


# Current Debates in Educational Sciences

Editor
Assoc. Prof. Dr. Fethi Kayalar

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# Chapter 1

# The Investigating Of Syrian Children's Affective Characteristics Through Draw A Person Test[1]

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1 This study was presented at the IV International Eurasian Educational Research Congress in Denizli, 11-14 ,2017

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**Introduction**

Because of the war and the negative life conditions brought with it, a lot of families are obliged to migrate from the place they live because of several reasons such as anxiety for surviving. Most of the recent researches reveal that early war findings and exposure to mass violence cause emotional and mental disorder in a lot of children (Drury, J.,& Williams, R. 2012; Hadfield, Ostrowski & Ungar 2017; Yılmaz, 2014b; Uzun & Bütün, 2016; Çevik, 2016; Geçkil, Aldem and Kaleci,2017).In Sabuncuoğlu' s (2003) study, which was carried out with 1989 Bulgaria immigrants examined the psychological effect regarding mothers and their children and concluded that being obliged to migrate and refugee life in restricted life conditions for long years affected the individual within the developmental period in a negative way. Culbertson and Constant (2015)presented their study findings regarding four important issues in their extensive report prepared concerning the education of Syrian refugees in Lebanon, Turkey and Jordan (the countries that have the highest number of Syrian refugee population): access, administration, society and qualification. Concerning the health problems of the refugee children in Jordan the results of Al-Ammouri&Ayoub's study (2016) and Inkheili (2017) and Charles & Denman's (2013) study on negative results regarding informal education qualities out of the education system and were quite devastating.

Presently the attention of the entire world is on the ongoing war in Syria and the war weary individuals (Culbertson& Constant,2015). The war weary people in Syria migrated and started to live in neighboring countries like Turkey. It is clear that these individuals, who have a lot of struggles particularly in communication, have difficulty within the adaptation process. Within this transition process it can be said that the children, who have to migrate with their families, are the group which is affected most (Seydi, 2014; Yılmaz, 2014a).Understanding, what is needed to protect the future of these children from being affected by this chaos, their perceptions and inner world is quite important in terms of taking various precautions and accelerating the adaptation process of these children. In addition in our country it is known that a great number of studies are carried out regarding refugees either in public or non-governmental organizations (Yiğitbaşı, 2016). Since mostly it is hard to take detailed information through verbal communication in understanding what the children really feel and how much they are affected, it is necessary to take information from the children with alternative ways (Çobaner,2015).While the children are growing up they observe everything around and they try to imitate the behaviors of others and consider them as role models (Sarason and Sarason; 2012).Especially when the children, with whom communicating is really hard

and who have trouble in expressing and explaining themselves, are applied appropriate methods, important inferences can be obtained through the drawing of the children. Projective techniques that help children reflect some of their emotions that they avoid expressing unconsciously can be used as alternative and special communication tool (Topçu,1997; Malchiodi, 2005; Sağlam, 2011; Stoltz&Coltharp 1961; İnan, Karagözoğlu and Şimşek, 2014; Çakmak and Darıca, 2012).

The drawings of the children are often used in evaluating their mental developments, emotional states, the emotional, physical and sexual abuse they are exposed to and their academic success (Cherney et al. 2006; Skybo, Ryan-Wenger and Su, 2007; ChantlerPelco and Mertin, 1993). In their research Laak, Goede, Aleva, and Van Rijswijk's (2005) searched whether draw a person test can become an indicator of cognitive and socioemotional adaptations of school children of 115 kids who attend normal and private schools at the age of 7-9. Results indicate that draw a person test is an adequate test in terms of evaluating the cognitive development stages of children (Binici, 2014). In addition in our country it is known that a lot of studies are performed regarding either public or non-governmental organizations concerning refugees (Yiğitbaşı,2016).Since it is difficult to take information through verbal communication in understanding what the children really feel and how much they are affected, it is necessary to take information from the children with alternative ways (Çobaner,2015).

**Purpose**

When the literature is examined it is seen that in Turkey, facing "the Syrian Subjected to Temporary Protecting Regime" fact since 2012, studies have beencarried intensely concerning this issue. However any study regarding the affective characteristics of Syrian children was not encountered. Understanding the inner world of these children will direct the studies of adaptation, intervention and rehabilitation for them. Within this context it is thought that the study will contribute to the literature and application studies. For this purpose within the study the affective characteristics of the Syrian Children Subjected to Temporary Protecting Regime were examined through "Draw a Person Test".

## Method

### Research Design and Sample

| | | | |
|---|---|---|---|
| Sex | Female | 20 | %64.52 |
| | Male | 11 | %35.48 |
| Age | 9 | 4 | %12.90 |
| | 10 | 7 | %22.58 |
| | 11 | 14 | %45.16 |
| | 12 | 4 | %12.90 |
| | 13 | 2 | %6.45 |
| Number of Sibling | 2-3 siblings | 15 | %48.39 |
| | 4 and more | 16 | %51.61 |
| Sibling Order | First | 5 | %16.13 |
| | Medium | 18 | %58.06 |
| | Last | 8 | %25.81 |
| People S/he lives with | Parents- Siblings | 29 | %93.55 |
| | Only Mother | 1 | %3.22 |
| | Only Father | 0 | - |
| | Other | 1 | %3.22 |
| Who Takes Care | Mother | 24 | %77.42 |
| | Father | 0 | - |
| | Parents | 6 | %19.35 |
| | Other (caretaker,close relative) | 1 | %3.22 |
| The State of Going to a School of MEB | Yes | 1 | %3.22 |
| | No | 30 | %96.78 |
| The Place Where S/he Feels Happy | Course | 12 | %38.70 |
| | Home | 9 | %29.05 |
| | Park | 3 | %9.68 |
| | Syria | 2 | %6.45 |
| | Unknown | 2 | %6.45 |
| | Other | 3 | %9.68 |
| Whom S/he Shares a Problem | Mother | 14 | %45.16 |
| | Father | 5 | %16.13 |
| | Sibling | 4 | %12.90 |
| | Friend | 4 | %12.90 |
| | Nobody | 4 | %12.90 |

The analysis of the data was made by general scanning model, which is a research approach that aims to describe a situation exists now or happened in the past with its current state (Karasar, 2005). The children at the age of 9-13 who migrated from Syria were included in the research. The sample of the research was constituted basing on the volunteer participation of 31 children, who live with their families and acquaintances, and their families.

Table-1 the distributions of the replies given to the questions concerning sex, age, sibling number, sibling order, the people living together, care taker, the state of going to school, the place where s/he feels happy, whom s/he shares when there is a problem

Table-1 when the distributions of the replies given to the questions concerning sex, age, sibling number, sibling order, the people living together, care taker, the state of going to school, the place where s/he feels happy, whom s/he shares when there is a problem, are examined, it is determined that 64.52% of the participators were female and 35.48% of them were male; according to the age variable there is a distribution between the age of 9-13 and the intense age was 11 with 45.16% rate; 48.39% of the children have 2-3 siblings; 51.61% of them have 4 and more siblings; 93.55% live with parents and siblings; 3.22% of them live only with the mother; 3.22% of them live with a close relative; 77.42% of them were looked after by the mother; 19.35% of them were looked after by parents; 3.22% of them were looked after by other individuals; the places they feel happy were cultural center (38.70%), home (29.05%), park (9.68%), Syria (6.45%), unknown (6.45%) and other (9.68%);the people they share when there is a problem were, mother (45.16%), father (16.13%), sibling (12.90%), friend (12.90%) and nobody (12.90%).

