DIFFERENTIATED SOCIAL STUDIES EDUCATION ACCORDING TO THE INTEGRATED CURRICULUM MODEL IN THE EDUCATION OF THE GIFTED STUDENTS

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Abstract:
It is not pedagogically appropriate to provide the developments of the gifted students with the curriculum prepared for the students in general or to expect them to have this gift. For this reason, it is necessary to differentiate the curriculum in accordance with the differences of the gifted students whose many skills such as cognitive, affective, psychomotor and learning speed are different from the other students in general. According to the Integrated Curriculum Model (ICM) put forward in this study, the primary school social studies instructional program is differentiated for the gifted students. The effect of this differentiated curriculum on the problem solving skills, self-regulation skills and academic achievements of the gifted students is examined. In the study employing quantitative research method pretest, posttest experimental and control group design is used. Experimental and control groups are comprised of 12 gifted students. As data collection tools, Self-Regulation Skills Test, Perception Scale for Problem Solving Skills and Academic Achievement test are used. In application, 4th grade social studies lesson units “All Together, People and Management, My Distant Friend”

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(Hep Birlikte, İnsanlar ve Yönetim, Uzaktaki Arkadaşım) are turned into a specific differentiated unit. The curriculum is applied to the experimental group participants in a period of six months in the academic years 2016-2017. For data analysis Mann-Whitney U test is used. As a result of the study, while there is a significant difference between the self-regulation skill and problem solving skill scores of the experimental and control group students in favor of the experimental group, there is not any significant difference in their academic achievement scores. Thus, the social studies education differentiated according to the integrated curriculum model has increased the scores of the self-regulation and problem solving skills of the gifted students.

**Keywords:** gifted students, differentiated curriculum, integrated curriculum model

### 1. Introduction

While differentiation is done in order to increase the learning potential of the students, it is necessary to regulate the current curriculum according to the learning conditions of those students. It is important to consider the students’ readiness, interests and learning styles while differentiation planning is done. The differentiated curriculum reformed according to the basic concepts, principles and techniques of the topics to be differentiated should be designed considering the learning differences between the individuals, as well. This can also be defined as rearranging and applying the current programs according to the need by considering all the genetic and environmental factors, minimizing possible shortcomings to occur during learning process while differentiation is done (Kaplan, 1986). In differentiation studies, if the curriculum is formed considering the desired skills, fundamental principles and basic concepts constituting the content, it is most likely to achieve the desired results (Tomlinson, 2006: 35-47).

Utilizing certain theories facilitates to perform a systematic study while differentiating the curriculum. Therefore, it is necessary to appropriately know the differentiation models and characteristics that are an example to hypothetical differentiation models. Some of the differentiation models are Differentiation of Achievements According to Bloom’s Taxonomy (Feldhusen, 1994), Maker Model of Differentiated Curriculum (Maker, 1982), Curriculum Compacting Model (Reis and Renzulli, 1978), Kaplan’s Curriculum Differentiation Model (Kaplan, 1973; 1993), Parallel Curriculum Model (PCM) (Tomlinson et al., 2002), Multiple Menu Model (Renzulli, 1977), ÜYEP (Üstün Yetenekliler Eğitim Programı / An Instructional Program for Gifted Students) Model (Sak, 2009), ÜYÜKEP (Üstün Yetenekliler Üniversite Köprüsü Eğitim Programı / Another Instructional Program for Gifted Students) Model, (Tortop, 2013, 2015), Integrated Curriculum Model (Van Tassel, Baska and Wood, 2009) (as cited in Tortop, 2015).

The Integrated Curriculum Model (Van-tassel Baska, 1986:164-169) subject to the study is specially developed special for the gifted children. According to the results obtained in the studies conducted in this area, this model should improve the contents
and critical thinking in experimental groups in its use in social studies curricula and should have an accelerated, enriched, deepened and partly challenging curriculum for the gifted students in cognitive, affective, social and esthetic areas. Integrated Curriculum Model comprises these desired educational characteristics. Besides, the gifted individual can easily have the achievements that will realize active learning by using the preliminary real life information in this model. The studies have revealed that an active learning is provided in students as well as important progress is made in high level thinking skills by means of problem solving skills. In this case, students can realize the interdisciplinary connections easily and develop parallel thinking skills to the ways of thinking of the specialists in the areas they work (Gallagher, 2006:207, as cited in Kaplan, 2013). For this reason, the integrated curriculum differentiation model is accepted as a very strong approach in terms of effective and quality learning and of regulating the learning process.

