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Use of Direct Analogy Types in Religious Education

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Abstract

Logic is a tool used to gain the ability to question in individuals. Therefore, its use in education is essential. In particular, it is necessary to use logical methods in order to develop inquiry skills in religious education of individuals who want to canalize their lives according to a certain religion. Because it is very important for religious education students to have a critical point of view both for their own religious and lives and for them to live in peace with individuals with different religions and worldviews.

In this study, the use of direct analogy forms, which are the formal expansion of educational analogy, which is used extensively in science lessons, was questioned in religious education lessons. Direct analogy forms are a good teaching tool. Because it is used to solve the difficulties that students experience in learning. Through direct analogy forms, students learn to make connections between what they have learned so that they can evaluate all aspects of the subject. Since they can also analyze information, they can easily remember the topic later. In addition, thanks to the direct analogy forms, it is easier to establish a relationship between the newly learned topics and the well-learned and understood previous topics. At this point, it is important to use logic effectively in the religious education lesson, both for the students to understand abstract and difficult concepts more easily, and for the instructors to teach the lesson more easily.

Keywords: Logic, Education, Reasoning, Analogy, Direct Analogy.

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Introduction

People often form their beliefs on unsound foundations rather than valid and sound arguments. This situation, which is referred to as belief bias in the literature, is a process in which logical inferences are ignored and even the examination of their beliefs is strongly opposed. Logic aims

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to save individuals from such prejudice by showing the conditions under which a belief or judgment that individuals adopt can be true. In other words, there is no single solution to all kinds of problems that people face, besides, systematic, consistent, versatile, critical thinking, being open to other ideas, establishing and grounding thoughts on the right ground, strengthening the bond between language and thought, and thinking rules can be taught with logic.

The purpose of religious education is to put people's religious beliefs on solid ground. This is possible with true and valid arguments that are free from form and doubt. The most effective method that will enable us to believe by questioning and researching imitation away from faith is to make use of logic in religious education. In the past, logic teaching was prioritized in madrasahs with this awareness. Therefore, there is a need for logic in order to increase the quality of religious education today. In other words, the help of logic is essential to establish a system where students can think correctly about the arguments they encounter about their religion, understand what they read and convey what they understand.

Direct analogy forms are used extensively in science education and can be used in a way that is beneficial in religious education as well. Therefore, in this study, we would like to give some ideas on how to use direct analogy forms.

1. The Use of Analogy in Education

Analogy is one of the important techniques in teaching because it contributes to the concretization of intangible concepts for the formation of active teaching, to learning and keeping scientific concepts in mind for a long time, to the thinking abilities of individuals, their creativity, to the development of scientific thinking and problem-solving abilities. To provide meaningful learning, it is necessary to establish links between prior knowledge and newly learned knowledge, and the way to establish these links is to use the right analogy techniques.

Educational analogy, which is also used as an assimilation, is different from indirect analogy reasoning in logic. Because the purpose of reasoning in logic is to prove, while the purpose of educational analogy is rather explanation and knowledge transfer. In addition, the link established between propositions in logic is established between objects, events or facts in education. Therefore, we can call the analogy used in

education "direct analogy". In this respect, three methods of the relationship established between the source and the target in education can be mentioned. These; The analogy in the world is the analogy in use and the functional analogy.

1. Structural Relationship, (Appearance/ Shape Similarity)

In a structural analogy, the source and target have similar qualities, such as external features, shape, size. In other words, physical properties of the source such as external or internal shape, size or color are shared by the target. There are two main ways in which the source and target can share a similar relationship. They either have the same general physical appearance or a similar structure, both of which are referred to as a structural relationship. For example, likening the structure of the brain to a walnut. There is only a similarity in appearance in this analogy.

2. Functional Relationship (Functional Relationship/Relational Similarity)

Source and target only share similar attributes such as function, movement, and behavior. In other words, the analogy established according to the working principle does not include physical similarity. For example, analogy of the heart to a pump or analogy of lung breathing to gill respiration. While these two are similar in operation, they are completely different in appearance.

3. Structural and Functional Relationship (Exact Similarity)

Source and target share both structural and functional similarities. Here, we can give as an example the operation of the pupil, i.e. its functional feature, to resemble the diaphragm of the camera. Like the diaphragm, the pupil narrows in high light and widens in low light, thus regulating the amount of light entering the eye. At the same time, both are similar in appearance.