When Table 1, which includes demographic information, is examined it is seen that participators' number of siblings were 4 and more, they live with the parents, parents take care of them, and when there is a problem they share it with their parents. These findings indicate that the children have social support system and they have not corrupted their pattern of living with the family. Polat (2007) determined that among the immigrant families those who have social support systems have got higher psychological adaptation states compared to those who do not have social support system. Sabuncuoğlu (2003) determined that the psychological states of the mothers and the children, who were obliged to migrate, was not corrupted depending on living with the family.

When the consistency between the picture that the participators drew in draw a person test and the questions addressed to them regarding the demographic information is examined according to the replies given, consistency was seen among their age, number of sibling and the people they live with. Considering these results the children were generally evaluated as they reflected their characteristics on pictures. This finding can be interpreted as a result of the participators being in the reality period. The children's siblingstates and the people they live together showing parallelism can be considered as a support for this thought (Nas, 2017).29% of the participators stated that the person within the picture they drew concerning consistency were older than themselves. Machover (1958) states that the child drawing an adult can point the existence of a conflict or an obsession between the child and the parents (Akt. Altınköprü, 2002).

**Research Instrument and Procedure**

Within the research in order to determine demographic information that belongs to the Syrian children, the reactions of the children for happy or unhappy events and some of their thoughts regarding the state of migrating, Child Information Form was used. In order to understand the emotions of the children and the situation they are in Machover Draw a Person Test was used.

**Machover Draw a Person Test**

This test, which was created by Karen Machover (1949), and inspired by the symbolism of various parts of human body, is a study based on psychoanalytic basis that gives wide range of results. It is a projective test that can be applied one by one or in group performed with graphic expression. Anybody that can draw a meaningful picture can use it and there is no age limit. The test is used in order to reveal the relationships and conflicts of the child with the family. The person who will be carried out the test is given a paper, a pencil and a rubber. Giving a short instruction of the picture to be drawn: "Draw a person!" the child is allowed to draw a picture that belongs to the same or opposite sex. The choice of the child sometimes is the clue of some sort of important findings (Altınköprü 2003).

**Gathering of the Data and the Analysis of the Data**

Within this research in the pre-studies performed it is observed that the children do not speak Turkish at an adequate level; in order to provide a healthy communication interpretation of the undergraduate students was consulted. These students, who speak both languages at a good level, attend Uludağ University Faculty of Theology and have pedagogic formation education. After completing the gathering of the data with respect to the evaluation stages of Draw a Person Test each evaluation criterion were scored separately. The pictures that the children drew were examined on by one and the scores obtained were defined.

Within the research since the demographic characteristics of the children and the parents and the results that belong to the information regarding the state of marriage of the spouses and the results that belong to the data obtained from the test were discontinuous data, the frequency was analyzed using descriptive statistics such as percentages (Büyüköztürk 2008).

**Findings and Discussion**

When the consistency between the questions asked regarding the demographic information and the picture they drew in draw a person test according to the answers of the children, who participated in the research, it is determined that 38.70% ofthe consistency between their ages was consistent with the person in the picture and their own, 29.05% of them were older than their age and 32.25% of them was younger

than their age. Also it is determined that the consistency between the sibling number of the picture they drew in the draw a person test and their sibling number was consistent with 80.65% and 19.35% of them was not consistent, the consistency between the people they live with and the people the person they drew live with was 80.65% and 19.35% of them was not consistent.

Considering these results it is seen that the children generally reflect their characteristics (sibling state, sex, and the people they live with) on the picture. The children drawing a person, who has the same sex, points out the sex the child identifies him or herself. This finding can be interpreted as a result of the participators being in the reality period (Nas 2017).It was found that 12.9% of the participators drew a person of the opposite sex and this finding points out that there might be an obsession for the mother or the father or sexual attention, the wish for resembling the opposite sex. In Dülger's (2008) study, which is called the reflection of family and individual characteristics of the students at the age of 6-11 on pictures, similar results were reached.

Table-2 the consistency between the physical characteristics of their own and the person they drew in the picture

| | | N | % |
|---|---|---|---|
| Which is the worst part of your body? | Hair | 5 | %16.13 |
| | Eye | 2 | %6.45 |
| | Hands | - | - |
| | Other | 11 | %35.48 |
| | None | 13 | %41.94 |
| Which one is the ugliest part of the person in the picture? | Hair | 5 | %16.13 |
| | Eye | 1 | %3.22 |
| | Hands | 8 | %25.81 |
| | Other | 13 | %41.94 |
| | None | 4 | %12.90 |
| Which is the best part of your body? | Hair | 13 | %41.94 |
| | Eye | 14 | %45.16 |
| | Hands | - | - |
| | Other | 4 | %12.90 |
| | None | - | - |
| Which one is the most beautiful part of the person in the picture? | Hair | 7 | %22.58 |
| | Eye | 14 | %45.16 |
| | Hands | - | - |
| | Other | 10 | %32.26 |
| | None | - | - |

Table 2 when the consistency between the questions regarding the information asked them and the picture drawn by the children participated in draw a person test, according to their replies while the children expressed that the worst part of their body was hair with 16.13%, the worst part of the person's body drawn in the picture was hair with 16.13% too. It is determined that the best part of the body question was answered as hair with 41.94% by the children who participated in the research, 45.16% of them expressed that it was their eyes, 22.58% of them expressed that the best part of the person they drew was hair and eyes with 45.16%. The children reflecting their own positive characteristics on the characteristics of the person they drew in the picture can be interpreted as an indicator of healthiness.

Table-3 the consistency between the personal characteristics of their own and the person they drew in the picture

| | Which is your worst habit? | | What is the worst characteristic of the person in the picture? | | Which is your best habit? | | What is the best characteristic of the person in the picture? | |
|---|---|---|---|---|---|---|---|---|
| | n | % | N | % | N | % | n | % |
| Help | - | - | - | - | 6 | %19.35 | 7 | %22.58 |
| Being hardworking, smart | - | - | - | - | 6 | %19.35 | 6 | %19.35 |
| Praying | - | - | - | - | 2 | %6.45 | 3 | %9.68 |
| Generosity | - | - | 1 | %3.22 | 3 | %9.68 | - | - |
| Compassionate | - | - | - | - | 7 | %22.58 | 5 | %16.13 |
| Honesty | - | - | - | - | 3 | %9.68 | - | - |
| Thinking to have a skill | - | - | 1 | %3.22 | 4 | %12.90 | 1 | %3.22 |
| Upsetting mother | 3 | %9.68 | - | - | - | - | - | - |
| Being angry | 14 | %45.16 | 10 | %32.26 | - | - | - | - |
| Telling a lie | - | | 2 | %6.45 | - | - | - | - |
| Being dirty and untidy | - | - | 2 | %6.45 | - | - | - | - |
| Other | 7 | %22.58 | 9 | %29.03 | - | - | 7 | %22.58 |
| None | 7 | %22.58 | 6 | %19.35 | - | - | 2 | %6.45 |

Table-3 when the consistency between the personal characteristics of the children who participated in the research, and the person they drew in the picture is examined, according to their replies it is determined that in the question of 'your worst habit' they mostly expressed being angry with 45.16%, and the worst

habit of the person they drew in the picture of draw a person test was being angry. Also it is determined that in the question 'your best habit' they stated being compassionate with 22.58%, and the best characteristic of the person they drew was helping, being hardworking smart and other with 19.35%.

