunkins, 1988, 166).

2. Method

The aim of this study is to determine the necessary characteristics that should take place in a curriculum in order to design a democratic educational environment in a classroom. Delphi technique was used with the aim of reaching shared agreement among expert opinions (Dalkey and Halmer, 1963, 458).

2.1. Delphi Panelists

Scheele (2002, 65) suggests that in order to create a successful mixture of panelists should include stakeholders who are or will be directly affected by the study, as well as experts and facilitators who have related experience who can provide alternative ideas. This study also included among the panelists practitioners, academics and NGO members in order to establish different points of view and maintain the variety of opinions. The following criteria were followed when deciding on panelist candidates: for academics, a PhD. title and study in the related field; for
practitioners, being a democratic school founder or being employed in a democratic school; for NGO members, being employed in an NGO that runs a democratic education study. Emphasis was also placed on choosing panelists from different countries and cultures.

Candidate panelists were sent an invitation email that provided information about the problem, the goals of the research and study methodology. Thirty eight candidates agreed to participate in the study. In the literature, there is no set number for the Delphi panelists. Some of the studies (McIlraith, Keeney, McKenna and McLaughlin, 2009; Torrance et al., 2010; Herring, 2007; Wilson, 2010; Ager, Stark, Akesson and Boothby, 2010) quote that the number of panelists ranges from 13 to 77. Witkin and Altschuld (1995) also indicate that the mean number is fewer than 50. In the first round, a total number of 25 panelists were involved from the following countries: the U.S.A. (9), the U.K. (2), Germany (4), Holland (2), Turkey (2), Puerto Rico (1), Spain (1), Canada (1), Australia (1), Austria (1), and Israel (1). In the third round, 17 panelists were involved. According to the literature, this number can be considered to be sufficient. Table 1 shows the number of surveys sent in the first round, the number of replied surveys and the number of the panelists in each group.

<table>
<thead>
<tr>
<th>Panelists</th>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey delivered to</td>
<td>38</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Completed surveys</td>
<td>25</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Practitioners</td>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Academics</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>NGO members</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Response rate</td>
<td>%66</td>
<td>%72</td>
<td>%94</td>
</tr>
</tbody>
</table>

2.2. Procedure

In the study, 3 phased Delphi design was applied. The first and the third round question forms were sent via e-mail. For the second round question form, a survey website called SurveyMonkey (http://www.surveymonkey.com) was used. The procedure followed in all rounds can be summarized as follows:

**First round:** In the first round of the Delphi, panelists were asked to answer this question: “What actions should be taken in order to design a democratic educational environment in a conventional school classroom?” The concept of “conventional school” cited in the question is defined with the following conditions and in the context of Turkey where the findings of the study will be used: state-appointed teachers and administrators; a compulsory educational curriculum developed by central education authorities; classical seating setting in the classroom; uniform age groups; standard lesson plans; and strict attendance policy.

In order to guide the panelists in answering the questions and gather detailed data, categories and subcategories are stated. These are listed as: decision-making mechanism, curriculum (objectives, content, instructional methods/techniques/strategies, instructional materials, evaluation), teacher, learner, relationships (relationships within the classroom, with the family, with the school and with the society) and physical properties (Inandi and Peker, 2007, 63; Başar, 2001; Erden, 2003; Aydin, 1998; Sönmez, 1985; Erden, 1998; Fer, 2009; Ornstein and Hunkins, 1988). Panelists are asked to answer the questions taking the categories and subcategories into account. In order to not restrict the answers of the panelists, new columns were placed in the question forms so that participants could add new categories, subcategories and related comments if necessary. In this study, only the results of the curriculum category are presented.

**Second round:** The item list populated after the first round was sent to panelists in the form of a Likert scale, in which panelists were asked to rate 1-5 (1 strongly disagree – 5 strongly agree) with adding the comments made by Strauss’ (2003, 69) selective coding is applied to the answers of the first round along with content analysis. Three experts analyzed the understandability of the item list made after the selective coding. Every item’s understandability, category compatibility and merging possibilities with other item(s) were analyzed by three experts. Based on expert opinions, a form consisting of 128 items was produced.

