

Journal for the Education of Gifted Young Scientists, 11(2), 125-136, June 2023 e-ISSN: 2149- 360X jegys.org dergipark.org.tr/jegys



Research Article

Evaluation of the support education room primary school Turkish activity book prepared for gifted ones in the context of the revised Bloom's taxonomy

Serkan	Ciftci ¹ .	Abdulka	dir Saglaı	n ² and	Omer	Erbasan ³
0.0	<i>on</i> ,		an ougin			21040411

Yusuf Gökçenay Science and Art Center, Van, Turkiye

Article Info	Abstract
Received: 20 Febuary 2023 Accepted: 18 April 2023 Available online: 30 June 2023	There are many science and art centers established throughout our country within the scope of support services for gifted students. These gifted students have the right to benefit from the support training room in the schools where they study, apart from the science and
Keywords Activity book Differentiation Gifted education Revised Bloom Taxonomy Support training room 2149-360X/ © 2023 by JEGYS Published by Young Wise Pub. Ltd This is an open access article under the CC BY-NC-ND license	art canters. On 04/11/2022, the Ministry of National Education published 9 Training Room Activity books for gifted students in different branches. In this study, it is aimed to evaluate the achievements contained in the Support Training Room for Gifted Students Turkish 2. 3. and 4. classroom activities book in the context of the cognitive domain steps of the updated Bloom Taxonomy. In the study, the achievements found at the 2. 3. and 4. grade levels were analysed using keywords compiled in the literature and it was tried to determine which step corresponds to the updated Bloom Taxonomy. In the study carried out with document analysis technique, one of the qualitative research methods, a total of 122 achievements, including 40 at 2 grade levels, 37 at 3 grade levels and 45 at 4 grade levels, were evaluated. As a result of the study, it was determined that 10% of the 2nd grade achievements were in the recall, 15% in comprehension, 42.5% in practice, 5% in analysis and 27.5% in creation. Also, it was seen that 8.1% of the 3rd grade achievements were in the recall, 16.2% in comprehension, 43.2% in the application, 8.1% in analysis, 2.7% in evaluation and 21.6% in the creation stage. Finally, it was found that 6.6% of the 4 grade level achievements can be associated with recall, 17.7% with understanding, 35.5% with application, 8.8% with analysis, 8.8% with evaluation and 22.2% with the creation step. Based on these findings, it can be said that the achievements at the 2, 3 and 4 grade levels of the Support Training Room for the Gifted Turkish activity book correspond to the most application and creation steps from the Updated Bloom Taxonomy cognitive field steps,
	while the evaluation step is the least included.

To cite this article:

Ciftci, S., Saglam, A., & Erbasan, O., (2023). Evaluation of the support education room primary school Turkish activity book prepared for gifted ones in the context of the revised Bloom's taxonomy. *Journal for the Education of Gifted Young Scientists*, *11*(2), 125-136. DOI: http://dx.doi.org/10.17478/jegys.1267904

Introduction

One of the most basic principles of education is to provide education to students at all levels of education systems in line with their interests and needs. This principle should help learners with different learning methods reach their potential by receiving training with appropriate arrangements. The term "gifted education" refers to educating students of above-average intelligence, talent, or potential. The idea of multiple intelligences has introduced new ways of thinking about

¹ Corresponding author: Dr., Yusuf Gökçenay Science and Art Center, Van, Turkiye E-mail: serkanciftci65@gmail.com ORCID: 0000-0003-0949-1267

² Dr., Edremit Science and Art Center, Balikesir, Turkiye. E-mail: saglam6888@gmail.com ORCID: 0000-0003-3023-5751

³ Dr., Çalışlar Primary School, Afyonkarahisar, Turkiye. E-mail: omererbasan20@gmail.com ORCID: 0000-0001-7852-2747

students with special abilities. Traditionally, the term gifted refers only to students with unusually high verbal skills, but refers to performing particularly well on standardized tests of general ability or school achievement. Recently, however, the meaning of giftedness has expanded to include extraordinary abilities in many activities, such as music, creative writing, or the arts (Davis and Grim, 2005). Some schools offer special courses for students who are presumed to be more talented than their peers. In some countries, there is also a Decoupling between different types of schools in this way. Some of these courses primarily perform the process of grouping students.

