| Research Article / Araştırma Makalesi |

An Investigation of Critical Thinking Skills in Illustrated Children's Books

Resimli Çocuk Kitaplarında Eleştirel Düşünme Becerisine Yer Verilme Durumunun İncelenmesi

Şule ERŞAN1, Hasan ER2

Keywords

- Critical thinking
 Illustreted children's books
- 3. Chidren's literature

Anahtar Kelimeler

- 1.Eleştirel düşünme
- 2.Resimli çocuk kitapları
- 3.Çocuk edebiyatı

Received/Başvuru Tarihi 19.07.2020

Accepted / Kabul Tarihi 16.09.2020

Abstract

Purpose: The purpose of this research is to investigate the critical thinking skills in illustrated children's books in pre-school education classes.

Design/Methodology/Approach: Within the scope of the research, 200 picture children's books were analyzed by document analysis method.

Findings: According to the findings, it was observed that in the analyzed children's books, there were more phrases that support critical thinking skills such as inference, evaluation and self-regulation while high-level skills such as analysis and interpretation were rather limited. In addition, while phrases supporting the explanation skills were included directly in the examined children's books, it was observed that there was no indirect mention.

As a result, research findings showed that critical thinking skills are limited in the illustrated children's books, and they are usually given directly. These results also clearly revealed the existence of a didactic approach, an attitude that restricts critical thinking in children's books. Illustrated children's books prepared for early childhood should avoid this approach and they should be enriched with content that supports children's thinking skills.

Highlights: The abstract of the article should be written by adding the "Calibri (Body)" text font, 8 font size, single line spacing and 6 nk space at the end of the paragraph. The abstract should be between 150 and 350 words. In the abstract, the purpose of the article, the method used, the main findings, conclusions and suggestions should be clearly stated.

Öz

Çalışmanın amacı: Bu araştırmanın amacı okul öncesi eğitim sınıflarında yer alan resimli çocuk kitaplarında eleştirel düşünme becerilerine doğrudan veya dolaylı olarak yer verilme durumunu incelemektir.

Materyal ve Yöntem: Araştırma kapsamında doküman analizi yöntemi ile okul öncesi sınıflarının kitap merkezinde bulunan 200 yerli resimli çocuk kitabı incelenmiştir.

Bulgular: Elde edilen bulgulara göre incelenen çocuk kitaplarında eleştirel düşünme becerilerinden çıkarım yapma, değerlendirme ve öz düzenleme gibi becerileri destekleyici ifadelere daha çok yer verilirken üst düzey beceriler olan analiz etme ve yorumlama becerisine oldukça az yer verildiği gözlenmiştir. Ayrıca incelenen çocuk kitaplarında açıklama becerisini destekleyici ifadelere kısmen doğrudan yer verilirken, dolaylı olarak hiç yer verilmediği görülmüştür. Sonuç olarak araştırma bulguları incelenen resimli çocuk kitaplarında eleştirel düşünme becerilerine sınırlı olarak yer verildiğini ve bunun da genellikle doğrudan yapıldığını göstermiştir. Bu sonuçlar çocuk kitaplarında eleştirel düşünmeyi kısıtlayıcı bir tutum olan didaktik yaklaşımın varlığını da açıkça ortaya koymuştur. Erken çocukluk dönemine yönelik hazırlanacak resimli kitapların bu yaklaşımdan uzaklaşarak çocukların düşünme becerilerini destekleyici içeriklerle zenginleştirilmesi gerekmektedir.

Önemli Vurgular: Çocuklar için kitap seçimi yapan yetişkinlerin özellikle okul öncesi öğretmenlerinin kitapların popülaritesi yerine kitapların içerik açısından düşünme becerilerini destekleyici özelliğine önem vermeleri ve seçici olmaları bu konuda daha nitelikli yayınların yapılmasına katkı sunacaktır.

¹ **Corresponded Author,** Sinop University, Faculty of Education, Department of Basic Education, Sinop, TURKEY; E-mail, sersan@sinop.edu.tr, https://orcid.org/0000-0003-3229-5686

² Bursa Uludag University, Bursa, TURKEY; E mail, hasaner@uludag.edu.tr, https://orcid.org/0000-0002-2868-5801

INTRODUCTION

Throughout his life, human beings are the only beings who seek their reason for existence, strive to protect their freedom and struggle for originality in the field of freedom. These searches have made the interaction of a social being with other people and the need to question his life's essential practice. Early childhood years are critical when these life practices take shape, and the first steps are taken (Oktay, 2004). Children begin to explore life through their innate feelings of overbearing curiosity. Therefore, they are prone to ask questions (lnan, 2012). The attitudes that adults develop towards children's questions affect the development of thinking action, which is effective in mental processes. Thinking is a mental process that results in systematic or coincidental idea generation. The act of thinking can occur spontaneously in children or develop systematically through interaction with adults. These experience practices form the foundations of a different way of thinking in which children can think purposefully under their control, reject the usual and repetitive patterns, test, evaluate and discuss all kinds of information, and as a result, reach new ideas or actions. The development of thinking flexibly and creatively depends on the support given to the child and the practices made. (Wallace, Cave, & Berry, 2009; Kestel & Şahin, 2018; Söylemez, 2016). Critical thinking is necessary for the individual's freedom and originality (Seferoğlu & Akbıyık, 2006). This way of thinking is a unique way of thinking purposefully. In other words, critical thinking is an individual who thinks systematically and makes it a habit, has empathy, open-mindedness, and courage to examine facts in intellectual integrity (Rood, 2012).