Integrated curriculum model has three dimensions. These dimensions are advanced content, process/product, and issues/themes. Since this model is much more applicable in special classes for gifted students, while developing advanced level thinking skills in subject area, it helps the gifted students transfer these skills to new environments (Kaplan, 2013).

While differentiated curriculum is designed, self-regulated learning skills should be included in the program. Regulation is the review and evaluation of the problems and solutions occurring in the use of the information learnt. It is defined as the individuals’ regulation of learning processes in line with their requirements. The need for regulation in education has introduced the self-regulated learning skill (Üredi and Üredi, 2005). Self-regulation skills are thought to be one of the important elements of success and academic performance. It is regarded as an important field included in learning strategies, redefined and modeled according to many researchers and theoretical point of view (Tortop, 2015). In order to maximize the learning level in an individual, social studies curriculum can be differentiated with the integrated curriculum model. This differentiation program including self-regulation skills can also positively affect problem solving and academic success in the student. To this end, it is necessary to develop personal awareness. Personal awareness can be defined as gifted students’ being capable of controlling their learning processes and having the necessary information about the operation of these processes. Application stages of certain strategies are required for the self-regulation skills requiring awareness. Gifted students ask themselves questions in order to form their personal awareness and regulate cognitive domain. The aim of these questions is to review retrospective, incomplete or unclear information and to arrange by going over them. A student who rereads an unclear part to learn uses reading as a regulative strategy (Zimmerman, 1989).

One of the latest studies conducted on self-regulation skills is the study done by Stoeger and Ziegler in 2005. According to this study, in order to develop self-regulation skills in an individual, a cycle of seven stages should occur. Some other stages are needed for 7-stage cyclical self-regulation skill expected to develop. In order to record and
evaluate these stages, they developed Self-Regulated Learning-7 (SRL-7) (Ziegler et al., 2012). The cycles of this study are in the following:

1) The individuals evaluating their own learning,
2) The individuals determining suitable learning objective,
3) The individuals determining effective learning strategy,
4) The individuals applying learning strategy,
5) The individuals monitoring themselves,
6) The individuals applying their learning strategy,
7) Evaluating the learning outcome.

It is thought to be important in terms of evaluating the students’ learning levels, learning profiles, self-evaluation styles and learning skills they perform with the self-regulation skill (Taşçılar, 2015).

Through self-regulated learning, the individuals are open to lifelong learning with the skill of using their learning styles effectively. It means self-fulfillment and to be at the wheel while performing this fulfillment. Drawing a parallel between all the learning components of the individuals and an orchestra, it means to conduct that orchestra throughout their life in the self-regulated learning. Self-regulated learning is the process in which the students actively participating the learning process regulate their behaviors according to their learning needs, acquire the ideas required in order to achieve the objective, show the behaviors, develop their feelings according to these ideas and produce and develop their own solutions in problem solving (Tortop, 2015).

Gifted individuals and giftedness, according to their general definitions, refer to the individuals who show more rapid improvement than their peers in one or several fields compared to the developmental characteristics of their peers (Smutny, 1998). These are the individuals who have original ideas, can look at the relations from different aspects, are faster than their peers in transferring information, and develop creative and original ideas (Metin, 1999). According to another definition, they show much more sensitivity to their interests than their peers and have a high level of talent in the transfer of perception (Tannenbaum, 2003).

These general definitions about gifted individuals demonstrate a high level of talent during the transfer of perceptions to cognitive and affective experiences, personal awareness and sensitivity. It is very important for the gifted individuals to receive social studies education, because the training objectives that the gifted individuals need correspond to the objectives of social studies education. These objectives are questioning, critical thinking, decision making skills, creativity skills, problem solving skills and leadership skills. Since the gifted and talented individuals enjoy solving complicated problems, it is important to have the real life problems to be presented to them to be from simple to complex. Social studies curriculum has also a structure that leads the students from simple to complex in problem solving processes and carries them to a higher level (Maker, 1996:48). Social studies education is said to be an ideal field of study for the education of gifted individuals thanks to its wide diversity (Delisle, 1991). It aims to help individuals realize their social identity and existence. Subjects such as psychology,
sociology, anthropology, geography, economy, philosophy and politics reveal the mentioned individuals’ characteristics. In social studies education, it is important to present the learning domain in the context of the individual’s past and future, social environment thematically (Kıroğlu, 2006). According to Doğanay (2002), social studies is a field that operates in an interdisciplinary way and examines human and its environment with which it is interacting with time dimension. It aims to raise democratic citizens with high thinking skills in the globalizing world. While doing all this, it utilizes contents and techniques of the social sciences. The method and technique that will achieve the goal and release the product as soon as possible are accepted as the best for the relevant learning. It can be right to make the planning with the idea of which method is more suitable to this educational application instead of which method is superior (Yaşar, 1998). This is because there is not any method or technique as good or bad, or valid or invalid in social studies education.