The term "gifted" can be defined in many different ways. One reason for the different definitions is that there have been changes in people's attitudes towards intelligence throughout history. Some researchers believe that there is only one aspect of giftedness, while others believe that it is related to a combination of several factors. Some researchers claim that intelligence, which is arguably a key element in giftedness, is a genetic trait, while others note that environmental factors play an important role (Haight, 2005; Winstanley, 2005). Over time, academics have become aware of the social and political factors that affect the definition of giftedness and have recognized that talent is not in one frame that fits everyone (Rinn, 2021). In current studies, some authors discuss the difference between 'supported/advanced abilities' and 'innate abilities' (Brighouse & Swift, 2014; Giesinger, 2011). The concept of talent is closely related to productivity and success. Competencies are skills that make future success possible or easy. The reference to a person's abilities does not refer to the current abilities or other qualities that a person may have, but rather means the acquisition of these qualities in the future. For example, high math ability may allow a person to develop higher math skills in the future. Future achievements, such as musical or mathematical abilities, do not depend solely on a person's genes. They also rely on the efficient guidance of a highly qualified math teacher or math parents (Vopat, 2011). In order for such situations to occur naturally, education systems should focus on the needs of special abilities outside of the general educational process.

Since the educational process of schools usually focuses on the academic development of students, some needs are neglected and there are problems in meeting the educational needs of gifted students. Given the same educational resources, a more talented child will learn more in a certain area over a certain period of time. For example, even if a child is not better than her/his peers in mathematics when he goes to school, s/he will have success by doing what the teacher says and having better academic achievements (Meyer, 2021).

Gifted students are those who demonstrate high ability or excellence in one or more areas. They may have a wide range of skills, such as creativity, leadership, and problem solving. Gifted students may also have a deep interest in a particular topic or field. It may be difficult to identify gifted students, as there is no criterion for identifying these students. Instead, several indicators should be considered. These may include test scores, teacher and peer reviews, and evidence of outstanding performance in a particular field. On the other hand, it is also important to recognize that gifted students may face unique challenges. These can include feelings of isolation, boredom, and frustration. It is important to provide support and understanding to help them develop the skills and confidence they need to achieve their goals (Worrell et al., 2019).

Gifted students often need special educational opportunities to reach their full potential. Parents and teachers can help create a positive learning environment by encouraging and appreciating their achievements. At home, parents, especially teachers at school, can help children find resources and activities that can challenge them. According to Sayler (2021), schools can offer special classes or programs to meet the needs of these students.

Gifted students are students with exceptional abilities, usually in an academic or artistic field. It is important to give them the support they need to reach their full potential. Various education options are offered to meet the educational needs of these gifted students. This support can come in the form of tutoring, mentoring, and other resources tailored to specific interests and skills. With the right resources and guidance, these students can reach their highest potential. Creating an inclusive environment for gifted students is critical to their success. This means that teachers, administrators and other school personnel must be aware of their needs and provide them with the resources they need. These training opportunities are support education room applications that include both classroom exercises and extracurricular activities (Callahan et al., 2017). Every student, including gifted students, has the right to learn something new every day, but unfortunately it is known that too many advanced students sit in the classroom waiting for new material to be presented to them. In addition, most gifted students with limited English proficiency – those with limited English proficiency, a disability or a minority or weak background – do not benefit from remedial services or attend schools that offer education services for the gifted. There may also be situations where classroom teachers do not have the necessary training to meet these needs in classrooms in schools with regular education.

In the post-republic period, especially in the 1960s, small steps in terms of talent accelerated again in the 1990s, but unlike what happened in the world, something was tried to be done with the efforts of only some foundations and the determination of a few educators. Various decisions have been taken throughout the history of the Republic, from identifying the gifted to giving them the most appropriate education. Regarding the definitions, the special pedagogy council of the Ministry of National Education convened in 1991 grouped the concepts of "gifted intelligence" and "high talent" under the title of "gifted talent". Here, gifted individuals are defined as "individuals evaluated by experts that they perform at a higher level than their peers in terms of general and/or special abilities" (MoNE, 1991). A new definition has been added to the directive of SAC as "Gifted student: A student who outperforms his peers in intelligence, creativity, art, leadership or special academic fields" (MoNE, 2022).

Various support trainings are held in Turkey in order to support the gifted. The most common and well-known of these educational applications is Science and Art Centers (SAC). Science and art centers, which make it easier for gifted students to receive education in different fields, and their number has increased in recent years, provide the support education that gifted students need. The Turkish Ministry of National Education, in cooperation with all stakeholders, has prepared an action plan for the development and implementation of a strategy to provide appropriate education for gifted students. MoNE is responsible for establishing education policies for exceptional students, including gifted students. The Ministry of National Education is also responsible for decisions regarding public and private education and private pedagogical programs in pre-primary, primary and secondary schools (MoNE, 2006).