Critical thinking is a way of thinking that blends skill and strategy. It is also geared towards a specific goal and purpose. Critical thinking depends on the acquisition of pioneering skills and strategies such as language skills and social-emotional skills and the use of these skills in real life (Murphy, Rowe, Ramani, & Silverman, 2014). Individuals with critical thinking skills express their thoughts in a short, concise, clear and consistent manner, discern whether the information they obtain as a result of their observations are reliable or not, avoid making judgments without sufficient evidence, observe objectively and in detail, take care to collect evidence and documents, reveal the relationship between the data they reach. They make new connections; their desire to learn is continuous, they are open to new ideas, they can apply problem-solving skills in situations other than what they have learned (Gürkaynak, Üstel, & Gülgöz, 2008; Seferoğlu & Akbıyık, 2006, Yoldaş, 2009). Askar et al. (2005) define critical thinking as a cognitive and affective feature that is aimed to be developed together with problem-solving in the process of reaching, processing and generating new information in the interaction with information. In addition, they express it as a power that enables the individual to control the self-development and learning process and a tool that provides freedom and originality in learning. Studies show that children with high critical thinking dispositions are academically more successful than those with low (Akbıyık & Seferoğlu, 2006).

According to Facione (1990), the essential skills that define critical thinking are as follows;

- **Interpretation:** Understanding and expressing the meaning or significance of various experiences, situations, events, judgments, traditions, beliefs, rules, procedures or criteria.
- **Analysis:** Identifying genuine relationships between situations, problems, concepts, definitions or other types of representations designed to express beliefs, judgments, knowledge, and opinions.
- **Evaluation:** Evaluating the reliability of statements or other statements that express a person's perception, experience, situation, judgment, belief or opinion; Evaluating the logical power of actual or deliberate inferential relationships between statements, questions or other forms of expression.
- Making inferences: identifying and securing the elements necessary to produce good results; to create assumptions and hypotheses, to take into account relevant information and to draw conclusions by using data, statements, principles, evidence, judgments, beliefs, opinions, connections, explanations, questions or other forms of expression.
- **Explanation:** Stating the results of the individual's reasoning; justification of reasoning in terms of evidential, conceptual, methodological, critical and contextual thoughts on which its results are based, and to present the individual's reasoning in the form of persuasive arguments.
- **Self-regulation:** Self-regulation is defined as the capacity of the individual to delay or prevent his / her behaviors and desires, to adapt to social norms, to regulate and control their emotions, to focus and to sustain this.

Critical thinking, which has been frequently mentioned by educators in recent years and includes the cognitive skills that an individual need in the process of adapting to the rapidly changing world, enables thinking differently and flexibly instead of directly receiving stereotyped information (Fisher, 2007). Studies reveal that critical thinking can be taught early childhood (Rodd, 2012; Soydan & Dereli, 2014). For this reason, critical thinking should be one of the essential skills that families and schools should teach children as this skill is a thinking skill that starts with the self-confidence of the family and progresses in every stage of life (Kasımoğlu, 2013). Truths and theories may vary, but flexible and analytical thinking, problem-solving are competencies that prevail in every moment of life (Williams Howe, 2016). Considering the speed and intensity of the flow of information today, it is an inevitable necessity for the individual to have critical thinking skills to make sense of information and reach the correct information. The development of this thinking skill is directly related to the child's experiences in the social environment and the opportunities offered to him since early childhood (Murphy et al., 2014). Developing critical thinking skills can be achieved in early childhood in different ways.

Children who are directed to establish cause-effect relationships with open-ended questions such as "why" and "how" that will prompt children to think can be supported to acquire higher-level thinking skills (Salmon, 2010). Games, artworks, drama exercises, or sincere conversations can contribute to the child's thinking skills. In addition, while supporting the development of children's critical thinking skills, stories that also entertain them, introduce the aesthetic aspect of language, and enable them to dream have an essential place. Illustrated children's books prepared for early childhood are friends who will provide vital and intellectual support. Illustrated books prepared by taking care of children's developmental needs support children's sense perception, concept learning, imagination and creativity, and sense of the aesthetic aspect of their mother tongue (Ceran, 2019).