In process-based enrichment, there can be difficulty in transferring some advanced level skills of gifted and talented children to different environments. This is one of the features of the approach. However, enrichment studies based on the product and the content applied are easier. Product based enrichment comprises abstract and concrete studies. Novel writing, portfolio preparation, keeping a diary, preparing report or presenting intellectual products are some of the examples to the product-based enrichment studies. However, since they are challenging for the education of the gifted students, generally process-based studies are used (Van Tassel-Baska, Zuo, Avery and Little, 2002; Tortop, 2018). Teaching by determining and reflecting a broad academic content to the lesson subjects is included in content-based enrichment studies. Since the content-based enrichment studies are mostly academic, they are suitable to be used in social studies, grammar, science and technology and mathematics. If process, product and content-based approaches are combined and planned in enrichment studies, it is possible to experience increases in the success of the gifted students (Sak, 2011).

It is important to bring the children in how the thinking can take place rather than what they can/cannot think, the related methods, the manner of application, how to develop correct communication skills and problem solving skills, that the solutions can be in different ways, which cases independent thinking and studying skills can occur, the best way of using information, and self-regulated learning skills. Therefore, training and developing the teachers who will take the training of the gifted students make this training much more important (MEB, 2010:186).

2. Method

According to the Integrated Curriculum Model, primary school fourth grade social studies lesson units “All Together, People and Management, My Distant Friend” are limited. The new unit is called “Governance” (YÖNETİŞİM). Afterwards, in GEPUB self-regulation skill acquirements are integrated and a new differentiated unit design is prepared according to the Integrated Curriculum Model. In a period of six months, lesson
plans are prepared and the content, process and product dimensions of the differentiated curriculum are rearranged.

In relation to the unit design, primarily curriculum differentiation approaches are determined. Then, a theme is determined for the fourth grade social studies lesson units “All Together, People and Management, My Distant Friend” and the new unit is called “Governance”. In regard to the thematic unit, some acquirements are chosen from the social studies lesson. Mathematics, Science and Turkish lesson acquirements that can be associated with these acquirements are determined. The acquirements determined are differentiated in a way to develop advanced level thinking skills. GEPUB curriculum model self-regulated learning acquirements are integrated into the thematic unit acquirements. For the thematic unit, a gripping real life problem is determined and sub-problems related to this problem are formed. After the lesson plans related to the six-month thematic unit are prepared, two classes as experimental and control groups are formed. While the experimental group is continuing to the social studies education differentiated thematic unit for six months, social studies education in line with the general curriculum acquirements is applied to the control group. Necessary equation processes are done between the groups. Data collection tools are applied as pretest and posttest, and the effect of the differentiated instructional program is examined.

3. Research Model

The study employs experimental research model, and is determined as pretest-posttest experimental and control group experimental design (Büyüköztürk, 2011). SPSS program is used in the data analysis of the study. Due to the narrow study sample, out of non-parametric tests, Mann Whitney U test is used. This test examines the significant differentiation of the scores obtained from the two independent samples. While real-life problem-based learning-driven differentiated and integrated program is applied to the experimental group students, social studies program in the national education curriculum is applied to the control group students without any change. For data collection Problem Solving Skill Test will be used while Self-regulation Skill Scale will be used in learning. In the study, the independent variable is the application of differentiated instructional design while the dependent variables are the students’ problem solving and self-regulation skills.