Being under the effect of the culture the children came from it is seen that they identify themselves attached to the traditional values. On the other hand it is noticed that the participators mostly state being angry as the worst characteristic of both themselves and of the person they drew in the pictures. Considering the fact that the identities of the children may cause an implicit or an explicit struggle in a different culture is a situation encountered frequently, the answers of being angry of the children can be evaluated as a result of this struggle (Şeker and Aslan, 2014).

Table-4 the distribution of the replies given to the questions regarding self perception of the person the children, who participated in the research, drew

| Questions concerning self perception through draw a person test | | N | % |
|---|---|---|---|
| Is s/he angry? | Yes | 10 | %32.26 |
| | No | 21 | %67.74 |
| Is s/he afraid of some things? | Yes | 14 | %45.16 |
| | No | 17 | %54.84 |
| Is s/he cheerful? | Yes | 27 | %87.1- |
| | No | 2 | %6.45 |
| | Do not know | 2 | %6.45 |
| What is s/he angry at? | Physical or emotional disturbance | 8 | %25.81 |
| | When the negative behaviours of his family and siblings emerge toward him or her | 8 | %25.81 |
| | No idea | 4 | %12.90 |
| | Other (writing, smell of cigarette,loneliness, give up prayer) | 4 | %12.90 |
| | During an intervention to personal space | 3 | %9.68 |
| | When physiological needs are prevented | 2 | %6.45 |
| | During a situation that prevents education | 2 | %6.45 |

Table 4 when the replies given to the questions regarding self perception of the person the children, who participated in the research, drew in draw a person test are examined it was found that in67.74%of them the person in the picture was angry, 32.26% of them was not angry; 54.84% of them were afraid of some things; 45.16% was not angry; 87.10% of them was cheerful, 6.45% was not cheerful, 6.54% did not know; in the question of anger state 25.81% of them stated physical and emotional devastation, 25.81% of them stated when negative attitudes of his or her parents and siblings emerge, 9.68% of them stated when his her personal space is interfered, 6.45% stated when his or her physiological needs are restrained, 6.45% stated when his or her education is restrained, 12.90% of them stated other, and 12.90% of them stated they had no idea. According to Önen, Güneş, Türeme and Ağaç (2014) it was found that anxiety symptoms were common in refugees and some psychological reflections caused by the war affect the anxiety level of the refugees. However when the table is examined the replies given to the questions such as anger and fear do not support these findings.

When the replies given to the questions regarding self perception of others concerning the person the children, who participated in the research, drew in draw a person test are examined, it is determined that for the question of what do other people say about the person drawn in the picture 54.84% of them stated positive, 25.81% of them stated negative, 6.45% of them were indecisive, 12.90% of them stated that nothing was said; and for the question of does s/he think that everybody is looking at him or her 51.61% of them stated that s/he thinks they look, and 48.39% of them stated they did not look.

Table 5 the distribution of the replies given to the questions concerning the relationship dimension of the person the children included in the research drew

| Questions regarding relationship dimension through draw a person test | | n | % |
|---|---|---|---|
| Who is the person s/he is mostly keen on? | Mother | 15 | %48.39 |
| | Father | 1 | %3.22 |
| | Parents | 3 | %9.68 |
| | Sibling | 5 | %16.13 |
| | Friend | 2 | %6.45 |
| | Other | 3 | %9.68 |
| | None | 2 | %6.45 |

| | | | |
|---|---|---|---|
| Does s/he live alone or with people? | With people | 28 | %90.32 |
| | Alone | 3 | %9.68 |
| Does s/he trust people? | Yes | 24 | %77.42 |
| | No | 7 | %22.58 |
| Is s/he shy, afraid of people? | Yes | 6 | %19.35 |
| | No | 25 | %8-.65 |
| How is parental relationship? | Good | 27 | %87.10 |
| | Bad | 2 | %6.45 |
| | Other | 2 | %6.45 |

Table-5 when the replies given to the questions regarding self perception of others concerning the person the children, who participated in the research, drew in draw a person test are examined, for the question of what do other people say about the person in the picture it is determined that 54.84% of them were positive, 25.81% werenegative, 6.45% of them were indecisive, 12.90% stated they did not say anything, for the question does s/he think that everybody is looking at him/her 51.61% of them stated that s/he thinks they look, and 48.39% of them stated they did not look.

According to the results of the study of Ceylan et al. (2014) it is found that after migration the families and the children possess low level of self respect and high level of depression. The contradiction of this finding and the findings obtained from the study can be explained with the study group possessing good social support systems (they live with their families). On the other hand it can be interpreted that the attention on the views of the children regarding other people observing them is perceived positively by the children. 54.84% of the children drew the picture in the middle of the paper, 25.81% of them on the top of the paper, 6.45% of them on the left side of the paper, 6.45% of them on the right side of the paper, 6.45% of them on the bottom of the paper; 80.65% of them drew their own sex, 12.90% drew the opposite sex, and the pictures of 6.45% of them were not comprehended; the person drawn in the pictures was consistent with their own age in 38.70% of them, the person drawn was older than them in 29.05%, in 32.25% the person was younger than them.

Drawing the picture on top of the paper can mean that the individual unjustifiably has self confidence and in an unjustifiable optimism. It also has a meaning of overreacting and over active fantasy world; since the left side of the paper is evaluated as the self part it may indicate an introvert characteristic. The child's preference of drawing the opposite sex may mean sexual reverse, complex

sexual identification and a strong dependence for the parent of opposite sex or somebody from the opposite sex (Güneri, 2016).

The child drawing a picture of an adult, if it describes parents, reveals a conflict or an obsession between the child and the parents. Althoughthere is not a finding regarding the picture stands for the parents the child's drawing an adult is not an expected situation (Akköprü,2002)

Table-6 the distributions of the replies given to the questions regarding the picture of the person drawn by the children participated in the research what does s/he do, who is the person s/he is mostly attached, what is his/her job, state of going to school, positive characteristics, his/her health, state of being angry, state of fear existence, state of trusting people, state of resembling the person in the picture, state of being cheerful, and the relationship of the mother and the father

| The evaluation dimensions of the questions that belong to the draw a person test | N | % |
|---|---|---|
| What does the person in the picture do? | | |
| Game Activities | 7 | %22.58 |
| Art Activities | 3 | %9.68 |
| Shopping | 2 | %6.45 |
| Do not know | 11 | %35.48 |
| Nothing | 2 | %6.45 |
| Other (waving Turkish flag, shouting,cleaning the table) | 6 | %19.35 |
| Who is the person s/he is mostly keen on? | | |
| Mother | 15 | %48.39 |
| Father | 1 | %3.22 |
| Parents | 3 | %9.68 |
| Sibling | 5 | %16.13 |
| Friend | 2 | %6.45 |
| Other | 3 | %9.68 |
| None | 2 | %6.45 |
| What is his/her job? | | |
| Student | 9 | %29.03 |
| Lawyer | 2 | %6.45 |
| Teacher | 2 | %6.45 |
| Shopkeeper | 2 | %6.45 |
| Other (waiter, architecture, engineer, artist, doctor) | 5 | %16.13 |
| No job | 8 | %%25.81 |
| Do not know | 3 | %9.68 |