For this reason, quality children's books are a practical resource that helps children in all development areas. Children's books are essential materials in acquiring and developing critical thinking. However, not all illustrated children's books support critical thinking skills in children. Guided publications that want to make the child dependent on the truths formed by an adult or publications using a didactic language to provide continuous information can lead to misconceptions in children about books and literature, discourage the child's desire to read over time, and consequently form barriers between the child and the book (Sever, 2008). Particular attention should be paid to the story and illustrations of the books prepared to teach critical thinking skills. First, books should develop reasoning and connection skills in children. In addition, questioning should include weeding out irrational thinking, establishing cause-effect relationships, basing on evidence, making comparisons, distinguishing relevant and unrelated information, and using motifs that give creative thinking power. It will be a didactic approach to try to give information, values, and skills desired to be acquired directly in children's books, and it will be intellectually ineffective in the face of an inquisitive, imaginative and questioning reader like a child (Cihaner, 2007).

One of the most important goals of the child's learning environment is to raise individuals who can think and use what they experience in real life (Narin & Aybek, 2010). For this reason, today's modern schools should be institutions that raise individuals who produce knowledge and discover ways to reach information, not transferring knowledge to children (Kurnaz, 2019; Seferoğlu & Akbıyık, 2006). The responsibility of both educators and parents is to make children feel that the truth is not the only one; the important thing is to develop their own opinion by examining a problem from various angles without losing the ability to think independently, and that the opinions of others are also worth respecting and tolerating (Williams Howe, 2016). For this reason, critical thinking skill is one of the essential skills that we should teach children. Critical thinking is thinking free from all kinds of obsession, addiction, dogmatism. In this respect, he is skeptical of any authoritarian view claiming that the only truth is mine (Sever, 2008). Therefore, critical thinking shapes the child's future life and guides the choices about his life.

The critical thinking process has begun for children who have been introduced to picture books chosen for them by educators and their parents from an early age and follow the characters in this book with great curiosity and interest. These books are the first tools to introduce children to the aesthetic language of colors, lines, and words, make them feel the beauty of their mother tongue, and contribute to their thinking skills starting from early childhood. Children can discover their own potentials and reach new concepts and meanings utilizing books with superior qualities prepared by master writers (Pekdoğan, 2017; Samur, 2018; Sever, 2008). Considering that young children especially learn through modeling, it should be taken into consideration that the way of thinking and skills presented in the illustrated books written for them will also be adopted by children due to identifying with the characters in the book. For this reason, it is imperative to include critical thinking skills, one of the 21st-century skills, in books prepared for children in terms of supporting the children's thinking skills. In addition, this study aims to contribute to the literature by drawing attention to the need to support the acquisition of critical thinking skills with different means, starting from early childhood years.

This study aims to examine critical thinking skills in illustrated books for preschool education classes. As a result of the research, it was revealed which critical thinking skills were included more and which skills were less or not included in the illustrated storybooks read/told to children in preschool classrooms. Thus, it is aimed to raise awareness and provide information to educators working in the field, children's book publishers, authors and illustrators with the areas of critical thinking skills that need to be developed in children's books. Especially considering that many children meet with books at schools, it is of great importance that the books in the classrooms support thinking skills in terms of content. In this respect, this study is an original study that guides teachers and parents who choose books for children.

METHOD

The research design is based on the qualitative research method. Qualitative research is defined as a study in which qualitative data collection methods such as observation, interview and document analysis are used, and qualitative data collection processes are followed regarding the realistic and inclusive handling of events and perceptions in their natural course (Yıldırım & Şimşek, 2016). Since this study will analyze children's picture books, document analysis was used to collect data.

The study sample consisted of two hundred illustrated storybooks selected with the appropriate sampling method from the books in the book centers of preschool classes in the city center of Sinop in the fall term of 2019-2020. While determining the sample, the following criteria for the books were considered: to have illustrations, have a label or explanation indicating that they are suitable for the age of 4+, and be written by local authors. A checklist was created in the data collection process by considering whether critical thinking skills, analysis, interpretation, evaluation, explanation, inference and self-regulation skills were directly

or indirectly included. In addition, during the examinations, the sub-dimension of the thinking skills included in the story was added to the checklist, while sentences related to this inference were recorded.

In order to ensure validity and reliability in the study, the books were examined independently by two different experts, then comparisons were made in terms of consistency, and a third expert review was done for incompatible evaluations. The obtained data were analyzed by descriptive analysis method, and frequency and percentage values were used to interpret the data. Also, the analyses were supported by including direct quotations from the documents to reflect the data. Yıldırım and Şimşek (2016) emphasize that it is essential that validity include direct quotations in the analysis of data and to make explanations accordingly.

FINDINGS

In this section, the findings obtained from the research are presented. In the illustrated books evaluated within the scope of the study, the critical thinking skills classified by Facione (1990) which are making inferences, evaluation, self-regulation, explanation, analysis and interpretation were examined in terms of being included directly and indirectly and a general result was obtained. In addition, examples of each sub-dimension are tabulated with the quoted sentences.