Analogy is an effective teaching tool if used well. Therefore, it has many advantages such as assisting students in transferring new knowledge to the existing knowledge structure and providing meaningful learning, embodying abstract concepts, motivating students and advancing conceptual change. In addition, there are also disadvantages such as the source replacing the target and causing students to develop misconceptions for various reasons. This cannot be achieved simply by adding generalizations, because applicable generalizations may require

different judgments that are inconsistent with one another. Experienced instructors often draw a comparison between their students and former students whom they observe academic success and failure.

2. Forms of Direct Analogy

When direct reasoning is mentioned, counter position and rotation come to mind in classical logic. However, when the subject is an analogy, which consists in thinking based on similarities, different forms of analogy emerge from the classification method of classical logic. These forms, which are used extensively in education, are inferences made by analogy, unlike designs. Because the analogy process does not consist of the combination of the four elements as in the indirect analogy form. Some researchers consider these forms, which we describe as direct analogies, as figurative analogies and only deal with metaphors defined as figurative analogy. But in our view, there are many kinds of direct analogy. In making a simile in direct analogy, sometimes the preposition of simile is not used as in metaphor, as in matvi syllogism (enthymeme), one goes to the conclusion from a single premise. However, although they are different in general, the types of direct analogy are also analogical. Therefore, these structures for making abstract and difficult to understand concrete and understandable subjects are very important in education. Forms of direct analogy include: metaphor, model, example, animation, simulation, sinology, isomorphism, imitation, mimicry, allegory, anthropomorphism and biomimicry.

3. Usage of Direct Analogy Forms in Religious Education

In religious education, students are generally taught abstract concepts. In other words, the fact that the common subjects of the Qur'an and religious education such as values and emotions like love, respect, happiness, honesty, generosity, tolerance and compassion, cannot be perceived by the senses, makes it difficult for students to understand them. The Qur'an trains the minds by establishing connections and revealing similarities in teaching these abstract concepts that appear in the fields of existence, value and emotion learning. As a matter of fact, the purpose of this study is to convey to students, in a more understandable and memorable way, religious concepts and practices which are abstract and difficult to understand. Therefore, in this section, the usability of direct analogy forms in religious education will be questioned.

3.1. Metaphor

The concept of metaphor, which originally comes from the Greek "metaphora" (Η μεταφορά), consists of the words "meta: beyond" and "pherein: to carry, to carry" and means "to take from one place to another". Metaphor literally means to understand one thing in terms of another. The metaphor, which is used as a figure of speech in Turkish, is interpreted as "showing something as something that it is not clearly, using it completely outside of its obvious meaning".

Metaphor is the use of a word with a meaning different from its basic meaning, instead of another, comparing one thought with another, or creating an implicit analogy. In other words, in the indirect analogy, the explicit connection between the source and the target is implicit in the metaphor. The expression "A is B" in metaphor is expressed as "A is similar to B" in indirect analogy. In this case, the indirect analogy explicitly compares the two fields, showing the identities of the parts. Apart from that, a metaphor; 1) it expresses the identification of two objects, concepts or phenomena with a common direction, 2) while establishing similarity, it is not possible to explain the comparative aspects of the objects. For example, the proposition "the curriculum is a guide" is a metaphor. The sentence "The curriculum is like a guide because it guides the teacher and the students" is an indirect analogy, 3) in the established similarity, there are contradictions in terms of high level of similarity in appearance and intersecting qualities, albeit low, 4) a metaphorical expression is often metaphorical or exaggerated rather than functional similarities. That's why it's often used in literary texts, 5) In metaphor, two known things are usually compared and the aim is not to reach a conclusion in this comparison process. Because metaphorical propositions do not have a purpose to provide truth conditions. In other words, metaphors are not formally base on propositions.

Metaphors constitute an important data source in determining the complex views of the students, determining the equivalents of the concepts in the mind and finally revealing the thoughts that affect the behaviors. For this reason, determining perceptions with the help of metaphors in educational sciences has started to be accepted as an important method in recent years and many studies have been carried out on this subject. In religious education, the use of metaphors is very common for students to better understand and make sense of the subject. For example, explaining the concepts of heaven and hell to students with

the metaphors of the rose garden and the fireplace can help students to understand these concepts better in their imagination.