| | | |
|---|---|---|
| Does s/he go to school? | | |
| Yes | 22 | %70.97 |
| No | 9 | %29..03 |
| Does the person in the picture look positive? | | |
| Yes | 26 | %83.87 |
| No | 5 | %16.13 |
| The health of the person in the picture | | |
| Yes | 28 | %90.32 |
| No | 3 | %9.68 |
| Is s/he angry? | | |
| Yes | 10 | %32.26 |
| No | 21 | %67.74 |
| Is s/he afraid of some things? | | |
| Yes | 14 | %45.16 |
| No | 17 | %54.84 |
| Does s/he trust people? | | |
| Yes | 24 | %77.42 |
| No | 7 | %22.58 |
| Is s/he shy, afraid of people? | | |
| Yes | 6 | %19.35 |
| No | 25 | %80.65 |
| Do you want to resemble the person in the picture? | | |
| Yes | 15 | %48.39 |
| No | 16 | %51.61 |
| Is s/he cheerful? | | |
| Yes | 27 | %87.10 |
| No | 2 | %6.45 |
| Do not know | 2 | %6.45 |
| How is parental relationship? | | |
| Good | 27 | %87.10 |
| Bad | 2 | %6.45 |
| Other (Father died, afraid of father) | 2 | %6.45 |

In Table 6 it is determined that the question of what does the person in the picture do was answered as game activities with 22.58%, the person s/he is mostly attached was answered as mother with 48.39%, the question of what is his/her job was answered as student with 29.03%, the question of do you go to school was answered as yes with 70.97%. 83.87% of the children stated that the appearance of the person in the picture was positive, 16.13% of them stated it was negative.

30.32% stated that the person in the picture was healthy, 32.26% of them stated s/he was angry, 45.16% of them stated s/he is afraid of some things, 77.42% of them stated s/he trusts people, 19.35% of them stated s/he refrains from people, 87.10% of them stated s/he was cheerful, 87.10% of them stated s/he had good relationship with the parents. 48.39% of the participators stated that they wanted to resemble the person in the picture.

Within the answers given by the participators regarding the person in the picture generally they reflected their characteristics in real life and it is possible to explain it with the fact that the age range they are in concrete operational stage and realistic period (Nas,2017).This can be described as a kind of protective shield for the participators in terms of coping with difficulties brought by being an immigrant.

Within the pictures drawn by the children it is determined that 87.10% of them drew the picture fully, 9.68% of them drew the incomplete legs, 3.22% of them drew incomplete arms; 58.06% of them drew the torso angled, 41.94% of them drew it with normal round lines, in the pictures of 61.30% of them there was no move, 38.70% of them drew pictures including moves and all children drew the picture from the front side.

The torso drawn with round lines, can point soft, humane, womanlike characteristics and angled lines mean the existence of violent impulse. The rarely seen movements in the pictures of children may indicate the feeling of insecurity or depending on somebody else. Drawing the picture from the front side can be accepted as the ability for establishing social relationships directly, openheartedness and symbol for honesty (Güneri, 2016; Akköprü,2002).

It is determined that in 48.39% of the pictures drawn the head was bigger than normal size, in 45.16% of them it was normal size, in 6.45% of them it was smaller than normal size;in 51.61% of them eyes were distinct, in 38.70% of them eyes were like spots or empty, in 9.68% of them eyes were described in different shapes; in 45.16% of them the ears were proportional, in 35.48% of them they were significantly forgotten, in 9.68% of them they were drawn smaller than normal size, in 9.68% of them they were not comprehended because of head-scarf, in 41.94% of them the mouth was drawn proportionally, in 22.58% of them it was exaggerated, in 22.58% of them it was shut and firm, in 12.90% of them open mouth was drawn as if they were talking; in 45.16% of them the nose was proportional, in 38.70% it was small, in 12.90% of them it was pointed, and 3.22% of them did not draw a nose; 67.74% of them drew proportional neck, 19.35% of them did not draw a neck, 6.45% drew exaggerated nose, 6.45% of them was not comprehended because of head-scarf; 83.87% of them drew the chin normally, 16.13% of them drew it angled.

A great majority of the children drew the head bigger than normal size and this situation can be interpreted as they have strong intellectual efforts (Akköprü, 2002; Güneri,2016).It is determined that the children went to school in the countries they left however since migration laws are not clear in our country yet they have expressions regarding they miss school life.

Other findings of the studyin the pictures of the participator children were human pupils were very distinct, the eyes were open and the absence of pupils of the eyes. These findings may point out inadequacy of the connections established with the society, other people and the entire environment, indifference against society, introversion and over observation. The eyes being big and emphasized may be hostile and threatening individuals; attractive or the individuals that want to be attractive (Güneri,2016).Really the hesitation of these children, who have been in our country mostly for one year, their curiosity and being observer, must be seen natural in the process of getting used to a new country. It is seen that these findings correspond to the studies of Jothimani and Kumar (2016). Significantly forgotten ears that were left undrawn instead of being seen may indicate the difficulty of the test subject encountered in social contacts the will for establishing social relationships. 35% of the participators not drawing the ears in a way support this finding.

In 45.16% of the pictures the hands were proportional, in 25.81% of them they were small and in 6.45% of them they were big and in 22.58% of them no hands were drawn; in 61.30% of them the feet were proportional, in 12.90% of them they were small and in 25.81% of them no feet were drawn; in 45.16% of them the fingers were missing, in 41.94% of them they were proportional and in 12.90% of them they were drawn in a different way.

It is seen that while a great majority of the participators drew normal/proportional hands, in another part no hands were drawn. This finding is often noticed in the children whose social relationships are inadequate (Akköprü, 2002).On the other hand it is found that the number of the children who drew big hands was a considerable amount. It is determined that this finding is often seen in children who tend to make fine adjustments in social relationships because of making an effort for gaining power, feelings of impulsivity and inadequacy (Güneri, 2016).

The existence of small and not drawn feet in the pictures may be interpreted as an indicator of being restricted, a probable dependence on others and strict control on sexual issues (Akköprü,2002).

Table-7 the state of clothes and buttons of the person the children participated in the research drew in the picture distributions with the details

| Draw a person test evaluation dimensions | | N | % |
|---|---|---|---|
| The state of clothes | No clothes | 6 | %19.35 |
| | Detailed clothes | 19 | %61.30 |
| | Drawn carelessly | 6 | %19.35 |
| The state of buttons | From top to the bottom | 5 | %16.13 |
| | No buttons | 26 | %83.87 |
| The state of details | House, stuff around the picture | 20 | %64.51 |
| | No details | 11 | %35.48 |

In Table 7 in the clothes of the people drawn in the pictures 61.30% of them were detailed, 19.35% of them were drawn carelessly, 19.35% of them did not draw at all; in the 83.87% of the clothes there were no buttons, in 16.13% of them there were buttons; 64.51% of the pictures drawn some details were drawn other than the person character,and in 35.48% of them no details existed other than the person.

When the pictures in which over dressing and detailed drawn clothing were seen are evaluated it can be concluded that the participators tend to be wannabes and then outgoing (Akköprü,2002).

**Conclusion and Recommendations**

Within the drawings of the Syrian children subjected to the Temporary Protection Regime generally healthiness was determined and it was explained with they had social support system. As a result of the study of Şener et al. (1997) made using projective measuring tools, it is found that the trauma they experienced did not cause anxiety disorder in most of the test subjects yet it stayed at the level of symptoms.