Table 1. How critical thinking skills are included in illustrated children's books

Critical Thinking	Making inferences		Evaluation		Self-regulation		Explanation		Analysis		Interpretation	
	f	%	f	%	f	%	f	%	f	%	f	%
Directly	115	57.5	51	25.2	35	17.5	22	11	9	4.5	11	5.5
Indirectly	9	4.5	4	2	5	2.5	0	0	3	1.5	1	0.5
Total	124	62	55	27.2	40	20	22	11	12	6	12	6

Table 1 shows how critical thinking skills are included in the illustrated children's books examined. Table reveals that 62% of the books contain statements supporting the inference skill, followed by statements supporting the evaluation skill with 27.2%. Statements supporting self-regulation skills were used at a rate of 20%, expressions supporting explanation skills at 11%, and statements supporting analysis and interpretation skills at 6%. In numerical terms, the skill of "making inferences" is directly included in 115 books, indirectly in 9 books, "Evaluation" skill is directly included in 51 books, indirectly in 4 books, "Self-regulation" skill is directly included in 35 books and indirectly in 5 books. The skill of "explanation" is directly included in 22 books and indirectly in none of the books, and the skill of "interpretation" is directly included in 11 book, and the skill of "analysis" is directly included in 9 books and indirectly in 3 books. It has been observed that all these thinking skills are mostly given directly in the books. Although some thinking skills are given somewhat indirectly, it has been determined that the "Explanation" skill is not included indirectly. In addition, it is seen that 136 of 200 picture children's books evaluated in terms of critical thinking skills sub-dimensions include only 1 thinking skills. In addition, the critical thinking skills, 3 of them include 3 skills, while only 1 book contains statements that support 4 thinking skills. In addition, the critical thinking skills discussed within the scope of the research were listed according to the rate of their place in the books and tabulated with examples and quoted sentences for each sub-dimension.

Table 2. Critical Thinking Skills: Making Inferences

Book Name	A === C =====	Making info	erences	Fuencial Cantago
воок наше	Age Group	Directly	Indirectly	Example Sentence
B:1: Kırmızı Domatesin Yolculuğu / Zeynep DOYMUŞ- Yeliz Sazak B:45: Öğretmen Sınıfa Ne Getirdi/ Mavisel Yener	4-5	x		B.1: "Children, all these vegetables and fruits are here for your health." B.45: If collection meant collecting items of the same type, bluish crayons were the richest collection in the house.
B:146: Ayşe'nin Kedisi/ Gülçin Alpöge	4-5		X	B.146: They moved the bed frame away from the window so that there was no wind.

Table 2 shows the findings regarding inference skill which is one of the critical thinking skills. According to the findings, it was seen that 62% of the story books examined contained expressions supporting the inference skill. The rate of inference skill, which was seen to be included the most in the books, is given 57.5% directly and 4.5% indirectly. Looking at these numerical values, it can be seen that there is a significant difference between the direct and indirect inclusion of expressions that support this thinking skill. This situation also reveals that the authors of children's books adopt a didactic approach that is more prone to provide direct information with the concern of tutoring. In table 2, when the sample expression in B.1, which directly supports the child's inference skill is read to the child, the child may conclude that vegetables and fruits are beneficial for their health. In addition,

when the sample sentence is examined, it is seen that the heroes of the story question an event or situation and come to a conclusion. On the other hand, when the example statement in B.146, in which the inference skill is indirectly supported, is read with the child, the child may conclude that the bed should be placed away from the window, so that it is not affected by the wind.

Table 3. Critical Thinking Skill: Evaluation

Book Name	Age Group	Evaluation		Formula Contract
		Directly	Indirectly	 Example Sentence
B:5: Büyük Sınav/ Necat Akdemir B:19: Sincapla Fare/ Ak Karton NP	4-5	x		B. 5: "Who is comfortable in the world? Those who worked before then relax." B.19: "Squirrel, know that without fear and pain, we cannot appreciate the value of health and love."
B:59: Eşeğin Tatlı Dili/ Adnan Özveri	4-5		Х	B.59: "Speaking also has a rule, a method. Speaking should be within the bounds of courtesy and decency. "

It was determined that direct evaluation skill was included in the analyzed story books at a rate of 25.2%. In Table 3, when the sentence in B:5 that directly supports the evaluation skill is read with the child, the child can evaluate that more work is required to be successful. He may think he has to work on time to achieve his goals. The indirect evaluation skill was included at a rate of 2% in the analyzed storybooks. When the sample sentence in B.59, in which evaluation skill is indirectly included in the table, is read with the child, he/she can conclude that certain rules should be followed when speaking. He may think that he should not hurt the other person while speaking, and that he should be polite.