3.1 Study Population and Sample

The study population consists of the primary school 4th grade students in Malatya, and the study sample is composed of 24 students who study in the 4th grade in Fırat Primary School, Malatya and are determined to be gifted by the counseling and research centers in the province.
3.2 Data Collection Tool

3.2.1 Problem Solving Skill Test
It is DISCOVER Problem Matrix developed by Maker (Güçyeter, 2009). This test is made suitable for the education of the gifted students by Özgöl and Sarıkaya. The reliability of this test is provided with the studies done on 220 gifted students. The scale has revealed that fit indices values obtained with confirmatory factor analysis are at an acceptable or perfect level in all parameters. Internal consistency, split half and test-retest reliability coefficients are .83, .82 and .83, respectively for the entire scale. Use of problem solving skill test in curriculum programs is important in terms of developing problem solving skills of the students, and revealing the weaknesses and strengths of the students. This scale allows for the evaluation of the students’ lesson performances (Özgöl and Sarıkaya, 2015).

3.2.2 Self-regulation Skill Scale in Learning
Self-regulated learning Skill Test: Developed by Tortop (2015), this test is a scale of self-reporting that measures the students’ skill of self-learning. The scale is four dimensional, including Cognitive Skills, Metacognitive Skills, Motivational Skills and Administrative Skills. Consisting of 21 items, the scale is of 5-likert type. The reliability coefficient of the scale is found to be 0.94 in the studies.

3.2.3 Data Analysis
SPSS 18.0 program is used in the statistical analysis of the data. Significance level is determined as .05 and .01. In the study, since the number of the study group is below 15 and group data is inadequate for the normal distribution, Kruskal Wallis-H test and Mann Whitney U test are used (Büyüköztürk, 2007).

3.2.4 Operation
According to the Integrated Curriculum Model, the units “All Together, People and Management, My Distant Friend” similar to one another in terms of content included in the primary school fourth grade social studies curriculum are thematically differentiated. This new theme differentiated is called “Governance”. Afterwards, in GEPUB self-regulation skill acquirements are integrated and a new differentiated unit is redesigned with the name “Governance” according to the Integrated Curriculum Model (ICM). In a period of six months, lesson plans are prepared and the content, process and product dimensions of the differentiated curriculum are rearranged. In relation to the differentiated unit design, primarily curriculum differentiation approaches are determined. Then, themes are determined for the primary school fourth grade social studies lesson units “All Together, People and Management, My Distant Friend”. In regard to the thematic unit, some acquirements are chosen from the social studies lesson. Mathematics, Science and Turkish lesson acquirements that can be associated with these acquirements are determined. The acquirements determined are differentiated in a way to develop advanced level thinking skills. After GEPUB curriculum model self-regulated
learning acquirements are integrated into the thematic unit acquirements, a gripping real life problem is determined for the thematic unit. Sub-problems related to this problem are formed. While social studies education with a six-month differentiated thematic unit is applied to the experimental group, social studies education in line with the general curriculum acquirements is applied to the control group. Pretest and posttest are applied, and the effect of the differentiated instructional program is examined.

4. Findings

While the social studies education differentiated according to the integrated curriculum model is given to 12 students from the experimental group in a period of 6 months, social studies lesson is taught to 12 students in the control group in line with the general curriculum acquirements. With the application of pretest and posttest, the effect of the instructional program differentiated within the scope of the study on the students’ self-regulation skills, academic achievements and problem solving skills is determined. The data obtained after pretest and posttest applications are evaluated according to the U test and the results are interpreted in the tables below.

4.1 Change in Self-Regulated Learning Skills

Table 1: U-Test Result according to the Self-regulated Learning Skills Pretest Scores of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>12</td>
<td>13.58</td>
<td>163.00</td>
<td>59</td>
<td>0.451</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>11.42</td>
<td>137.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 indicates that there is not any significant difference in the self-regulated learning skills pretest scores of the experimental group and control group students (p>0.05). This may suggest that experimental and control group students have similar characteristics in terms of the self-regulated learning skills prior to the application.

Table 2: U-Test Result according to the Self-regulated Learning Skills Posttest Scores of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>12</td>
<td>18.46</td>
<td>221.50</td>
<td>.5</td>
<td>0.000</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>6.54</td>
<td>78.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 indicates that there is a significant difference in the self-regulated learning skills posttest scores of the experimental group and control group students (in favor of the experimental group) (p>0.05). This may suggest that there is an increase in the self-regulated learning skills of the experimental and control group students following the application.
4.2 Academic Achievement

Table 3: U-Test Result according to the Academic Achievement
Pretest Scores of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>12</td>
<td>12.63</td>
<td>151.50</td>
<td>70.50</td>
<td>0.930</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>12.38</td>
<td>148.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 indicates that there is not any significant difference in the academic achievement pretest scores of the experimental group and control group students (p>0.05). This may suggest that experimental and control group students have similar characteristics in terms of the academic achievement prior to the application.