It has become an accepted fact that the emotional and social development of gifted students, as well as their academic development, are supported by the effect of special education. However, it is still a matter of debate which training method is most suitable for gifted students. It is thought that the adaptation of these children to the normal education classes in schools affects their academic success relatively negatively. On the other hand, it has been determined that going to a private school separate from their peers may cause socio-emotional problems. This highlights the implementation of a support education room within the school as a temporary solution (Opengin, 2018).

Support Education Room

In addition to the education in general education classrooms, gifted students receive support education in a different classroom at certain times of the week according to their individual needs in the support education room (Rogers, 2002). It can be said that there is a transition between concepts in the literature about support education rooms applications. In the studies, extracurricular learning programs are sometimes examined together, and sometimes the support education room applications are considered as out-of-class learning (Mammadov, 2015; NAGC, 2015). Although there are many different ideas about the use of the support education room in the education of the gifted, the fact that there is a certain standard will facilitate the practices accepted by all segments. The idea that the education programs of the gifted should be within certain frameworks and that they have basic criteria was first put forward by Belcastro (1987) and the basic criteria were determined. According to these basic criteria, special education;

- It should have content related to the general curriculum.
- There should be a fair student determination system.
- Students should receive training every day.
- Students are educated with their peers who are mentally close to each other.
- There should be an educational content suitable for the learning styles and speeds of the students.
- The curriculum should have a content suitable for high-level thinking skills.
- It should be given by teachers who are experts in the field of education.

Since support education room applications are also included in special education, studies have been carried out on the need for certain standards in this regard, and as a result of these studies, meta-analytical studies have determined that support education room applications have a positive effect on gifted students (Kulik, 2003; Rogers, 2002). This situation is the same in Turkey as in the rest of the world. In Turkey, gifted students are evaluated within special education groups. However, gifted students are subject to the same rules as other special education groups. The Special Education Service Regulation (Ministry of National Education [MoNE], 2012) clearly includes provisions regarding the use of support education rooms by the gifted. Various metrics are used to improve the cognitive and social aspects of gifted people and to evaluate them in different ways. Bloom's taxonomy is the most important matrix known to reveal the goals that students need to achieve according to a certain indicator and to see concrete items.

Revised Bloom Taxonomy

Taxonomies created in the late 1950s to facilitate target setting received a lot of attention. Among these taxonomies is the cognitive domain taxonomy presented by Bloom et al. (1956). Bloom has worked in schools and coeducational institutions to minimize the impact of this gap and make it beneficial for students, families and society. The basic structure of taxonomy is to guide the quality of teaching by managing individual differences in perception that affect the student. This understanding argues that with extra time and effort, any student can learn or reach the desired level. With the current understanding of education, the need to update the taxonomy has emerged. Bloom's taxonomy has been reviewed by colleagues, students, and other distinguished researchers to meet the need for updating. Two reasons have been suggested for this update; The first is to try to get teachers to refocus on the original taxonomy, which is the old version. Because this taxonomy is not just a historical document, it contains many ideas about design, implementation, standards-based learning, and authentic assessment that are grappling with today. Another reason is the need to link the development of the USA and the world since 1956, up-to-date information in the field of developmental and learning psychology, teaching methods and techniques, measurement and evaluation to this taxonomy (Bumen, 2010).

The revised Bloom's Taxonomy consists of two dimensions: the knowledge dimension (factual knowledge, conceptual knowledge, functional knowledge, and metacognitive knowledge) and the cognitive process dimension (remember, understand, apply, analyze, evaluate, and create). In the original taxonomy, the knowledge dimension was changed to recall, the synthesis and evaluation stages were changed, and the understanding and synthesis stages were renamed as understanding and creation (Oey, 2010). Amer (2006) found in his research that the revised Bloom's taxonomy can be used for a clear, concise and visual analysis of curriculum objectives, helping teachers not to confuse achievement with activities, helping teachers understand the relationship between learning and teaching activities. He also noted that this taxonomy can be used for evaluation process of the gifted in the taxonomy, the education of these students in the SAC and the supportive education they receive in the support room will find a place for themselves in both dimensions of the taxonomy. As a matter of fact, the training received in the support room supports the gains in the knowledge dimension, while the cognitive process dimension finds a place for itself here as the application dimension is mostly realized in SAC.