Table 4. Critical Thinking Skill: Self-Regulation

Book Name	Age Group	Self Regula	ition	Example Sentence
	Age Gloup	Directly	Indirectly	- Example Settlefice
B:3: Pikniğe Gidiyoruz/ Özlem Aytek B:36: Cansu'nun Uykusu/ Alev Önder	4-5	х		B.3: Ege has always fulfilled the responsibility he has taken since that day. B36: She had to rest so that she could colour beautifully and play games.
B:143: Küçük Balık Ne Yaptı/ Aziz Sivasoğlu	4-5		X	B.143: What is that? There was food right in front of him. It was like saying "eat me". The little fish was hesitant for a moment. "Yes or not?" he thought.

In Table 4, how self regulation skills are included in the illustrated children's books is shown with examples. It was determined that the self-regulation skill was included directly at 17.5% and indirectly at 2.5% in the analyzed storybooks. When the sample sentence in B.3 in the table is read with the child, the child may realize that it is important to fulfill his responsibilities. He can begin to take care of his responsibilities. In addition, when the sample sentence in B.143, in which the self-regulation skill is indirectly supported, is read with the child, the child may think that he / she should control himself in some cases. Some situations may be pleasing to the child, but the result may not be liked by the child. In this case, the child can realize that he has to control his emotions and behavior and reflect on it.

Table 5. Critical Thinking Skill: Explanation

Book Name	Age Group	Explanation	١	Francis Contact
		Directly	Indirectly	Example Sentence
B:165: Boyama Gecesi/ Ahmet Uysal B:48: Tek Ayak / Özlem Aytek	4-5	x		B.165: Honestly, it is very easy to prepare dough. I used two glasses of flour, a glass of salt, a glass of water, a spoonful of olive oil and a glass of glue. B.48: Their arrival means the arrival of spring, which is the most beautiful season of the year.

Table 5 includes findings in the illustrated children's books related to the explanation skill, which is one of the critical thinking skills. According to the data obtained, it was seen that 11% of the expressions supporting direct explanation skills were included in the story books, and indirect explanation skills were not included. When the sample sentence in B.165 in Table 5 is read with

the child, the child can explain which ingredients are required to prepare the dough. On the other hand, when the sample expression in B.48 is read to the child, the child can comprehend and explain the relational connection between cause and effect.

Table 6. Critical Thinking Skill: Analysis

Book Name	A. a. Canava	Analysis		Francia Contono
	Age Group	Directly	Indirectly	- Example Sentence
B:42: Ceren'in Mevsim Bahçesi/Oya Abacı B:81: Baba ve Tırtıl Arkadaşı/ Berna Yeşilova	4-5	X		B. 42: Ceren woke up one morning. She could not believe her eyes when she looked at the garden from her room window. The trees bloomed in one night. B.81: It did not look like what it is now. He was changing as he got older, learning to do something new every day. / "Without bees, there wouldn't be honey," said the little caterpillar.
B:70: Selim'in Maceraları/ Necdet Neydim	4-5		Х	B. 70: Well, you need to know cat language to understand this.

Table 6 shows examples in the illustrated children's books related to the skill of analysis, which is one of the critical thinking skills. It was determined that analysis skills were directly included in the analyzed storybooks at a rate of 4.5% and indirectly at a rate of 1.5%. When the sample sentence in B.42 in Table 6 is read with the child, the child can think about how the trees can bloom overnight and can make an inference by comparing and analyzing the existing information and the incident in the book. On the other hand, when the sample sentence in B.70, one of the indirect expressions that are rarely included in the books, is read with the child, it can be analyzed that the language they use is different from the language of the cats' agreement. He may think he needs to know spoken languages in order to understand others. Or it may be inferred that it is not necessary to only speak the language to get along.

Table 7. Critical Thinking Skill: Interpretation

Book Name	Age Group	Interpretation		_
DOOK Name		Directly	Indirectly	Example Sentence
B:26: Minik Panda Hayvanat Bahçesinde/ Ayşen OY B:96: Düşler Teknesi/ Necdet Neydim	4-5	X		B.26: When the little panda was returning home, it said: "I wish my friends lived freely in their natural habitat." B.96: I do not like to swim, but I love the sea very much. / Who are they? I know, penguins! How stylish they are when they wear tuxedos.
B:170: Rengarenk Bir Gün/ Deniz ŞAHİN	4-5		X	B.170: She understood what her friends were thinking from their looks.

Table 7 shows examples in the illustrated children's books related to the skill of interpretation, which is one of the critical thinking skills. It was determined that interpretation skills were included directly at a rate of 5.5% and indirectly at a rate of 0.5% in the analyzed storybooks. When the sample sentence in B.26 in Table 7 is read with the child, the child may notice that the animals may be happier in their natural environment even if they are cared for in the zoo. When the sample sentence in B.170 is read with the child, the child may realize that the people who spend more time together can understand what they mean by their gestures or their feelings after a while.