Table 4: U-Test Result according to the Academic Achievement
Posttest Scores of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>12</td>
<td>14.08</td>
<td>169.00</td>
<td>53.0</td>
<td>0.269</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>10.92</td>
<td>131.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 indicates that there is not any significant difference in the academic achievement posttest scores of the experimental group and control group students (p>0.05). This may suggest that the application does not have any effect of the academic achievement of the experimental and control group students following the application.

4.3 Problem Solving Skills

Table 5: U-Test Result according to the Problem Solving Skills
Pretest Scores of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>12</td>
<td>12.58</td>
<td>151.00</td>
<td>71.00</td>
<td>0.954</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>12.42</td>
<td>149.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 indicates that there is not any significant difference in the problem solving skills pretest scores of the experimental group and control group students (p>0.05). This may suggest that experimental and control group students have similar characteristics in terms of the problem solving skills prior to the application.

Table 6: U-Test Result according to the Problem Solving Skills
Posttest Scores of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>12</td>
<td>16.96</td>
<td>203.50</td>
<td>18.50</td>
<td>0.000</td>
</tr>
<tr>
<td>Control Group</td>
<td>12</td>
<td>8.04</td>
<td>96.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6 indicates that there is a significant difference in the problem solving skills posttest scores of the experimental group and control group students (in favor of the experimental group) \( (p>0.05) \). This may suggest that there is an increase in the problem solving skills of the experimental and control group students following the application.

The study findings about the gifted students’ problem solving and self-regulated learning skills and academic achievements have revealed that there is a significant difference between the experimental group and the control group. There is a significant difference at the level of .01 between the Problem Solving Skill Test and Self-regulation Skill test posttest score averages of the control and experimental group students. As a result of the Mann-Whitney U test, a significant difference at the level of .05 is found in favor of the experimental group. This data suggests that in terms of the experimental group scores, the differentiated instructional design applied in the experimental group is more effective in the development of the gifted students’ problem solving and self-regulation skills compared to the education in the control group.

5. Conclusion, Discussion and Suggestions

While the instructional programs for the gifted individuals are planned, it is important to consider their characteristic features. These individuals need differentiated instructional programs due to their personal differences (Davaslıgil and Leana, 2004). A natural connection suitable to this characteristic structure is present among the objectives of the social studies education. For this reason, social studies education is chosen as the field of study. One of the objectives of this study is to differentiate the social studies education according to the integrated curriculum model, associate it in an interdisciplinary way and apply to the gifted students. In this study, social studies education provides the student with a scientific and more complex model that will bring in advanced level of learning skills. It aims to contribute to the training of the gifted individuals with a more quality and powerful social studies education. These objectives correspond to the skills such as problem solving with real life problems, questioning, critical thinking, decision making, creativity, using scientific method, strategic and analytical thinking and leadership (Delisle, 1991). For this reason, Integrated Curriculum Model that can meet such a wide range of objectives is preferred. Besides, Breiter (1991) stated that this can be a great tool in the training of the gifted students since social studies lesson subjects have a wide diversity. Differentiation of the social studies education for the gifted students according to the integrated curriculum model applied has proven to help the students realize different point of views comprised in the structure of this lesson, develop their own point of views thanks to using evidence-based resources.

In this study, in parallel to the idea defended by Dreeszen (2009), it is seen that social studies education in the training of the gifted and talented individuals supports the students’ problem solving skills, self-regulation skills, leadership skills, thinking skills and flexibility, motivational skills and participation in the lesson eagerly.
In this study, social studies lesson is differentiated in terms of presenting an advanced level of content with a curriculum differentiation strategy like the Integrated Curriculum Model. In the process part, however, the emphasis is put on the skills in the social studies education differentiated according to the Integrated Curriculum Model. This instructional design has proven to develop problem solving and self-regulated learning skills of the gifted students.

Studies revealing that the differentiated curriculum prepared for the gifted students is an effective model in understanding the cause and effect relation between the events (Tortop, 2015a), in entering into connection with more disciplines (Van Tassel Baska and Stambaugh, 2006), developing problem solving skills (Maker, 1982), developing self-regulation skills, developing critical and creative thinking skills (Tortop, 2015) are conducted. The results supporting the importance of a basic education program that teaches thinking, problem solving and searching to the gifted and talented students are obtained.