On the other hand when the drawings are considered in terms of their characteristics it is seen that they point children who are worried, having externalization problems and feelings of inadequacy and whose social skills are not formed yet. These children at the same time show shy and timid characteristics. Some of the features that take place within the drawings of the participators are dependence on others and the problems in interpersonal relationships. These findings correspond with the studies of Jothimani and Kumar (2016). Kara et al. (2017) found that between the years of 2012 and 2015 among the immigrant children applied to the children's clinic mostly kidney and urinary system diseases (enuresis %9.2) was seen. It is thought that being away from their old country decreases life quality of refugee children and no matter how much health service they take, because of the continuity of the political crisis and unsteadiness the emergence potential of these diseases increases.Uğurlu, Akça

and Acartürk (2016),have found that art therapy may be an effective method for decreasing the symptoms of post-traumatic anxiety disorder, depression and continuous anxiety symptoms of refugee children.

In literature it is seen that the main point of the studies carried out regarding this issue are defining and measuring protective factors. Within this study in which social and personal factors are reviewed it is seen that what provides the psychosocial flexibility is the attention regarding child development and its disasters. Findings reveal the strong effects of the interventions at the holistic and society level (Drury, J., & Williams, R. 2012).

The findings Closs, A. et al. (2001) obtained from the study in which the problems two minority groups encountered at school in Scotland indicate that peer experiences emerge negative, hostile and refusing. Therefore it is clear that it is necessary to give orientation training before such minority groups start to have education in our country. According toEr, Er and Bayındır (2015) since most of the teachers believe that they cannot perform the education of refugee children without any problems, it is thought that within this orientation study teachers must be supported through channels such as in-service training.

Within the research of Uzun and Bütün (2016), in which the views of teachers regarding the problems of Syrian refugee children at preschool education institutions were focused, it is found that one of the main points that teachers emphasised was the language of the children. Therefore it is obvious that in our country the in-service trainingduring the education of the teachers must be planned considering susceptibility toward intercultural differences and obtaining profession in language issues.

**References**


1. Al-Ammouri, I.,& Ayoub, F. (2016). Heart disease in Syrian refugee children: experience at Jordan University Hospital. *Annals of Global Health*, *82*(2), 300-306.
2. Altınköprü, T. (2002). *Karakter bilim ve insan tanımada testler*.İstanbul: Hayat Yayıncılık.
3. Altınköprü, T. (2003). *Çocuğun başarısı nasıl sağlanır?*.İstanbul:Hayat Yayıncılık.
4. Binici, C. (2014). *7-11 yaş arası üstün ve normal gelişim gösteren çocukların aldıkları müfredat türüne göre denetim odağı özelliklerinin "Goodenough-Harris İnsan Çiz Testi" açısından değerlendirilmesi* ['focus of control' properties of the top and normal developing children between the age of 7-11 acoording to 'Goodenough-Harris Human Draw Test']Yayımlanmamış yüksek lisans tezi. Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul. Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi
5. Büyüköztürk, Ş. (2008). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem Yayıncılık.
6. Ceylan, V., Algan, C., Yalçın, M., Yalçın, E., Akın, E. & Köse, S. (2017). Suriyeli mülteci ve sığınmacıların çeşitli psikolojik faktörler açısından incelenmesi: Batman örneklemi. [An investigation of Syrian refugees and asylum seekers in terms of various psychological factors: Batman sample] *International Journal of Social Sciences and Education Research*, 3(2), 595-606.
7. Chantler, L., Pelco, L., & Mertin, P. (1993). The psychological evaluation of child sexual abuse using the Louisville behavior checklist and human figure drawing. *Child Abuse & Neglect*, 17(2), 271-279.
8. Charles, L.,& Denman, K. (2013). Syrian and Palestinian Syrian refugees in Lebanon: the plight of women and children. *Journal of International Women's Studies,* 14(5), 96.
9. Cherney, I. D., Seiwert, C. S., Dickey, T. M., & Flichtbeil, J. D. (2006). Children's drawings: A mirror to their minds. *Educational Psychology*, 26(1), 127-142.
10. Closs, A., Stead, J., Arshad, R., & Norris, C. (2001). School peer relation ships of 'minority'children in Scotland. *Child: Care, Health and Development*, *27*(2), 133-148.
11. Culbertson, S.,& Constant, L. (2015). *Education of Syrian Refugee Children: Managing the Crisis in Turkey, Lebanon, and Jordan*. Rand Corporation.
12. Çakmak, A. & Darıca, N. (2012). 7-11 yaş grubu kurumda ve ailesi yanında büyüyen kız ve erkek çocuklarının anne figürü çizimlerinin duygusal gelişim

açısından incelenmesi. [The "mother figure" drawings of 7-11 year-old girls and boys, who grow up in an institution and with his/her family, in terms of emotional development] *Elektronik Sosyal Bilimler Dergisi*, 41(41).

13. Çevik, S. A. (2016). Suriye'den Türkiye'ye göç'ün etkileri. [The effects of Migration from Syria to Turkey]*Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi,* 5(2), 80-83.
14. Çobaner, A. (2015). Çocuk hakları bağlamında Suriyeli mülteci çocukların haberlerde temsili. [Representation of Syrian refugee children in news in the context of children rights] *Marmara İletişim Dergisi*, 24, 27-54.
15. Drury, J.,& Williams, R. (2012). Children and young people who are refugees, internally displaced person so survivor sorperpetrators of war, mass violence and terrorism. *Currentopinion in psychiatry*, *25*(4), 277-284.
16. Er, A.,& Bayındır, N. (2015). İlkokula giden mülteci çocuklara yönelik sınıf öğretmenlerinin pedagojik yaklaşımları. [Pedagogical approaches of elementary teachers for primary refugee children] *Uluslararası Sosyal ve Eğitim Bilimleri Dergisi,* 2 (4), 175-185.
17. Geçkil, E.,Aldem, M., & Kaleci, E. (2017). Göçün çocuk sağlığına etkisi. [Effects of migration on childhealth]*Journal of Human Sciences*, 14(1), 171-186.
18. Güneri, E. (2016). *Türkiye'de uygulanan psikoloji testleri-kişilik testleri-3*.İstanbul: Kaknüs Yayınları.
19. Hadfield, K., Ostrowski, A., & Ungar, M. (2017). What can weexpect of the mental health and well-being of Syrian refugee children and adolescents in Canada. *Canadian Psychology/Psychologiecanadienne*, 58(2), 194.
20. Inkheili, R. (2017). The Impact of Informal Education Programs on the Outof-School Syrian Refugee Children in Child-Family Centers (CFCs) in Jordan. *European Scientific Journal, ESJ*, 13(4).
21. İnan, M., Karagözoğlu, C., & Şimşek, Ö. (2014). 7 yaş çocuklarında hareketli oyunların saldırganlık davranışları üzerine etkileri. [The effects of active games on aggressive behaviors of 7-year-old children] *Pegem Eğitim ve Öğretim Dergisi*, 4(1), 47-58.
22. Jothimani, T.,& Kumar, S. D. (2016). Draw a person test: A case study. *SIS Journal of Projective Psychology & Mental Health*, 23(2).
23. Kara, M. A., Kılıç, B. D., Çöl, N., Özçelik, A. A., Büyükçelik, M., & Balat, A. (2017). Kidney disease profile of Syrian Refugee children. *Iranian Journal of Kidney Diseases*, 11(2).
24. Karasar, N. (2005). *Bilimsel araştırma yöntemi* [Scientific research method]. Ankara: Nobel Yayın Dağıtım.