Problem of Study

In this study, it is aimed to evaluate the achievements in the Support Education Room Turkish 2nd, 3rd and 4th grade activities book published by the Ministry of Education for Gifted Students in the context of the cognitive domain steps of the renewed Bloom Taxonomy. While doing this, it is tried to express what the characteristics of gifted students are, what the education of these students includes, what the support education application is and how the renewed Bloom Taxonomy is. In addition, the Support Education Room Turkish 2nd, 3rd and 4th grade activities published by the Ministry of National Education are related to which achievements, which dimensions of the renewed Bloom Taxonomy are related to, and the Support Education Room Turkish 2nd, 3rd and 4th grade activities are tried to be explained. Problems of the study;

- In the context of the cognitive domain steps of the revised Bloom Taxonomy, which are the outcomes in the Support Education Room Turkish 2nd grade activity book published by the Ministry of Education for gifted and talented students?
- In the context of the cognitive domain steps of the revised Bloom Taxonomy, which are the outcomes in the Support Education Room Turkish 3rd grade activity book published by the Ministry of Education for gifted and talented students?
- In the context of the cognitive domain steps of the revised Bloom Taxonomy, which are the outcomes in the Support Education Room Turkish 4th grade activity book published by the Ministry of Education for gifted and talented students?

Method

Research Design

In this study, document analysis technique, one of the qualitative research methods, was used. Document analysis is the analysis of written sources of information about the phenomenon or phenomena that are intended to be investigated (Yildirim and Simsek, 2013). Document review is also a research technique that can be used alone (Bowen, 2009). In the study, taxonomic levels of 122 different learning outcomes (2nd grade: 40 outcomes, 3rd grade: 37 outcomes, 4th grade: 45 outcomes) in SER Turkish 2nd, 3rd and 4th grade Activity Books published in 2022 were determined according to the Revised Bloom Taxonomy.

Documents

As a data source in the study, the Turkish Activity Books for the 2nd, 3rd and 4th grades of primary school, which is one of the 9 Support Education Room activity books for Gifted Students in different branches published by the General Directorate of Special Education and Guidance Services of the Ministry of National Education on 04/11/2022 were used. In order to determine the taxonomic classification of the achievements in the activity books and the sub-steps of this classification, articles, theses, books and other internet resources related to the Renewed Bloom Taxonomy were also used.

Data Analysis

First of all, the studies carried out in the related literature were examined (Aktan, 2020; Ari and Gokler, 2012; Basbay, 2008; Canguven et al., 2017; Dalak, 2015; Dindar and Demir, 2016; Es, 2005; Girgin, 2012; Guleryuz, 2016; Kahramanoglu, 2013; Kuzu, 2013; Ozdemir et al., 2015; Sanli and Pinar, 2017; Tahaoglu, 2014; Tolan, 2011; Topcu, 2017) and a coding key for the cognitive domain sub-levels of the Revised Bloom Taxonomy was created. The characteristics and sample expressions of the steps of Bloom's Taxonomy, which is considered as a category in the study, are given in Table 1.

Digits	Features	Sample Expression
Recall	Basic concepts and principles of the child; It includes cognitive processes such as knowing, recognizing, reciting.	Naming the digits in Bloom's Taxonomy
Understanding	It includes processes such as assimilation of concepts gained at the knowledge level, comprehension and interpretation of their meanings, and expressing the knowledge in your own words.	Ability to chart the information of the digits in Bloom Taxonomy
Application	It consists of processes such as solving new problems, applying knowledge to operations, calculating, executing and showing, based on what the student has acquired at the level of comprehension.	Being able to prepare homework using the steps of Bloom's Taxonomy
Analysis	It includes the processes of breaking a whole into parts, finding and analyzing relationships, revealing similarities and differences, and using the deductive method.	To be able to reveal the difference of Bloom's Taxonomy from other classifications.
Evaluation	It includes the use of the individual's standards of appraisal such as being able to summarize, draw conclusions, criticize, reveal inconsistencies, reach judgment, and appreciate.	Ability to criticize the errors/deficiencies of Bloom's Taxonomy
Creating	It includes the processes of creating a new whole, presenting a new idea, designing original productions, teaching the acquired knowledge to others, and offering new solutions to problems.	Developing a new approach to Bloom's Taxonomy

Table 1. Features of revised Bloom's taxonomy levels and example expressions

(Anderson & Krathwohl, 2018)

Table 1 shows the step characteristics and sample expressions of the Revised Bloom Taxonomy. While analyzing the data in the study, similar acquisition statements in the SER Turkish Activity books were analyzed under the relevant steps and evaluations were made. All analyzes were carried out in this way, and the percentages at the grade level and the percentages in the general curriculum were calculated, and sample achievements matched with the steps of the taxonomy at grade levels were included.

In order to ensure the validity and reliability of the obtained data; Regarding which step verb expressions can be associated with in the revised Bloom Taxonomy; In addition to the researchers conducting the research, three more field experts, two experts in the field of qualitative research and one expert in the field of education programs, were consulted. The classifications created in line with the opinions of these experts were compared and the data table was given its final form. The reliability of the data obtained through document analysis was examined with the formula of Miles and Huberman (2021) "Agreement / (Agreement + Disagreement) x 100". The reliability rate among experts was determined as 89%.