Mertol (2014), in the doctorate studies example of Hope Project and Science and BILSEM (Science and Art Education Centers) compared the educational applications of the social studies education in Turkey and USA. The effect of the social studies education differentiated for the training of the gifted students is examined. The results obtained in this study have revealed that the differentiated social studies education gets the gifted students to an advanced level of thinking thanks to developing problem solving skills and self-regulation skills, among the important skills required to be developed in the field of social studies. Besides, the field of social studies also comprises some talent areas such as organization skills, management, and leadership. In order to develop these talent areas, one of the most important skills basically required is the problem solving skill (Stevens, 1998). In this study, studying with problem solving based social studies education provides much more advantage in terms of the student success. In the study, one of the most influential of these advantages is that it has led the students to think about the conditions they are in, to find solutions to the current problems apart from these conditions, to discover the connections between the events and to use the results obtained in the solutions properly. The study indicates that the gifted students have enjoyed the method of problem based learning, interested in the lessons and a majority of them (90%) have wanted to learn the lessons in this way.

Integrated Curriculum Model offers to present the learning content to the student with an interdisciplinary approach by giving the content with problem and sub-problems. Thus, the gifted students employ many disciplines around the problem and realize their personal and independent learning (Maker, 2004, as cited in Tortop; 2018). In this study conducted, the subjects and the instructional plans are differentiated and offered to the students with real life problems. The gifted students are encouraged to access information, make research and deepen their information by employing the problem solving skills with the study methods of the other disciplines in the solution of these problems. The students have developed their problem solving skills using many disciplines and discovered the ways of using the relations among the disciplines.
The study findings, the differentiated social studies education developing the problem solving skills of the gifted students, correspond to the objectives determined by the theorists (Obergriesser, Steinbach, & Stoeger, 2013) with respect to how the education required to be given to the gifted students should be. Besides, the educational environments necessary for the children to study with real problems for their solution in a natural environment and to encounter such problems have been created. In this study, the environments involving real problems are presented to the students. In regard to the operations of the institutions and the problems experienced by the students, the students are offered solutions and asked to solve them on-site. The students offering and developing solutions in the places where problems are experienced make emergency plans in emergencies they encounter and develop different thinking skills in order to solve the problems.

The study findings indicate that the self-regulation skills are higher in the gifted students than the other students in general (Tortop and Eker, 2014). It is also important in terms of supporting the idea that the self-regulation skills should be developed in the training of the gifted students. This study also supports that in the training of the gifted students, the social studies education differentiated according to the ICM develops the self-regulation skills of the gifted students.

One of the features of the self-regulated learning skill is that it is a skill that should be given in the primary education stage or at early ages (Obergriesser, Steinbach, & Stoeger, 2013). Stoeger (2013) states that the students can develop self-regulated learning processes from nine years of age. This study also offers significant contributions in terms of developing self-regulated learning skills in social studies education at a primary school level. Maker and Nielson (1995) have stated that use of the real life problems in the education in order to provide the gifted students with self-regulated learning skills will increase the success. This study also indicates that powerful educational attainments are obtained both in problem solving and in self-regulation skill.

According to Ziegler, in self-regulation skill while the students evaluate their own learning capacity socially, they can also observe whether their learning processes are successful. This means a key for the student to learn how the learning processes work, and how and in what way it is necessary to study in order to be successful. It is a state of awareness brought in the students by the self-regulation skills (Ziegler, 2012).

During the study, the primary school fourth grade gifted and talented students discovered and used the ways and methods to realize learning in the differentiated social studies lesson. In a similar case, Zimmerman (2002b) stated that the self-regulation is necessary to be handled within the concept of lifelong learning, self-regulated learning skill is important for the individuals to regulate their talents especially in the studies such as creative projects that will take a long time, discovery and art studies, and producing a literary work. In this regard, this study indicates that the gifted and talented individuals will take the advantage of an instructional program involving self-regulated learning skills. The gifted students have developed their self-regulated learning skills during this study. Among these skills, they have learnt to determine special objectives, use the
resources effectively, prepare efficient studying environments, act with sense of responsibility, realize their own features, the ways to control self-learning and cognitive processes. In this study, in developing self-regulation skills and new information acquisition, the differentiated social studies education design applications supported with the studies of forming self-learning strategies have enabled the students to evaluate their own study, process, and results. The study reveals that the gifted and talented students have a higher lesson motivation then the other students in general. The students evaluate their performances and learn the mistakes in the learning process, and make progress regarding the development of their self-sufficiency perceptions. They have learnt not to be demotivated against the failures, and not to lose their self-confidence.