25. Laak, J. T., De Goede, M., Aleva, A., & Rijswijk, P. V. (2005). The Draw-A-Person Test: An indicator of children's cognitive and socioemotional adaptation?.*The Journal Of Genetic Psychology,* 166(1), 77-93.
26. Machover KA (1949) Personality projection in the drawingof a human figure. CC Thomas (ed) Springfield, Illinois.
27. Malchiodi, C.A., (1998). *Understanding children's drawings.* New York: The Guilford Press
28. Önen, C., Güneş, G., Türeme, A., & Ağaç, P. (2014). Bir mülteci kampında yaşayan suriyelilerde depresyon ve anksiyete durumu. [Depression and anxiety case in syrians that live in a refugee camp], *Akademik Sosyal Araştırmalar Dergisi*, 2 (6), 223-230
29. Polat, G. (2007). İç göçün çocuk ruh sağlığına etkisi ve sosyal hizmet müdahalesi. [The effect of internal migration on child mental health and social work intervention ], *Journal of Society & Social Work*, 18(1).
30. Sabuncuoğlu, O. T. (2003). Bulgaristan'dan Türkiye'ye göç etmek zorunda kalan Türklerde anne ve çocuklarının ruhsal durumu. PTT Hastanesi Tıp Dergisi, 25(3), 134
31. Sağlam, M. (2011). *Boşanma sürecinde olan ailelerdeki çocukların aile algılarının ve sorunlarının resimler aracılığı ile incelenmesi.* [The study examining family perceptions and problems of children who belongs to families in process of divorce with intervention of pictures] Yayımlanmamış yüksek lisans tezi. Ankara Üniversitesi Fen Bilimleri Enstitüsü, Ankara.Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi
32. Sarason, I.G & Sarason, B.R. (2012). *Abnormal psychology: The problem of maladaptive behaviour (11th edition).* New Delhi: PHI Learning Pvt Ltd.
33. Seydi, A. R. (2014). Türkiye'nin Suriyeli sığınmacıların eğitim sorununun çözümüne yönelik izlediği politikalar. [Policies of Turkey regarding the solution of educational problems of Syrian refugees] *Süleyman Demirel Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 2014(31).
34. Skybo, T.,Ryan-Wenger, N. & Su, Y.H., (2007). Human figüre drawings as a measure of children's emotional status: critical review forpractice. *Journal Of Pediatric Nursing,* 22(1), 15-28.
35. Stoltz, R. E.,& Coltharp, F. C. (1961). Clinical judgments and the draw-a-person test. *Journal of Consulting Psychology*, *25*(1), 43-45.
36. Şeker, B. D.,& Aslan, Z. (2015). Refugee Children in the Educational Process: An Social Psychological Assessment. *Journal of Theoretical Educational Science*, *8*(1), 86-105.
37. Sener, Ş., Özdemir, D. Y., Şenol, S., Karacan, E., & Kargın, E. Ş. (1997). Dinar depreminden sonra Ankara'da yatılı okula yerleştirilen ergenlerde

travmanın psikolojik etkileri. [Preliminary report of stressor effects on adolescent survivors who are in dormitory living after dinar earthquake] *Çocuk ve Gençlik Ruh Sağlığı Dergisi,* 4(3), 135-144.

38. Topçu, S. (1997). *Çocuk ve gençlerin cinsel istismarı.*Ankara: Doruk Yayıncılık.
39. Uğurlu, N. ,Akça, L.,& Acarturk, C. (2016). An art the rapyintervention for symptoms of post-traumaticstress, depression and anxiety among Syrian refugee children. *Vulnerable Children And Youth Studies*, 11(2), 89-102.
40. Uzun, E. M., ve Bütün, E. (2016). Okul Öncesi Eğitim Kurumlarındaki Suriyeli Sığınmacı Çocukların Karşılaştıkları Sorunlar Hakkında Öğretmen Görüşleri. *Uluslararası Erken Çocukluk Eğitimi Çalışmaları Dergisi*, *1*(1). 75-80
41. Yılmaz, A. (2014a). The state of ınternational Migrant Children in Turkey: The case of Van. *Akdeniz İnsani Bilimler Dergisi*, 4(2), 349-372.
42. Yılmaz, A. (2014b). Uluslararası göç: çeşitleri, nedenleri ve etkileri. [International migration: its types, causes and effects]*Electronic turkish studies*, 9(2).
43. Yiğitbaşı, K. G. (2016). Medya ve mültecileri sivil toplum üzerinden okumak: Mülteci-Der Örneği. [Understanding media and refugees through civil society: Mülteci-Der Case] *Marmara İletişim Dergisi,* 25, 53-76

## Chapter 2

# Language, Power, and Participation

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As a result of the fact that policy is a constitutive component, it is vital to carry out in-depth critical studies of policy to understand how political power originates from and is produced by activities that have a societal context that is more comprehensive. In addition to serving the objective of disseminating these values, it also ensures that members of the educational institution and the educational institution itself adhere to them. The fact that this represents bigger society difficulties and trend statistics involving literacy education, children and families living in poverty, and those learning a second language is significant. This is significant since it reflects larger societal challenges and trend figures. Because it reflects greater societal concerns and trend numbers affecting literacy education, this is relevant. Critical discourse analysis (CDA), which is bolstered by Bernstein's theory of relationships, sheds light on how text, discourse practice, and social practice interact to bring about social change. This is accomplished by shedding light on how social change is brought about. The purpose of combining these three aspects was to increase the likelihood of establishing a consensus while simultaneously decreasing the number of dissenting voices. They saw, as is typical with information systems, how the language in California's rules had been changed to guarantee that exact interpretations were transmitted. This is frequent in information systems. Through analyzing significant texts within the framework of their particular contexts, we were able to ascertain the chronological order in which older material preceded more data than recent. Text that is constructed in this manner not only contributes to the "good reason" principle (Halliday, 1994, p. 308; for a more in-depth explanation, see Habermas, 1996), but it also helps shape the clause as a logical and grounded message. Halliday (1994) describes the "good reason" principle as follows: As a direct consequence of this, citizenship is encouraged (Fairclough, 2003).

The academics can determine, through the process of text structural analysis, how to emerge through discursive processes and how they subsequently are institutionalized in society. When this occurs, some ideas and patterns of speech might be elevated to the level of common sense, making it more difficult to notice them or fight them.

The outcomes of the study indicate that naturalization can be found in both the structural and nonstructural components of the text. They asserted that lexical coherence, which can be achieved by using terminology that is consistent or by making references to "current and confirmed research," also improves coherence and naturalizes writing. This can be accomplished by employing terminology that is consistent or by making references to "current and confirmed research." According to Bernstein (2000), the concept of "social realities" is "current and validated research." It is irrelevant as to whether or not the "current and confirmed

study" that you allude to is sensible. When politicians share their perspectives on how things should be and how they now are, they adopt an authoritative tone, which suggests that people should be more submissive to what they have to say and pay closer attention to what they have to say. The distribution of power that exists between dominant players and players who are submissive affects the categorization of what counts and what does not count.