**Second round:** The item list populated after the first round was sent to panelists in the form of a Likert scale, in which panelists were asked to rate 1-5 (1 strongly disagree – 5 strongly agree) with adding the comments made by Strauss’ (2003, 69) selective coding is applied to the answers of the first round along with content analysis. Three experts analyzed the understandability of the item list made after the selective coding. Every item’s understandability, category compatibility and merging possibilities with other item(s) were analyzed by three experts. Based on expert opinions, a form consisting of 128 items was produced.

Second round: The item list populated after the first round was sent to panelists in the form of a Likert scale, in which panelists were asked to rate 1-5 (1 strongly disagree – 5 strongly agree) with adding the comments made by Strauss’ (2003, 69) selective coding is applied to the answers of the first round along with content analysis. Three experts analyzed the understandability of the item list made after the selective coding. Every item’s understandability, category compatibility and merging possibilities with other item(s) were analyzed by three experts. Based on expert opinions, a form consisting of 128 items was produced.
the experts in the first round. Descriptive statistical analysis was applied to the answers collected after the end of the second round.

Third round: Third round question forms were prepared specifically for each panelist. In this form, degree of agreement of panelist in the previous round, descriptive-statistical results of the each item and comments made in the second round took place. Panelists were asked to analyze every item in terms of statistical results and comments in order to re-evaluate their degree of agreement. If they wanted to change their degree of agreement, they were expected to write down the new degree in the related box; if not, they were expected to leave the box empty.

There are two important criteria in Delphi studies: stability and agreement. Stability is the consistency between given answers in Delphi rounds. Consistency arises when answers do not statistically differentiate in a meaningful way from two successful rounds. Stability does not necessarily imply agreement level, but agreement level analysis begins when stability exists (Dajani, Sincoff and Talley, 1979, 84). In the literature, different criteria such as the coefficient of variation, $F$ test on two variances, $\chi^2$ test, and the percentage of the panelists that changed their answers in accordance to get close to the mode were used (Dajani et al., 1979). Scheibe, Skutsch and Schofer (2002) used the percentage of the panelists that changed their answers in accordance to get close to the mode as stability criteria; they reported that stability can be reached where the change is less than 15%. Also in this study, the number of panelists who changed their answers in accordance to get close to the mode was used as the stability criteria. Because 17 panelists were involved in the third round of the study, it was agreed to have the number of panelists fewer than 3. Only in 2 items, these criteria could not be provided. It was decided not to repeat the round for 2 items as the number of the items is abundant and the study is completed after the third round.

3. Findings

In the literature, it has been noted that in order to determine the agreed items the following different criteria are used: only IQD (Waterlanger, Steenhuis, Vet, Schuit and Seidell, 2009; Elfeddali, Mesters, Wiers and De Vries, 2010; Herring, 2004; Peng, 2009); only percentage of agreement, (Ager, Stark, Akesson and Boothby, 2010); IQD and percentage of agreement (Rayens and Hahn, 2000); IQD and median (Brouwer and et al., 2008); and mean, median and percentage of agreement (Terrell, 2009). In this study, it was decided to use mean, median and percentage of agreement to be used together as the agreement criteria. It was specified that in order for an item to be selected as a characteristic of the curriculum to design a democratic educational environment, mean should not be fewer than 3.5, median should not be fewer than 4 and the ratio of “strongly agree” and “agree” answers of the panelists should at least be equal to $\frac{3}{4}$ of the total number of the panelists. At the end of the third round, 128 items were evaluated according to these criteria, and 61 items were specified as characteristics of the curriculum to design democratic educational environment. Distribution of the items according to the subcategories is as follows: objectives (24), content (8), instructional methods/techniques/strategies (19), instructional materials (3), and evaluation (7). Table 2 shows the mean and median of the items, frequency of “strongly agree” and “agree” answers, and the ratio of “strongly agree” and “agree” answers of the panelists to total number of the panelists.