Self-regulated learning is a learning strategy that should be regarded important in order to cut across the path that the gifted and talented students will use to reach the level of metacognition and improve their behaviors, to save time and to improve in developmental aspect (Tortop and Eker, 2014). Just as the self-regulation skill develops the independent study skill in children, it also helps them realize their strengths and weaknesses. As a result of this perception, this study indicates that self-regulated learning has enabled the gifted individuals to enrich their strengths and also to improve their weaknesses in a short span of time. In case of better understanding of the creativity concept disposed in the personal structure of the gifted individuals and in the theories, it can be thought that creativity and emergence processes of creativity are strongly connected and associated with the self-regulated learning theory. The individuals not considered as creative in their society can be accepted as creative according to their development and change criteria. The fact that an individual achieves a previously failed behavior is associated with that individual’s creativity and the creativity being improvable (Sak, 2014). During this study, it is observed that the gifted students have developed self-learning skills, have had important acquirements in terms of presenting independent and original skills in the individual, which forms the basis of creativity.

As a result of the study, although there is not any significant difference between the experimental and control group students in terms of their academic achievements, there is a significant difference in terms of their problem solving and self-regulation skills in the social studies education differentiated according to the integrated curriculum model. The gifted individuals expected to be trained for community management are also required to have a high level of problem solving skill (Kaplan, 2017). There is a significant difference between the experimental group students studying the social studies education differentiated according to the integrated curriculum model and the control group studying the social studies education according to the national education curriculum in favor of of the experimental group students. However, there is not any significant difference between the experimental group and the control group according to the academic achievement pretest and posttest results. It can be concluded that the students participating the study have not had much difficulty in obtaining and transferring the information.
The differentiation studies done in the social studies lessons will help the students form different point of views, realize the point of views in the structure of the lesson, and form their own point of views using evidence and resources (Kabapınar, 2012: 238). In this study, in the teachers’ method of bringing in information, skills of teaching social studies, instead of concentrating on certain dates, multiple reasons of those dates and events, the geographical structure of the events experienced, relations of the methods with this structure, economic and sociological results, and the effect of the geographic structure on the life of the living things are concentrated. Thanks to the open ended questions and conceptual understanding, the students have had the opportunity to transfer different life experiences, encouraged to deduce and make a prediction, and information analysis has been included. The learning motivation built in the gifted students has urged them to make research, and they are allowed to collect detailed information during the application. Therefore, there is not any significant difference in both groups’ results in regard to academic achievement and obtaining information.

Besides, social studies lesson is in fact within and closely related to the current life. The achievement test of the differentiated social studies unit applied comprises real life problems and current events encountered frequently in real life. Since the gifted students have a higher level of general knowledge and interest in real life events than the other students in general, they understand the events they experience faster and make more objective deductions, they may have showed an equal level of success in the achievement test. This can also be a field of study worth searching for. Social studies lesson is closely related to the current life. Current events comprised in the program are convenient in terms of the students understanding and interpreting the events properly and making deductions from the results. Effective teaching of the current events in this lesson serves as a bridge in associating the things learned with real life (Moye, 1998). The achievement test of the differentiated social studies unit applied also reflect the students’ skill of establishing a connection with the current events and real life problems.

It can be deduced that designing and applying social studies education differentiated according to the integrated curriculum model in the training of the gifted students will make it easy to acquire the facts and concepts disposed in the social studies lesson curriculum. Differentiation of curriculum is as important for the education of a different class as for meeting the needs of those requiring individualized education (Tomlinson, 2001). However, as a result of the differentiated instructional applications that can be studied with larger groups, elements such as gender, economic structure of the family, relationship of the students with the advanced level of intelligence and skill areas, teacher competences, educational environment richness and capability of reaching more detailed information, which may affect this difference, can help this study be evaluated in a multi-dimensional field. In the differentiated curriculum, the gifted and talented students studying with adequate number of mentors can also indicate how and to what extent this study results will be affected and reveal the place and importance of the specialist mentors in education. Planning the instructional design differentiated
according to the integrated curriculum model with the contents that the students have not seen and studied can make it possible to see the study from different aspects.

References