DISCUSSION

According to the findings obtained in the study, it was observed that the critical thinking skills in the illustrated children's books examined were given more directly in the story texts. It was seen that in the reviewed books, inference, evaluation and self-regulation skills were mainly used. According to the research findings, it was observed that analysis and interpretation skills, which are high-level skills, are used less in illustrated children's books. It was observed that the explanation skill, which was partially included in the analyzed children's books, was directly included, and it was not included indirectly at all. When the findings are evaluated, it is understood that critical thinking skills are limited in the illustrated children's books selected from preschool education classes and examined. This result coincides with the research findings of Ceran (2019). Ceran, in his research on illustrated children's books to support critical thinking skills, determined that the examined books were insufficient in terms of content that supports critical thinking skills. He also states that this inadequacy is an indicator of adults' attitudes (authors, publishers, parents and teachers) interested in illustrated children's books about thinking skills. The fact that the books examined in this study were selected from preschool classes and that these books were insufficient in supporting thinking skills reveals that

teachers did not show the necessary attention to this issue. This result is in parallel with Ceran's (2019) study result. Similarly, Çotuksöken (2011), in his study in which he discussed the current situation and problems in thinking education, stated that the awareness of adults on developing thinking skills, which is very important for children, is insufficient.

On the other hand, the results show that critical thinking skills are limited in the illustrated children's books examined, and this is generally done directly. These results reveal the existence of a didactic approach in illustrated children's books, which is an attitude that restricts critical thinking. It is imperative to bring children together with qualified books early. There are too many illustrated children's books. However, it is seen that some of these books are of high popularity with a purely commercial concern or have low content that has undertaken the task of teaching a subject directly and has no concern for improving thinking skills.

For this reason, teachers who work with children and are aware of children's literature should be even more careful in choosing books than parents. This care and selectivity will act as a driving force in preparing more qualified books for children. Books prepared for early childhood must have content supporting critical thinking skills rather than teaching children mere knowledge or behavior. In order to develop children's thinking skills at an early age, it is necessary to include qualified books in our schools, classrooms and children's libraries that support critical thinking skills, question children with the story and drawings, and allow them to think. Erdem (2013) emphasizes that books written and drawn for children, especially local authors, should support thinking skills. Tozduman Yaralı (2020) examined the course of critical thinking from infancy to adolescence from a developmentally integrated perspective in his research. It has revealed that developmental changes and experience practices in human life require critical thinking. Therefore, critical thinking is not an innate ability of the individual but a skill that becomes competent by being supported throughout his development, and it accompanies every moment of his life. Quality children's books also support thinking skills with different perspectives offered to the readers from infancy to adulthood. According to Rundell (2020), our need for children's books does not change no matter how old and wise we are.

Illustrated children's books appeal to individuals of all ages. Adults should start reading illustrated children's books before children. Therefore, authors should write as rich story texts as the adult reader demands from adult literature while including more critical thinking skills. Adults' attitudes are critical to helping children become critical thinkers. Illustrated children's books should also make adults surprised, make them think, and ask them questions. Especially if the adult reading the book to the child in the early childhood years is surprised, the child will also be surprised. If the adult thinks and questions, there will be opportunities for thinking and questioning for the child. Thus, the transition will be made from reading to the child to reading. A meaningful way adults can support critical thinking skills is by asking questions while reading a book. When starting to read a book with the child, questions can be asked by talking about the cover, author, illustrator and publisher. This conversation is the first step that will develop the child's bond with the book and activate their thinking skills. It has been determined that adults' use of abstract and inferential questions while reading interactive books with children is a predictor of language development, one of the prerequisite skills of critical thinking (Murphy et al., 2014). New questions from children will answer adults' questions. Adults who interact with the child should have the courage to say I do not know about things they do not know (Pappas, 2017).

Illustrators that depict images as necessary as the story in children's books should include illustrations that will develop children's critical thinking skills. Some pages of the books may intentionally contrast the story and the drawings. Thus, it can be ensured that the child is curious about the difference between the illustration and story and uses critical thinking skills. Some studies do not consider illustrations in children's books as necessary. According to Lipman, Sharp, and Oscanyan (1980), Philosophers for Children do not prefer illustrated children's books. They do not show illustrations that accompany the story because children's attention may shift to different aspects of the illustrations and that it may make it difficult for children to focus on the topic under discussion.

CONCLUSION AND RECOMMENDATIONS

In illustrated children's books, games, rhymes, riddles, activity suggestions, and questions related to the book can be used that will guide parents and teachers and support children's critical thinking skills. Activities associated with the books offer opportunities for children to engage in joint discussions and be exposed to multiple perspectives in interaction with their peers. These interactions also help children discuss the meaning and solve problems collaboratively. Flexible, interactive and child-centered play contexts encourage critical and analytical thinking by empowering children to create, maintain and achieve shared goals through communication and collaboration (Murphy et al., 2014).