Results

The achievements used in the Turkish Activity Book for the 2nd, 3rd and 4th grades of primary school, which is one of the activity books of the Support Education Room for Gifted Students published by the General Directorate of Special Education and Guidance Services of the Ministry of National Education, were analysed according to the cognitive process dimensions of the renewed Bloom Taxonomy.

The distribution of SER 2nd grade Turkish activity book outcomes according to the revised Bloom's Taxonomy cognitive process dimensions is given in Figure 1.



Figure 1. Distribution of SER 2nd grade Turkish activity book outcomes according to the revised Bloom's Taxonomy cognitive process dimensions

Looking at Figure 1, the distribution of the achievements in the SER 2nd grade Turkish Activity book prepared for the gifted according to the revised Bloom Taxonomy is seen. Accordingly, the 4 outcomes that correspond to 10% of the total 40 outcomes are Recall; Comprehension of 6 gains corresponding to 15%; Application of 17 gains corresponding to 42.5%; It is shown in Figure 1 that 2 achievements corresponding to 5% of them correspond to the Analysis step and 11 achievements corresponding to 27.5% of them correspond to the Creation step. There is no gain that corresponds to the evaluation step.

Table 2 shows the cognitive dimension of the revised Bloom Taxonomy of some of the achievements in the Support Education Room for Gifted Students 2^{nd} Grade Turkish Activity Book.

Table 2. The equivalents of some of the acquisitions in the SER 2nd Grade Turkish Activity Book in the revised Bloom

 Taxonomy cognitive dimension

SER 2nd Grade Turkish Activity Book Sample Outcomes	
Learning Outcomes	Digit
Relates independent cause and effect sentences.	Creating
Implements writing strategies.	Understanding
He makes impromptu speeches.	Application
Comprehends written instructions.	Recall
Answers questions about the text reading.	Analysis

When we look at Table 2, it is seen that some of the acquisitions correspond to which step according to the revised Bloom Taxonomy in line with the keywords determined in the data analysis section. While the acquisition of "Associate independent cause and effect sentences" can constitute the Analysis step; "Applies the writing strategies" is an example of the Implementation step. While the acquisition of "Makes impromptu speeches" can be associated with the Creation step; The achievement of "comprehends written instructions" can be associated with the Comprehension step. The outcome of "Answering questions about the text read" can be given as an example of the Recall step.

The distribution of SER 3rd grade Turkish activity book outcomes according to the revised Bloom's Taxonomy cognitive process dimensions is given in Figure 2.



Figure 2. Distribution of SER 3rd grade Turkish activity book acquisitions according to the revised Bloom's Taxonomy cognitive process dimensions

When Figure 2 is examined, it is seen that the achievements of the SER 3rd grade Turkish activity book correspond to 3 Recall, 6 Understanding, 16 Application, 3 Analysis, 1 Evaluation and 8 Creation steps of the Revised Bloom Taxonomy. The total number of achievements in the SER 3rd Grade Turkish activity book is 37.

Table 3 shows the cognitive dimension of the revised Bloom Taxonomy of some of the achievements in the Support Education Room for Gifted Students 3rd grade Turkish Activity Book.

Table 3. The equivalents of some of the acquisitions in the SER 3rd Grade Turkish Activity Book in the revised Bloom's Taxonomy cognitive dimension

Learning Outcomes	Digit
Writes narrative text.	Creating
Understands the meanings of shapes, symbols and signs.	Understanding
Implements speaking strategies.	Application
He tells the main lines of what he has read.	Recall
Distinguish between text types.	Analysis
Evaluates the content of what they listen/watch	Evaluation

In Table 3, the achievement of "Write a text of storytelling" is combined with the Creation step of the Renewed Bloom Taxonomy, the "understands the meanings of shapes, symbols and signs" achievement with the Understanding level, the "Applies speaking strategies" achievement with the Application step, the "He/she describes what he/she reads" achievement with the Recall step, It is seen that the acquisition of "distinguish between text types" can be associated with the Analysis step, and the acquisition of "evaluate the content of what they listen to/watch" can be associated with the Evaluation step.

The distribution of SER 4th grade Turkish activity book acquisitions according to the revised Bloom's Taxonomy cognitive process dimensions is given in Figure 3.