3.2. Model

The word model, which is translated from the French word "modèle" into our language; 1. Painting, sculpture, example. 2. Object or person with a characteristic, 3. Form, 4. The magazine that collects clothing samples, 5. Type in automobile, etc., 6. Similar, 7. Someone worthy of being an example or thing, sample, paradigm, 8. Mannequin, 9. The first sample of the designed product, produced for the purpose of demonstration or trial, means "prototype".

The model is a process that progresses from the known to the unknown, from the abstract to the concrete, just like in other forms of analogy. In other words, the model makes what is invisible to the naked eye visible and understandable. Models are mechanisms created by using materials such as diagrams, tables, graphics, pictures, which are created to appeal to more than one sense organ, in order to facilitate the understanding of the event without going into the details. While explaining the importance of models, Gilbert stated that representations of the real thing can be described in various forms, aiding understanding and remembering, organizing ideas, helping to generate new ideas, and giving a part of the general situation but can also represent the general. A model is a simplified version of a complex object or process. In this respect, they help us understand and make predictions about how an object is formed, how it will behave, or how a process develops.

Models are not real and accepted models may change with new information. The model simply establishes a referenced connection with the world. For this reason, it must have an internal system of transformation rules that allows us to obtain results that can then be applied to a real-world system. For example, the relationship between Galileo's geometric models and the motions of objects on the earth's surface is naturally seen as an expression in which the vertical axis of a geometric diagram can be used to refer to or denote the time intervals of some real-world kinetic phenomenon.

Models and modeling, in fact, briefly summarize the stages that scientists follow to reveal their new products (law, theory, principle, equation, formula, etc.) that they produce as a result of their research, and the results of these stages. In addition to helping to understand complex

phenomena, models that also help form the basis for experimental results are to provide students with scientific thinking and working skills. Although the use of models in religious education is not very common, we can give examples of funeral lessons by modeling them here.

3.3. Sample

The sample is obtained in an analogy when the target has all the properties of the source. Therefore, an example is not a comparison between similar features of two concepts, it is an exemplification of the concept, an example of the concept and shows the features of the concept. For this reason, the examples often given in large numbers for a better understanding of the properties of a concept may show an indirect analogical reasoning feature. The example usually refers to a subspecies of a genus. For example, It is an example to show the dolphin species as an example of the marine mammal species and to explain their characteristics.

In the religion lesson, as in other lessons, examples are used a lot while teaching the lesson. Particularly, the sections in which the life of the Prophet is told are the sections where examples are used the most.

3.4. Cynology

Cynology is a relationship established through temporal or causal proximity, and what matters in cynology is not similarity but contiguity. So a thing or concept is defined by the name of something different with certain temporal or causal affinity. Examples include naming a region after the continent in which it is located, or the origin of a species or explaining the Arabian Peninsula as a holy land in religion classes.

3.5. Animation

Animation means "animation" in the dictionary of the Turkish language institution. In this sense, we can call animation an analogy achieved by animating something that resembles oneself with something else. Technically, it is the display of images one after the other. Animation is the sequential display of millions of slightly different images.

Animations, which are used to ensure that the subjects are learned and used effectively, are used to describe the events in science in a visual and interactive multidimensional way, unlike written texts. Many abstract concepts can be explained in a way that will attract students' attention by means of analogies made with animations. When the presented content is

coded both verbally and visually and reconstructed in the mind, meaningful learning takes place.

We can show the religious-themed cartoons, which are especially watched by primary school students, as an example here. It is observed that the students can easily understand the subjects that the teacher has difficulty in explaining thanks to these animations.

3.6. Simulation

The term simulation means to imitate (imitate) something, which comes from the root ‘similis’ meaning "similar". Simulation is derived from the word ‘simulare’ which has been used in Latin since the 14th century but gained technical meaning in the 20th century. Today, it is used in Western languages with its technical and non-technical meanings and its meaning is understood according to its place.

Simulation is a computer-based teaching model that provides a simplified simulation of a real situation, event or process. In other words, simulation is a time-dependent imitation of a process or system in the real world. The simulations are grouped into four categories. These; physical, iterative, procedural and state simulations.

Simulations; are complex, versatile and dynamic models. The rapid development of computer technology has led to the rapid development of simulation models and their use more frequently in teaching. Simulations added mobility to teaching and provided more models to be presented visually. It also facilitated the modeling and presentation of experimental activities that could not be carried to the classroom environment due to economic, security and time constraints. In some cases, reality in the simulation masks their similar structures, causing students to view them as more real rather than simulation. For this reason, teachers need to explain and guide students while using the simulation.