<table>
<thead>
<tr>
<th>CURRICULUM Objectives</th>
<th>n</th>
<th>f4+5*</th>
<th>Ratio**</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Objectives are not too detailed as individual development differs from learner to learner.</td>
<td>17</td>
<td>14</td>
<td>3.29</td>
<td>4.06</td>
<td>4</td>
</tr>
<tr>
<td>2 Teacher gives the possibility to reach goals in different ways.</td>
<td>17</td>
<td>15</td>
<td>3.53</td>
<td>4.35</td>
<td>4</td>
</tr>
<tr>
<td>3 Teacher gives the possibility to reach goals at different times.</td>
<td>17</td>
<td>14</td>
<td>3.29</td>
<td>4.29</td>
<td>4</td>
</tr>
<tr>
<td>4 Teacher balances the need to meet learning standards with the goal of having learners involved in their own learning in a meaningful way.</td>
<td>17</td>
<td>15</td>
<td>3.53</td>
<td>4.29</td>
<td>4</td>
</tr>
<tr>
<td>5 Democratic education aims to help each learner develop and follow his/her own ways.</td>
<td>17</td>
<td>15</td>
<td>3.53</td>
<td>4.29</td>
<td>4</td>
</tr>
<tr>
<td>6 Democratic education aims to offer education which enables the learners to learn who they are.</td>
<td>17</td>
<td>16</td>
<td>3.76</td>
<td>4.41</td>
<td>4</td>
</tr>
<tr>
<td>7 Democratic education aims to offer education which enables the learners use their mind effectively.</td>
<td>17</td>
<td>14</td>
<td>3.29</td>
<td>4.24</td>
<td>4</td>
</tr>
</tbody>
</table>
Democratic education aims to facilitate cognitive, affective and social skills.  
Democratic education aims to improve debating and negotiating skills.  
Democratic education aims to improve problem-solving skills.  
Democratic education aims to improve communication skills.  
Democratic education aims to improve critical thinking skills.  
Democratic education aims to promote self-esteem of the learners.  
Democratic education aims to promote self-confidence of the learners.  
Democratic education aims to offer education which enables the learners to learn to search information.  
Democratic education aims to offer education which enables the learners to learn how to advance claims, provide evidence, weigh and consider.  
Democratic education aims to offer education which enables the learners to learn to disagree with each other without the situation becoming a zero-sum game.  
Democratic education aims to connect to and engage with the learners’ cultural knowledge.  
Democratic education aims to promote that learners are culturally aware and responsive.  
Democratic education aims to respond to learners’ experiences and actively and consciously critiquing that experience.  
Democratic education aims to empower learners with the belief that what they do will make a difference to their lives and the opportunity to voice and discover their own authentic and authoritative life.  
Democratic education aims to ensure democratic attitudes and behaviour.  
Democratic education aims to offer education which enables the learners to become active members of the learning community.  
Democratic education aims to offer education which enables the learners to develop understanding of the necessary tensions of democracy (i.e., tension between freedom that is not anarchy and order that is not oppression).  
Content  
Content is individualized as much as possible.  
Learners’ needs are taken into consideration when the content is being determined.  
All class members discuss possible options of the content.  
Class members determine the themes.  
The content reflects the real life in order to make learners understand and adopt the values in the content.  
Conflict resolution is a part of the content.  
Human rights education is a part of the content.  
Social responsibilities and roles are discussed to raise awareness of the learners about relations with the society.  
Instructional Methods/Techniques/Strategies  
Learners have a say in the way they are instructed.  
Instructional methods are determined according to the needs of the learners.  
A wide variety of instructional methods are used in order to address individual differences.  
Any methods that meet the needs of the learners and teacher are used.  
Instructional methods are built on learner’s strengths.  
Methods give learners an opportunity to find solutions themselves.  
Self-directed learning is used.  
Cooperative learning is used.  
Group work is used.  
Project-based learning is used.  
Meaningful projects that focus on the community are used.  
Discussions are used.  
Activity based learning is used.  
Inquiry is used.  
Hands-on learning is used.  
All methods that promote critical thinking are used.  
Equity pedagogy is used.  
Critical pedagogy* is used.
Norms for classroom activities are created by class members.  