Figure 3. Distribution of DEO 4th grade Turkish activity book acquisitions according to the revised Bloom's Taxonomy cognitive process dimensions

Looking at Figure 3, out of 45 different outcomes in the SER 4th grade Turkish book, 3 of them have the Recall step of the Revised Bloom Taxonomy, 8 have the Understanding step, 16 have the Application step, 4 have the Analysis step, and 4 have the Evaluation step. and 10 of them correspond to the Creation step. Table 4 shows the cognitive dimension of the revised Bloom Taxonomy of some of the achievements in the Support Education Room for Gifted Students Grade 4 Turkish Activity Book.

Table 4. The equivalents of some of the acquisitions in the DEO 4 th Grade Turkish Activity Book in the revised Bloom's
Taxonomy cognitive dimension

SER 4 th Grade Turkish Activity Book Sample Outcomes		
Learning Outcomes	Digits	
Prepares an anthological source and writes an informative text about it.	Creating	
Comprehends the contribution of idioms and proverbs to the meaning of the text.	Understanding	
Evaluates media texts.	Evaluation	
Distinguish between text types.	Analysis	
Uses words according to their meanings.	Application	
Answers questions about what they have listened/watched.	Recall	

Looking at Table 4, the achievement of "Preparing an anthological source and writing an informative text about it" among the gains in the SER 4th Grade Turkish Activity Book is compared with the Creation step of the Renewed Bloom Taxonomy, and the "Concepts the contribution of idioms and proverbs to the meaning of the text" with the Understanding level. It is seen that the achievement of "evaluate the texts" can be associated with the Evaluation step, the achievement of "Distinguish between the types of texts" with the Analysis step, the achievement of "Uses words in accordance with their meanings" with the Application step, and the achievement of "Answers questions about what they listen/watch" can be associated with the Recall step.

Conclusion and Discussion

This research was carried out in order to evaluate the achievements in the Turkish 2nd, 3rd and 4th grade activity books of the Support Education Room prepared for gifted students according to the cognitive steps of the renewed Bloom taxonomy. Accordingly, it has been determined that there are 40 acquisitions at the 2nd grade level, 37 at the 3rd grade level and 45 at the 4th grade level in the books. When these achievements are examined according to taxonomy, it has been determined that the application and creation step has the most achievements, and the evaluation step is the least included step. It is expected that the books prepared for the gifted will have more gains in the analysis, evaluation and creation step of the taxonomy. In this sense, the fact that the examined books have many achievements in the creation stage can be evaluated positively, while the insufficient gains in the analysis and evaluation stage can be criticized. In

particular, when the evaluation step is examined, it is seen that there are 0 acquisitions in the 2nd grade, 1 in the 3rd grade and 4 in the 4th grade, and a total of 5 assessment acquisitions are included in the new 3rd grade level books. This number is quite insufficient, and the balanced distribution of high-level cognitive steps in taxonomy is important for the quality of the book.

Mayer (2002) emphasizes the importance of focusing on the processes of application, analysis, evaluation and creation for meaningful learning to take place. In accordance with the philosophy of the constructivist approach, the activities that students participate by doing and experiencing increase the quality of learning. For this reason, it is very important that the activity books prepared for students also provide opportunities for cognitive processes at a higher level, which will allow students to learn by doing and experiencing. Marlowe and Page (1998) state that the student who takes responsibility for learning in the constructivist approach should fulfill skills such as being an entrepreneur, expressing himself, communicating, critically evaluating, planning and using what he has learned in life. For this reason, activity books should support students in acquiring these skills.

It is expected that the gains in the course and activity books will show a balanced distribution according to the cognitive domain steps. Because these books are prepared to appeal to students from all corners of the country and from all levels. However, it is expected that a book that appeals to the gifted will include gains in the cognitive field at higher levels. According to Webb, Meckstroth, and Tolan (2006), gifted students tend to learn more quickly while they have longer attention and concentration periods than their peers. In addition, special talents have superior analytical ability, abstract thinking, critical thinking, creative thinking, flexible thinking and strategic thinking abilities (Chuska, 2005; Hoh, 2008; Moltzen, 2009). These distinctive features of the gifted make it necessary for the books prepared to appeal to them to have high-level achievements. As a matter of fact, when the activities in the Turkish Textbooks prepared for general use are examined, it is seen that the distribution is different from the books we have examined. Oryaşın (2021) examined the activities in the Turkish textbooks taught in our country from the 1st to the 8th grade according to the renewed Bloom classification. He determined that 13 of them took place in the evaluation and 5% in the creation step.

Recommendations

As a result, the content of the auxiliary resources that should include more than one outcome can be developed, the activities can be diversified and the activities can be categorized according to the acquisition status. In addition to a main resource for each discipline, different activity resources and project handbooks can be prepared in support education room studies. In addition, workshops such as creative thinking techniques and current science researches can be created that will enable gifted students to receive versatile education in the support training room.