The simulation, which is used practically in education, lays the groundwork for indirect analogy. In the simulation-based analogical reasoning model, the real world continues to exist in an abstract way in the virtual world, and unlike education, it is passed from concrete to abstract. Especially after the pandemic, the increasing online life has made this even more visible. Now people are more interested in its abstract manifestations than concrete ones. Simulation technology of artificial intelligence is likewise more and more successful in imitating the real

world to the computer and robotics field. As an illustration, we can give an example of students in Gaziantep praying in the metaverse universe and circumambulating around the Kaaba simulation in the same way. The increase in such innovative models in the lessons both increases the interest of the students in the religion lesson and ensures that what they learn is more permanent.

3.7. Imitation

The word imitation, which is translated from the Arabic word "taḳlīd" into our language, is in Turkish language institution; "one. It means trying to emulate or imitate a certain example, 2. Having fun by repeating someone's behavior and speech, 3. Something made by imitation, imitation.

The first stage of analogy is the stage of imitation. In other words, imitation is the basis of our first inferences. About six to seven months after birth, babies begin to imitate what is going on around them. Then they learn new things by imitating the sucking reflex, which is an innate reflex, which they do by putting everything they find in their mouth and sucking. Therefore, the first imitation attempts are for learning new things. Babies imitate what they see by playing games. For them, the game is like a rehearsal for life. Moreover, babies learn to speak and walk by imitating.

In some studies, in the field of Religious Education, it is seen that imitation is described in various ways, such as "copying a pleasant behavior", "following the feelings, thoughts and behaviors of a member of the group he is in and taking it as a model for himself".

Imitation forms a large part of the religious lifestyle. For this reason, students can be informed about the principles of belief and moral issues through imitation activities. With these activities, the religious life, customs and traditions of our society will be conveyed, and the seeds of national unity and solidarity can be planted by aiming to develop the sense of brotherhood.

A theater play about the principles of belief in religious education can be staged if the children are young, without forgetting that the children are in the concrete operational stage. Therefore, the existence of God can be explained by turning them into concrete things created by God. A theater play written the based on the concept of God and angels

in the child's daily life contributes to the mental development of the child. It may be easier to stage worship topics compared to faith topics. Worship topics can be taught to children through games, whereas it is relatively difficult to find children's games to teach them about faith. For example, when considering an imitation activity related to fasting, activities describing the sahur and iftar moments witnessed by children on various occasions can be played by children. The subject of prayer can be studied by using prayer sentences containing concise expressions in various imitation activities. In addition, the atmosphere of the mosque can be enjoyed by children on various occasions, so that they can become acquainted with the practice of prayer.

The ability to imitate is the first stage of creativity. At this stage, we encounter different types of imitation. These are mimesis, allegory, anthropomorphism and biomimicry.

3.7.1. Mimesis

Mimesis is an imitative representation of nature and human behavior in art and literature. It means imitation in Greek. The word was used by Aristotle to argue that the role of art was to "imitate nature". In Plato's The Republic, as a technical idiom, it appears as a concept that has the meanings of "conjecture" and "deception". In fact, in Plato's works and philosophy, there is an opinion that the origin of everything is in the world of ideas and that all of them are good and bad imitations.

Mimesis, that is, works of art based on imitation, is an element that helps students internalize religious beliefs in religious education. Because religion emphasizes religious elements through art. In particular, the nature figures that we encounter in mosques and the human figures imitated by using religious motifs can be evaluated in this way. Having students watch these figures visually in the classroom can be useful to give information about religion by using the impressive power of art.

3.7.2. Allegory

The word allegory, which came into our language from the French word allégorie, is used in the Turkish Language Association as; 1. Visualizing and putting into words an image, an experience or a behavior to better understand it, 2. The situation where the elements in a work of art represent something from real life. Allegory is to show an abstract idea with a sculpture or painting. A blindfolded woman holding scales,

representing justice is usually a good example of allegory. So, allegory is features of direct analogy.

Although sculpture and painting are not welcomed in Islam, the use of religious paintings and sculptures in religious education paves the way for students to understand many things with a single image.