<table>
<thead>
<tr>
<th>Instructional Materials</th>
<th>n</th>
<th>f4+5*</th>
<th>Ratio**</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 Real life materials are used.</td>
<td>17</td>
<td>15</td>
<td>3.53</td>
<td>4.41</td>
<td>5</td>
</tr>
<tr>
<td>53 Materials which are accessible to all the learners are chosen.</td>
<td>17</td>
<td>13</td>
<td>3.06</td>
<td>4.24</td>
<td>4</td>
</tr>
<tr>
<td>54 Experiential materials for hands-on learning are used as instructional materials.</td>
<td>17</td>
<td>13</td>
<td>3.06</td>
<td>4.18</td>
<td>4</td>
</tr>
</tbody>
</table>

** Evaluation **

| 55 Evaluation is a process among the learners, the teacher and the parents. | 17 | 13 | 3.06 | 4.24 | 5 |
| 56 Evaluation is individualized. | 17 | 14 | 3.29 | 4.35 | 5 |
| 57 All class members discuss the purpose of the evaluation. | 17 | 14 | 3.29 | 4.41 | 5 |
| 58 Grading is not emphasized. | 17 | 14 | 3.29 | 4.53 | 5 |
| 59 Self-evaluation is used for evaluation. | 17 | 13 | 3.06 | 4.35 | 5 |
| 60 Evaluation is ongoing process. | 17 | 15 | 3.53 | 4.47 | 5 |
| 61 Evaluation is holistic. | 17 | 15 | 3.53 | 4.47 | 5 |

*Frequency of “strongly agree” and “agree” answers of the panelists.  
** The ratio of “strongly agree” and “agree” answers of the panelists to total number of the panelists.

4. Conclusion

Democratic education can only happen when all elements and the process of education gets democratized. In order to design a democratic educational environment in the classroom level, objectives, instructional methods, techniques and strategies, instructional materials and evaluation elements of the curriculum should have characteristics that support democratic educational environment.

According to the findings related to the objectives, in a democratic educational environment, objectives should not be too detailed, and the learners should be able to reach these objectives with different schedules and in different ways. In addition, democratic education should aim to help students gain necessary knowledge, skills and attitudes for self-improvement and a democratic lifestyle.

According to the findings related to the content, in a democratic educational environment, learners should get involved in the content assignments and content should be individualized and reflect real life. Human rights, conflict resolutions, and social roles and responsibilities should also be part of the content.

According to the findings related to the instructional method/technique and strategies (IMTS), in a democratic educational environment, the learners should have the right to assign IMTSs. IMTSs should be assigned in accordance with the learners’ needs, strengths and individual differences. In a democratic educational environments, active learning methods (Açıklgöz, 2007) (self-directed learning, cooperative learning, group work, project-based learning, discussion, activity based learning, inquiry, hands-on learning, critical pedagogy) should be used. In addition, equality education, which aims students from different racial, ethnic and cultural groups to be active and reflective in society (Banks and Banks, 1995), should also be among the approaches used.

According to the findings related to instructional materials, in a democratic educational environment, real life materials and experimental materials should be used and instructional materials should be obtainable by all learners. This conclusion should be interpreted as no other material should be used except real life materials and experimental materials; these materials should be considered the basic necessity.

According to the findings related to evaluation, in a democratic educational environment, evaluation is individualized, integrated and a continuous process. In evaluation, grading is not emphasized. In an evaluation process, parents, learners and teachers are included. Although self-evaluation is a basic evaluation technique that is necessary to use in democratic education, this does not mean that other evaluation techniques are not to be used.

In conclusion, when all findings are analyzed together, it can be said that in a democratic educational environment, the curriculum should have features to individualize the instruction; centralize the learners’ interests, needs and strengths; activate the attention of the learners in all decisions; simulate real life, encourage active learning, and help students gain necessary knowledge, skills and attitudes for democratic life and self-improvement.
References