Based on the research findings, the following suggestions can be made:

- The number of gains in the analysis step should be increased.
- The number of gains in the evaluation step should be increased.
- A balanced distribution of the gains in the upper level can be achieved.

Limitations of Study

This study is limited to the evaluation of the achievements included in the book Support Training Room activities for Gifted Students in the context of cognitive domain steps of the revised Bloom Taxonomy. Research area of the study are limited to Support for Education Room Turkish 2nd 3rd and 4th grade activities books Gifted Students.

Conflicts of Interest

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

Authors Contribution

The authors have contributed equally to the article.

References

- Aktan, O. (2020). Examination of primary school mathematics curriculum course outcomes according to the renewed bloom taxonomy. *Pamukkale University Faculty of Education Journal (PAU Journal of Education)*, 48, 15-36. Doi: 10.9779/pauefd.523545.
- Amer, A. (2006). Reflections on Bloom's revised taxonomy. *Electronic Journal of Research in Educational Psychology*, 4 (1), 213-230.

Anderson, L. W. & Krathwohl, D. R. (2018). A classification of learning, teaching and assessment, an updated version of Bloom's classification of educational goals. 3rd Edition. (Trans. Özçelik, D. A.). Ankara: Pegem Academy Publications.

Ari, A. & Göokler, Z. S. (2012). *Evaluation of primary school science and technology course outcomes and SBS questions according to the new Bloom taxonomy*. X. National Science and Mathematics Education Congress, Niğde. 20-30 June 2012.

- Basbay, M. (2008). The effect of project-based teaching on learning in an instructional design course organized according to the revised taxonomy. Unpublished doctoral thesis, Hacettepe University, Ankara.
- Belcastro, F. (1987). Elementary pull-out programs for the intellectually gifted--boon or bane? *Roeper Review*, 9, 208-212.
- Bloom, B. S. (1956). *Taxonomy of educational objectives, the classification of educational goals, handbook I: Cognitive do main.* New York: David McKay Company.

Bowen, A. G. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9(2), 27-40.

- Brighouse, H. & Swift, A. (2014). *The place of educational equality in educational justice*. In K. Meyer (Ed.), Education, justice, and the human good: Fairness and equality in the education system. Abingdon: Routledge.
- Bumen, N.T. (2010). A milestone in program development: Revised Bloom's taxonomy. Education and Science, 31(142).
- Callahan, C. M., Moon, T. R. & Oh, S. (2017). Describing the status of programs for the gifted: A call for action. *Journal for the Education of the Gifted*, 40(1), 20-49.
- Canguven, H.D., Oz, O., Binzet, G. & Avci, G. (2017). An examination of the Ministry of National Education's 2017 science draft program according to the revised Bloom's taxonomy. *International Journal of Eurasian Education and Culture*, *2*, 62-80.
- Chuska, K. R. (2005). Gifted learners K-12: A practical guide to effective curriculum and teaching (2nd ed.). National Educational Service.
- Dalak, O. (2015). *Examination of TEOG exam questions and related achievements in 8th grade curriculum according to the revised Bloom's taxonomy*. Master's thesis, Gaziantep University, Gaziantep.
- Davis, G. & Rimm, S. (2004). Education of the gifted and talented, 5th edition. Boston: Allyn & Bacon.
- Dindar, H. & Demir, M. (2006). Evaluation of fifth grade teachers' science lesson exam questions according to Bloom's taxonomy. *Journal of Gazi Education Faculty*, *26*(3), 87-96.
- Es, H. (2005). Evaluation of high school entrance exam science questions and primary school science exam questions according to Bloom's taxonomy. Unpublished master's thesis, Gazi University, Ankara.
- Giesinger, J. (2011). Education, fair competition, and concern for the worst off. *Educational Theory*, *61*(1), 41–54.
- Girgin, E. (2012). *Examining the end-of-unit evaluation questions in the primary school 2nd grade science and technology reverse books.* Master's thesis, Trakya University, Edirne.
- Guleryuz, H. (2016). *Evaluation of 5th, 6th, 7th, 8th grades science and technology exam questions according to Bloom's taxonomy.* Published master's thesis, Mus Alparslan University, Mus.
- Haight, A. (2005) 'Inclusiveness and teacher attitudes in the identification of gifted and talented pupils in Excellence in Cities and Excellence Clusters schools'. Paper delivered to the *British Education Research Association Conference*, Glamorgan, September, 2005.
- Kahramanoglu, E. (2013). *Evaluation of primary school science and technology textbooks in terms of Bloom's Taxonomy*. Published master's thesis. Istanbul University, Istanbul.
- Kulik, J. A. (2003). Grouping and tracking. N. Colangelo and G. A. Davis (Editörler), *Handbook of gifted education* (pp. 268–281). Boston: Allyn and Baco.
- Kuzu, T.S. (2013). Investigation of subtext questions in Turkish textbooks in terms of cognitive levels of remembering and understanding in the revised Bloom's taxonomy. *Cumhuriyet University Journal of Social Sciences*, *37*(1), 58-76.
- Mammadov, S. (2015). Current policies and policy efforts for the education of gifted children in Turkey. *Roeper Review*, *37*(3), 139-149.
- Marlowe, B. & Page, M. L. (1998). Creating and sustaining the constructivist classroom. London: Corwin Press.