3.7.3. Anthropomorphism

Anthropomorphism is a combination of the Greek words ανθρωπος (anthrōpos) meaning human and μορφη (morphē/format) meaning shape or form. Anthropomorphism, which is described as formalism in the Turkish Language Institution, is the attribution of human qualities to another object. So, it is the likeness of animals, inanimate beings, forces of nature, gods, angels, demons, jinn and other living things in monotheist and polytheistic religions to humans.

3.7.4. Biomimicry

Biomimicry derives from the Latin words bios (life) and mimikos (imitation). Biomimicry means imitating nature to study developments in nature and then solve human problems. In other words, it can be considered as an innovative design inspired by nature.

In religious education, subjects such as the hard work of animals in their natural environment, their life in order and peace, not harming nature can be explained to the students with examples, and new studies can be made by making use of similarities.

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Conclusion

Facts and objects in the real world are perceived and classified as the culture in which we live directs us. We also perform thinking through the relationships we establish between the concepts formed by the classification process. While the thinking process takes place, there is a path from the known to the unknown in the mind. In other words, when the known becomes orderly in the mind, there is room for knowing the unknown. Logic makes the determination of correct thinking because it puts the mind in order while acquiring the unknown from the known. In other words, logic is needed in order for the thoughts to be placed on the right ground and grounded. Because people, who always tend to think in

one direction, need to be taught to think multi-dimensionally and critically. However, in this way, people become open to other ideas and realize that there is no single solution to the problems they encounter.

Education is a lifelong process that starts in the family and concentrates at school. Therefore, it is one of the most important dynamics of personal life. A person can improve himself in many different areas throughout his educational life. However, the logic continues to exist in every field as an educational methodology. Religious education is also a very important lesson for individuals who want to live their lives according to the orders and prohibitions of a certain religion, both in the family and in school life. In religious education, which mostly consists of abstract subjects, some studies have been made and continue to be done in order to increase the dominance of both students and teachers on the subjects. In this study, we tried to examine the types of direct analogies used in religious education.

The progress of the mind from concrete to abstract while thinking causes students to have difficulties in abstract and incomprehensible concepts encountered in religious education. In other words, it is easy to tell students about individual things that they see concretely around them. For example, when the table, desk, and human are mentioned, they easily understand the symbols that appear in our minds. However, when it comes to explaining concrete or universal things, students and teachers have difficulties. In this case, what is needed is to explain the abstract issues by making them concrete. The way to do this is to enable students to learn new things with the help of analogy with what they already know. There are two kinds of analogy. One is direct analogy and the other is indirect analogy. Although indirect analogy is a complete form of reasoning and is used in many sciences, to avoid confusion among students, the type of analogy used in education is direct analogy.

There are many types of direct analogy and it is used extensively as a methodological tool in education. In this study, we made some suggestions regarding the use of direct analogy types, which are used extensively in science education as well as in religious education. It is obvious that the subjects covered in religious education are generally abstract subjects and that the best technique that enables students to

understand the abstract in a concrete way is that of direct analogy. At this point, analogies established by experienced instructors, usually by making an analogy between the previous student and the former students whose academic success and failure were observed, can be used as a very effective learning and teaching tool at this point.

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References

Alessi, Stephen M, Stanley R Trollip. Multimedia for Learning: Methods and Development. Allyn & Bacon, 2001.

Alvargonzález, David. "Proposal of a Classification of Analogies". Informal Logic, 40/1, 2020, 109-137.

Arıcı, İsmail, and Eyüp Şimşek. "Din ve Sanat İlişkisine Yönelik Tutum Ölçeği: Bir Ölçek Geliştirme Çalışması." Proceedings Book.

Arici, Fadime. İlkokul Üçüncü Sınıf Fen Bilimleri Dersinde Analoji Kullanımının Öğrencilerin Kavramsal Anlam Oluşturma Becerisine Etkisinin Farklı Açılardan İncelenmesi, Basılmamış Yüksek Lisans Tezi, Çukurova Üniversitesi, Adana, 2018.

Aubusson, Peter J, Allan G Harrison, Stephen M Ritchie. "Metaphor and Analogy: Serious Thought in Science Education", Peter J Aubusson vd. (ed.), Metaphor and Analogy in Science Education, Springer Science & Business Media, 2006, 1-10.

Barker, Evelyn M. "Beardsley's Theory of Analogy", Informal Logic, 1989, C.11, S.3, ss.185-194.

Berber, Nilüfer Cerit. İş-Güç-Enerji Konusunun Öğretiminde Pedagojik- Analojik Modellerin Kavramsal Değişimin Gerçekleşmesine Etkisi: Konya İli Örneği, Basılmamış Doktora Tezi, Selçuk Üniversitesi, Konya, 2008.