Samur Öztürk and Çiftçi (2019), in their study investigating families' competencies to choose qualified children's literature, concluded that families are not sufficient to choose qualified children's books. In addition, it is noteworthy that the number of books in the houses is low or there are no books in the houses, and they are not read (Arıcı & Tüfekçi Akcan, 2019). Although the father's role is determinant in the education and development of the child, studies show that fathers buy and read more miniature books for their children (Children's Foundation Report, 2006; Tezel Şahin & Tutkun, 2016). Therefore, starting with the families first, training should be given to teachers, school administrators, teacher candidates, people who take care of the child, children's library staff, and awareness activities should be carried out on how to select qualified illustrated books. Finally, according to the report prepared by the Children's Foundation of Turkey in 2006, most books published in Turkey are aimed at children aged 8-10. However, the years when the seeds of the love of reading are planted, and critical thinking skills start to be acquired are the early childhood years. Therefore, illustrated children's books that appeal to early childhood and support critical thinking skills should be

more prepared, developed, and enriched. Adults who choose books for young children, especially preschool teachers, giving importance to the thinking skills content of the books instead of their popularity will contribute to making more qualified publications in this regard.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

Funding

The authors received no financial support for the research, authorship, and publication of this article.

Statements of publication ethics

We hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

Researchers' contribution rate

The study was conducted and reported with equal collaboration of the researchers.

Ethics Committee Approval Information

In this study document analysis was used as a data collection technique. Therefore, ethics committee approval was not required.

REFERENCES

- Akbıyık, C. ve Seferoğlu, S. S. (2006). Eleştirel düşünme eğilimleri ve akademik başarı. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi, 3*(32), 90-99.
- Aktan Acar, E. (Ed.). (2017). Erken çocukluk eğitimi mozaiği büyük düşünceler/fikirler, modeller ve yaklaşımlar. Ankara: Nobel Yayınları
- Arıcı, M. ve Tüfekci Akcan, A. (2019). Okul öncesi dönemde anne-çocuk birlikte hikâye kitabı okuma davranışlarının incelenmesi. *Yaşadıkça Eğitim,* 33(1), 100-120.
- Askar, P., Paykoç, F., Korkut, F., Oklun, S., Yaygın, B. ve Çakıroğlu, J. (2005). Yeni öğretim programlarını inceleme ve değerlendirme raporu. Ankara: Eğitim Reformu Girişimi.
- Ceran, C. (2019). Resimli çocuk kitaplarının eleştirel düşünme becerilerini desteklemesi yönünden incelenmesi (Yüksek Lisans Tezi). Hacettepe Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Cihaner, C. (2007). Eleştirel düşünme kazandırma yönüyle Bilgin Adalı'nın çocuk kitapları (Yüksek Lisans Tezi). Abant Üniversitesi Sosyal Bilimler Enstitüsü, Bolu.
- Çocuk Vakfı Raporu (2006). Türkiye'nin okuma alışkanlığı karnesi. İstanbul: Çocuk Vakfı.
- Çotuksöken, B. (2011). Düşünme eğitiminin güncel durumu ve sorunları. Özne Dergisi, 15, 146-154.
- Facione, P. A. (1990). Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction. Millbrae, CA: The California Academic Press.
- Fisher, A. (2007). Critical thinking: An introduction. London: Cambridge University Press (9'th Printing), 1-4.
- Gürkaynak, İ., Üstel, F. ve Gülgöz, S. (2008). *Eleştirel düşünme (Güncellenmiş Baskı*). İstanbul: Eğitim Reformu Girişimi Yayınları. http://www.egitimreformugirisimi.org/elestirel-dusunme/ adresinden 16.05.2020 tarihinde indirilmiştir.
- İnan, H. Z. (2012). Okul öncesi eğitimde çağdaş yaklaşımlar Reggio Emilia yaklaşımı ve proje yaklaşımı. Ankara: Anı Yayıncılık.
- Kasımoğlu, T. (2013). Öğretmen adaylarında eleştirel düşünme, mantıksal düşünme ve problem çözme becerilerinin çeşitli değişkenler açısından değerlendirilmesi. (Yayımlanmamış yüksek lisans tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Kestel, M. ve Şahin, M. (2018). Eğitimde eleştirel düşünme. Eğitim ve Öğretim Araştırmaları Dergisi, 7(3), 2146-9199.
- Kurnaz, A. (2019). Eleştirel düşünme öğretimi etkinlikleri: (Planlama uygulama ve değerlendirme). Eğitim Yayınevi: Konya.
- Lipman, M., Sharp, A. M. & Oscanyan, F. S. (1980). *Philosophy in the classroom*. Temple University Press. http://www.jstor.org/stable/j.ctt14bt5b8.8 adresinden 26 Haziran 2020 tarihinde alınmıştır.
- Murphy, P. K., Rowe, M. L., Ramani, G., & Silverman, R. (2014). Promoting critical-analytic thinking in children and adolescents at home and in school. Educational Psychology Review, 26(4), 565-573.
- Narin, N. ve Aybek, B. (2010). İlköğretim ikinci kademe sosyal bilgiler öğretmenlerinin eleştirel düşünme becerilerinin incelenmesi. *Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi*, 19 (1), 336-350.
- Oktay, A. (2004). Yaşamın sihirli yılları: Okul öncesi dönem. İstanbul: Epsilon Yayınları.
- Özdemir, M. S. (2005). Üniversite öğrencilerinin eleştirel düşünme becerilerinin çeşitli değişkenler açısından değerlendirilmesi. *Türk Eğitim Bilimleri Dergisi, 3*(3), 297-316.
- Öztürk Samur, A. (2018). Çocuk edebiyatı ve medya (Geliştirilmiş 4. Baskı). Ankara: Vize Yayıncılık.
- Öztürk Samur, A. ve Çifti, Y. (2019). Ailelerin nitelikli çocuk edebiyatı ürünlerini seçebilme yetkinlikleri. *Iğdır Üniversitesi Sosyal Bilimler Dergisi*, 18, 327-354.