Mayer, R. E. (2002). Rote versus meaningful learning. *Theory into Practice*, 41(4), 226-232.

- MoNE (Ministry of National Education) (2012). *Special Education Services Regulation*. Ankara: Ministry of National Education General Directorate of Special Education and Guidance Services.
- MoNE (Ministry of National Education) (2022). Science and Art Centers Directive. Ankara: Ministry of National Education General Directorate of Special Education and Guidance Services. *Journal of Announcements*.
- MoNE (Ministry of National Education), (1991). *Special Education Council, Gifted Children and Their Education*. Ankara: Ministry of National Education General Directorate of Special Education and Guidance Services.
- MoNE (Ministry of National Education), (2006). Special education service regulation [Special education regulation]. Ankara, Official Gazette.

Meyer, K. (2021). Talents, abilities and educational justice. Educational Philosophy and Theory, 53(8), 799-809.

- Miles, M. B. & Huberman, M. A. (2021). *An extended sourcebook qualitative data analysis*. (Trans. Eds. Sadegul Akbaba Altun and Ali Ersoy). Ankara: Pegem Publishing.
- NAGC. (National Association for Gifted Children and Council of State Directors of Programs for the Gifted). (2015). *State of the states in gifted education 2014–2015: National policy and practice data*. Washington, DC.

Orey, M. (2010). Emerging perspectives on learning, teaching and technology (pp. 56-61). North Charleston: CreateSpace.

- Oryasin, U. (2021). Examination of activities in Turkish textbooks according to the renewed Bloom Classification. *Journal of Mother Language Education*, 9(3), 820-832.
- Öpengin, E. (2018). Problems encountered in the implementation of the support training room for gifted students at the primary school level and solution interventions for problems. Unpublished doctoral dissertation. Anadolu University, Eskişehir.
- Ozdemir, S. M., Altiok, S. & Baki, N. (2015). An examination of social studies curriculum achievements according to Bloom's revised taxonomy. *Journal of Education and Training Research*, 4 (3) 363-375.
- Rinn, A. N. (2021). Social, emotional, and psychosocial development of gifted and talented individuals. Routledge.
- Rogers, K. B. (2002). Re-forming gifted education: Matching the program to the child. Scottsdale, AZ: Great Potential Press.
- Sayler, M. F. (2021). Special schools for the gifted and talented. In *The handbook of secondary gifted education* (pp. 443-463). Routledge.
- Sanli, C. & Pinar, A. (2017). Examination of social studies course exam questions according to the renewed Bloom taxonomy. *Elementary Education Online, 16*(3), 949-959.
- Tahaoglu, A. (2014). *Examination of secondary education Turkish literature course curriculum achievements from a cognitive point of view*. Master's thesis. Bilkent University, Ankara.
- Tolan, Y. (2011). The appropriateness of the placement exam (SBS) Questions to the science and technology course curriculum and the examination according to Bloom Taxonomy. Master's thesis. Ataturk University, Erzurum.
- Topcu, E. (2017). Analysis of TEOG History questions according to the revised Bloom Taxonomy. *International Journal of Turkish Educational Sciences*, (9), 321-335. Retrieved from http://dergipark.gov.tr/goputeb/issue/34356/381023.
- Vopat, M. C. (2011). Magnet schools, innate talent and social justice. Theory and Research in Education, 9(1), 59-72.
- Webb, T.J., Meckstroth, A.E. & Tolan, S.S. (2006). Guiding the gifted child (25th ed.). Scottsdale.
- Winstanley, C. (2005). *Investigating the notion of children with multiple exceptionalities*. University of Warwick, National Academy for Gifted and Talented Youth.
- Worrell, F. C., Subotnik, R. F., Olszewski-Kubilius, P. & Dixson, D. D. (2019). Gifted students. *Annual review of psychology*, 70, 551-576.
- Yildirim, A., & Simsek, H. (2013). Qualitative research methods in social sciences (9. Ed). Ankara: Seckin Publishing House.