Curtis, Ruth V, Charles M Reigeluth. "The Use of Analogies in Written Text", Instructional Science, 13/2, 1984, 99-117.

Çelik, Zeynep. Bir Akıl Yürütme Yöntemi Olarak Analojinin Değeri Ankara: Gece Kitaplığı, 2022.

Duit, Reinders. "On The Role of Analogies and Metaphors in Learning Science", Science Education, 75/6, 1991, 649-672.

Gamboa, Steven. "In Defense of Analogical Reasoning", Informal Logic, 28/3, 2008, 229-241.

Gilbert, Steven W. "An Evaluation of the Use of Analogy, Simile and Metaphor in Science Texts", Journal of Research in Science Teaching, 26/4, 1989, 315-327.

Gülçiçek, Çağlar, Bilal Güneş. "Fen Öğretiminde Kavramların Somutlaştırılması: Modelleme Stratejisi, Bilgisayar Simülasyonları ve Analojiler", Eğitim ve Bilim, 29, 2004.

Günbatar, Serap, Musa Sarı. "Elektrik ve Manyetizma Konularında Anlaşılması Zor Kavramlar için Model Geliştirilmesi", Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi, 25/1, 2005, 185-197.

Güneş, Bilal, Çağlar Gülçiçek, Necati Bağcı. "Eğitim Fakültelerindeki Fen ve Matematik Öğretim Elemanlarının Model ve Modelleme Hakkındaki Görüşlerinin İncelenmesi", Journal of Turkish Science Education, 1/1, 2004, 35-48.

Harrison, Allan G. "How do Teachers and Textbook Writers Model Scientific Ideas for Students?", Research in Science Education, 31/3, 200, 401-435.

Harrison, Allan G, David F Treagust. "A Typology of School Science Models", International Journal of Science Education, 22/9, 2000, 1011-1026.

Altunya, Hülya. "Gelenbevi'nin İsaguci Şerhi İsimli Eseri Üzerine 'Delâlet ve Tanım Konuları Bağlamında'Bir İnceleme." Eskiyeni, 41, 2020, 571-598.

Sağlam, İsmail. Okulöncesi Eğitimde Taklit Etkinlikleri Ve Din Eğitimi Açısından Değerlendirilmesi, Uludağ Üniversitesi İlâhiyat Fakültesi Dergisi, 9/9, 2000.

İzmirli, İsmail Hakkı. Fenn-i Menahic. İstanbul, 1329.

Kennedy, Sean. "Biomimicry/Biomimetics: General Principles and Practical Examples", The Science Creative Quarterly, C.8, 2004.

Köklü, Niğmet. Genel Fizik Laboratuvarında Başarı ve Akılda Kalıcılık Etkilerinin Artırılmasına Yönelik Animasyon, Simülasyon ve Analojik Modellerin Geliştirilmesi, Basılmamış Doktora Tezi, Selçuk Üniversitesi, Konya, 2015.

Maxwell J. Roberts and Elizabeth DA Sykes. "Belief Bias and Relational Reasoning" The Quarterly Journal of Experimental Psychology Section, 56/1, 2003.

Özcan, Funda Zeynep. Analoji Tekniğinin Öğrencilerin Akademik Başarılarına Etkisinin İncelenmesi ve Bu Sürece İlişkin Öğrenci Görüşlerinin Belirlenmesi (5. Sınıf Matematik Dersi Örneği), Basılmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Ankara, 2013.

Ritchie, L David. "Metaphor (Key Topics in Semantics and Pragmatics)", Cambridge University, 1/2, 2013, 1-2.

Thiele, Rodney B, David F Treagust. "An Interpretive Examination of High School Chemistry Teachers' Analogical Explanations", Journal of Research in Science Teaching, 31/3, 1994, 227-242.

Volstad, Nina Louise, Casper Boks. "On the use of Biomimicry as a Useful Tool for the Industrial Designer", Sustainable Development, 20/3, 2012, 189-199.

Yassir Aqeel Adnan. Ortaöğretim 12. Sınıf Biyoloji Ders Kitabında Kullanılan Analojiler Üzerine Bir Araştırma, Basılmamış Yüksek Lisans Tezi, Necmettin Erbakan Üniversitesi, Konya, 2015.