As authorities elected and appointed by the government work toward reforming the language, they progressively shift their focus to other concerns. This encourages similar conversations among larger audiences, which eventually leads to a shift in the norm. The process of reducing opposition to policy by employing new vocabulary that is frequently ambiguous and then tying it to research experts and instructional materials to legato phrases. As a result, there is a decreased possibility that individuals may erroneously understand the policy. They have an effect not only on the likelihood of certain practices and conversations taking place but also on the resources and pedagogical abilities that are made accessible to teachers. This is because they have different policies about the kinds of instructional materials that are allowed in the classroom and those that are not. Because of this posture, people who are not included in these modes of discourse are given the idea that they support these forms of discourse. Because the information is continuous and flowing, it is essential for the readers to engage, even if they are unaware that they are doing so. This again obscures the fundamental socioeconomic problems that are the foundation for the differences in power and representation that exist throughout the world. The researchers will analyze the shift in power within California's educational decision-making system, as well as examine how the views and intentions of notable persons were advanced in policymaking forums and by the general public. In addition, the researchers will investigate how California's educational decision-making system has changed over time (from the CDE to the SBE). They are aware that there has been a shift in the balance of power. As a result of the CDA, Fairclough is now in a position to devote a higher level of attention to both the text and the context while analyzing power and ideology. "When engaging in certain forms of dialogue, interpretive concepts may begin to feel more natural, as if they were second nature. It is essential to look into these connections since they offer light on the ideological roles that coherence plays in the construction of convincing arguments " (Fairclough, 1992, p. 84).

According to the conclusions of the researchers, the research that was undertaken by the NICHD in policy forums is difficult to ignore, and that's before we even talk about its distribution and naturalization. These studies, in particular a sizeable portion of them, are taken into consideration to be credible sources of

data regarding reading and reading teaching. Significant assessments that combine second and third-generation research, as well as the actual presence of NICHD researchers and workers during legislative sessions, have had an effect on the legislative process in the state of California. This impact has been observed. As a direct result of this myriad of influences, reading has been given a new definition and is taught in a manner that is unique to each state. As critical and reflective discourse analyzers, they believe it is their responsibility to comprehend, characterize, and explain texts, as well as discourse practices and social practices. The teaching tool developed by Bernstein provides students with assistance in gaining an understanding of the components that constitute social analysis. Text, discourse practice, and social practice are the three components that make up this. Fairclough placed a strong emphasis on these particulars (i.e., social matrix, orders of discourse, and the ideological and political effects of discourse). By establishing this kind of interaction between text and discourse practice, the authors argue that not only the function of language in change is significant, but also the social network that underpins language and discourse practices' capacity to effect change. This interaction between text and discourse practice was established to support the authors' argument that language and discourse practices' capacity to effect change is significant. For the writers to successfully argue their point, this connection between the text and discourse practice has to be developed.

**REFERENCES**


1. Bernstein, B. (2000). Pedagogy symbolic control and identity: Theory, research, a critique.Bristol, PA: Taylor & Francis
2. Fairclough, N. (1992). Discourse and social change. Cambridge, UK: Polity.
   Fairclough, N. (2003). Analyzing discourse: Textual analysis for social research. New York: Routledge.
3. Habermas, J. (1996). Between facts and norms: Contributions to a discourse theory of law and Democracy (W. Rehg, Trans.). Cambridge, MA: MIT Press.
4. Halliday, M. A. K. (1994). An introduction to functional grammar (2nd ed.). London: Arnold.

## Chapter 3

# Play and Reveal Your Misconceptions: Taboo Game in Geometry Learning

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## 1. Introduction

Nesher (1987) claims that students are experts in making mistakes and states that students contribute to the process of learning and teaching in that expertise field. That contribution is very important, since it has been leading many studies realized in the mathematics education field for the last forty years, and it will continue to be subject of many studies in the future (Bingolbali & Ozmantar, 2012). According to Baki (1996), one of the important reasons for low success in mathematics lessons is misconceptions.

There are many definitions of the term concept in the literature. According to Yurumezoglu, Ayaz, and Cokelez (2009), even when a limited number of observations are done by individuals, they lead to generalizations by induction, and each generalization has a common name, 'concepts'. The students perceive many concepts differently from their acceptable scientific meanings (Yenilmez & Yasa, 2008). However, Schulte (2001) notes that if the individual's knowledge differs from the accepted meanings, alienation and incomprehensibility will appear in mind. Also, a misconception has many definitions. According to Yenilmez and Yasa (2008), misconception means wrong or incomplete conceptualizing. Ozbellek (2003) states that misconceptions are significant obstacles to meaningful learning, and not removing the persisting misconceptions early enough causes substantial issues in achieving the teaching targets.

When students come to the class, their minds are not empty. A student who knows about any subject before coming to the class considerably affects their learning. Since new understandings take place as a result of the interaction between pre-knowledge and new knowledge, and during this interaction, an individual organizes new knowledge using self-cognition, self-interests, attitudes, and experiences (Yurumezoglu, Ayaz & Cokelez, 2009). Since mathematics is a cumulative science, in other words pre-knowledge is used to get new knowledge; diagnosing and removing misconceptions are the necessities for successful mathematics education (Morali, Koroglu & Celik, 2004). Also, in other studies, it is emphasized that to change students' inappropriate reasonings and to rearrange the education in this regard, students' pre-knowledge and misconceptions should be diagnosed (Aykutlu & Sen, 2012). Early diagnosing misconceptions provides an opportunity to remove these misconceptions and prevents the difficulties faced in education.

Various methods are used to detect the misconceptions by researchers in the literature. Worksheets (Gonen & Akgun, 2005), Concept Tests (Aykutlu & Sen, 2012), Concept Maps (Yin, Tomita & Shavelson, 2008), Predict Observe Explain Method (Kose, Costu & Keser, 2003), Concept Cartoons (Ekici, Ekici, & Aydin,

2007) can be given as examples of these methods. Besides, games are also used to diagnose misconceptions (Genc, Genc & Yuzuak, 2012).

Game is defined by the Turkish Language Institute (TDK) as "the fun which has specific rules, enhances talent and intelligence and serves to have a great time." On the other hand, Salen & Zimmerman (2004) states, "game is the system which is defined by rules, so whose results can be measurable and whose players are in an artificial competition." Games can also be used in a classroom environment. Ara (2009) says that learning becomes funny, and students pay more attention to a lesson when games are used in the learning environment. Similarly, Uzun (2012) remarks that students bored with or are shy about lessons can be made active participants by using games. Since especially mathematics courses are seen as abstract, students have fear of mathematics. In this case, games create an effective environment for mathematics classes by making students willing and lessons funny.

One of the games that can be used in mathematics classes is the Taboo game. This game is played with two groups, and its goal is to tell the aimed word to group mates in 60 seconds without using banned words (Toma et al., 2017). Since the taboo game is built on speaking, it is effective for students to express themselves, and observers follow students' categorization of minds. Also, the taboo words push students beyond the standard definitions, providing an environment for detecting misconceptions.