- Pappas, S. (2017). You can teach your preschooler to research and think critically. http://parent.com addresinden 26 Haziran 2020 tarihinde alınmıştır.
- Pekdoğan, S. (2017). 3-6 yaş çocuğa sahip ebeveynlerin resimli çocuk kitabı seçimi ölçütlerinin incelenmesi. Ekev Akademi Dergisi, 21(71), 315-326.
- Rodd, J. (2012). Encouraging young children's critical and creative thinking skills: An approach in one english elementary school. *Childhood Education*, 75(6), 350-354.
- Rundell, K. (2020). Neden çocuk kitapları okumalıyız. İstanbul: Domingo
- Sağsöz, G. (2019). Resimli çocuk kitaplarında steam: "Yaratıcı ve eleştirel düşünme becerisi". Bilim, Teknoloji, Mühendislik, Matematik ve Sanat (J-STEAM) Eğitim Dergisi, 2(1), 1-20.
- Salmon, A. K. (2010). Tools to enhances young children's thinking. Young Children, 2(3) 26-32.
- Seferoğlu, S. S. ve Akbıyık, C. (2006). Eleştirel düşünme ve öğretimi. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 30, 193-200.
- Sever, S. (2008). Çocuk ve edebiyat. İzmir: Tudem
- Soydan, B., S., ve Dereli, M., H. (2014). Farklı yaklaşımları uygulayan okul öncesi öğretmenlerinin çocuklarda düşünme becerilerini geliştirmek için kullandıkları stratejilerin belirlenmesi. *Kastamonu Eğitim Dergisi, 22*(2), 475.
- Söylemez, Y. (2016). İçerik analizi: Eleştirel düşünme. Ekev Akademi Dergisi, 20(66), 671-696.
- Şahin, E.Y., Çelik, G. ve Çelik, B. (2012). Anne-babaların çocuk edebiyatı kavramına ilişkin görüşleri (Çanakkale örneği). *Çanakkale Araştırmaları Türk Yıllığı, 10*(12), 109-125.
- Şirin, S. (2019). Yetişin çocuklar. İstanbul: Doğan Kitap
- Tezel Şahin, F. ve Tutkun, C. (2016). Okul öncesi dönemde anne, baba, çocuk ve kitap. Kastamonu Eğitim Dergisi, 24(5), 2373-2390.
- Tozduman Yaralı, K. (2020). Gelişimsel açıdan eleştirel düşünme ve çocuklarda eleştirel düşünmenin desteklenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 48,* 454-479.
- Wallace, B., Cave, D. & Berry, A. (2009). Teaching problem-solving and thinking skills through science: Exciting cross-curricular challenges for foundation phase, key stage one,key stage two. London: David Fulton.
- Williams Hows, C. 2016. How to raise critical thinkers in a world that desperately needs them. http://www.parent.com addresinden 25 Haziran 2020 tarihinde alınmıştır.
- Yılar, Ö. ve Turan, L. (Ed.). (2007). Eğitim fakülteleri için çocuk edebiyatı. Ankara: PegemA Yayıncılık
- Yıldırım, A. ve Şimşek, H. (2013). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayınevi
- Yılmaz Özelçi, S. (2012). Eleştirel düşünme tutumunu etkileyen faktörler: Sınıf öğretmeni adayları üzerine bir çalışma (Doktora Tezi). Adnan Menderes Üniversitesi, Sosyal Bilimler Enstitüsü, Aydın
- Yoldaş, C. (2009). Çevre bilimi dersinin sınıf öğretmeni adaylarının eleştirel düşünme becerileri, erişileri ve tutumlarına etkisi (Doktora Tezi.) Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.