There are many studies related to the subject of this study which is detecting the misconceptions of pre-service mathematics teachers (Esen & Cakiroglu, 2012; Morali, Koroglu & Celik, 2004; etc.). On the other hand, the Taboo game has been used effectively as an educational activity by adapting it to various teaching areas in recent years. When the studies on the application of taboo games in lessons are examined, determining the effect on vocabulary teaching in the language education process (Gundogdu & Kartal, 2021), vocabulary development (Batur & Erkek, 2017), and examining its effect on the development of speaking skills (Awidianingrum, 2012) are some studies that draw attention in the literature related to the language teaching. These studies determined that the student's success in learning vocabulary increased with the taboo game, and their views on learning words were positive. Science education and other science-related branches are different fields of study related to the taboo game. These studies were conducted to determine the effect of the taboo game on students' academic achievement and attitudes towards the course at the secondary school level (Serdaroglu & Gunes, 2019), revealing the effect of learning and reinforcing concepts related to science (Capps, 2008), determining students' opinions on the use of taboo in lessons (Halaç & Bozdogan, 2021) and identifying and

eliminating misconceptions (Genc et al., 2012; Sarikaya & Akbas, 2019). As a result of these studies, it was reported that the students' perspectives towards the subjects and concepts changed, their academic achievements increased, and their attitudes towards the course changed positively. It was revealed that the taboo game allowed the students to participate in their conceptual development processes. However, studies have not been conducted focusing on the diagnosing pre-service mathematics teachers' misconceptions about using the Taboo game. This study will contribute to the literature from the point of analysing pre-service mathematics teachers' misconceptions about using taboo game.

This study aims to analyze the Taboo game's effectiveness in determining pre-service mathematics teachers' misconceptions concerning geometric concepts.

## 2. Methodology

### 2.1. Research Design

This study is a qualitative study designed as a case study. According to Patton (2002), "a qualitative case study seeks to describe that unit in-depth and in detail, in context, and holistically."

### 2.2. Participants

This study was conducted with 20 pre-service mathematics teachers studying in the 2nd and 4th grades of Elementary Mathematics Education at Uludag University. Ten pre-service teachers from 2nd grade and 10 from 4th grade of Elementary Mathematics Education were chosen voluntarily.

### 2.3. Data Collection Tools and Data Collection Process

The video recording of Taboo game-play and non-structured group interviews were used as a data collection tool. In the Taboo game, one person from the group tries to tell the target word, in one minute, to group friends without using taboo words. If the teller uses one of the taboo words, that card is canceled, and the group loses one point as punishment. The group gets one point for each successfully said a word. At the end of the game, the group which has more scores wins the game.

In order to use the Taboo game for determining the misconceptions of pre-service mathematics teachers concerning geometric concepts, Taboo cards including 105 concept units (to be described-target words) and five taboo words for each target word were prepared by the researchers. These concept units were determined by analyzing the 5, 6, 7 and 8 grade math curriculum scanning the concepts related to geometric concepts concerning the numbers and geometry

learning areas. Also, taboo words in the cards were determined by considering the concepts' formal definitions.

Pilot implementation of the study was conducted with 10 students from the science section of 4th grade from the faculty of education. As a result of pilot implementation, necessary changes on the cards were realized, assessing the expressions used during the game. On the other hand, with the pilot implementation, it was concluded that the game's rules should be explained more clearly before the game started.

The data collection process consisted firstly of two implementations which lasted approximately one and a half hours. One of them was conducted with 2nd grade students and the other one with 4th grade students. During the implementations, students formed two groups of five, and the rules of the taboo game were explained through the original taboo game. During the data collection process, two cameras were used for the recordings. One camera situated by the blackboard near the pre-service teacher explaining the concepts, and the other was near the pre-service teachers trying to find the concepts. Findings were obtained by the analyses of the transcribed video recordings of game-play sessions and observation notes. After each implementation, the participants' non-structured group interview was realized to reveal their opinions about using the Taboo game. These interviews lasted approximately 15-20 minutes, and participants expressed themselves freely.

### 2.4. Data Analyses

The content analysis technique was used to analyze the obtained data. Content analysis "is generally used in the analysis of written texts such as transcripts, diaries, or documents, and is done for revealing the underlying meaning patterns of these texts" (Patton, 2002). The data collected were analyzed using codes, combining the codes in categories and obtaining themes englobing the categories.

The video recordings of the study were transcribed and converted into the text; coding was made related to the research problem. Transcripts of the recordings of the implementations were analyzed in two main categories "based on participants' behavior" and "based on the expressions used." In the "based on participants behavior" category; passers were examined in two groups as "those who pass from the beginning" and "those who pass later" those who make taboos were reviewed in two groups as "those who do not notice the presence of the word on the card" and "those who have to use the word because they cannot find a different way of expression"; "those who do not have enough time" and "those who succeeded" were gathered in another group. In the category based on the expressions used; first of all, the expressions are grouped as "make guesses by

using a word" and "make guesses by using sentences," then the validity of the expressions was evaluated as "correct," "incorrect" and "inaccurate" and the concepts used in the expressions were assessed as "similar concepts are used interchangeably", "unrelated concepts are used interchangeably," and "related concepts are used." Table 1 shows the themes, categories and sub-categories revealed from the content analyses of the recording of Taboo game-plays.

**Table 1.** Themes, categories and sub-categories revealed in the content analyses

| Themes | Categories | Sub-categories |
|---|---|---|
| Tellers' behaviors | Passers | those who pass from the beginning<br>those who pass later |
| | Taboo Makers | those who do not notice the presence of the word on the card<br>those who have to use the word because they cannot find a different way of expression |
| | Not enough timers<br>Succeeders | |
| Expressions used | Structure of the Expressions | make guesses by using a word<br>make guesses by using sentences |
| | Validity of the expressions | correct<br>incorrect<br>inaccurate |
| | Concepts used in the expressions | similar concepts are used interchangeably<br>unrelated concepts are used interchangeably<br>related concepts are used |

## 3. Findings

A Taboo game was used in this study to reveal the misconceptions of pre-service mathematics teachers about geometric concepts. Various situations have been revealed by analyzing the obtained data. During the taboo game, some pre-service teachers only talked about the subject in finding the concept, while others counted some of the concepts related to the subject and waited for the remaining concepts to be found by their friends. It is noticed that the pre-service teachers tend to use words or concepts as a reminder rather than making sentences about the concepts.

One of the most common ways pre-service teachers explained concepts was by using a few words. It has been observed that pre-service teachers had a lot of difficulties forming sentences about the concepts, mainly because they could not explain the concepts without taboo words; They only said one or two words and waited for the concept to be found. Analyses have shown that the few sentences composed by the pre-service teachers were limited to only one concept feature, and

this feature was not necessarily related to the mathematical subjects. For example, pre-service teachers started out from a single feature by saying "geometric shape without corners" when describing the circle, "the shape with which we wrote the letter E in secondary school" when describing the plane, or "What concept were we processing in the Cabri program?" when describing symmetry. Pre-service teachers did not give any other explanatory information about the concept and waited for their friends' answers. Some pre-service teachers supported their friends in finding the answer by making mathematical sentences related to the concepts. For example, a pre-service teacher provided the concept of "plane" to be answered in a short time by saying "the concept formed by points in space." Similarly, another pre-service teacher helped her group to easily find the concept of "fraction" by saying "write two numbers, one under the other with a line between them."

While explaining the concepts, some pre-service teachers tried to find the concept by using mistaken words and knowledge about the concept. For example, While one of the pre-service teachers explained the concept of "digit," he asked the question: "What is the other name of the number?"; his friends realized that he meant "digit" and they replied. However, although some pre-service teachers noticed the mistake, they did not emphasize it. Thus, it was understood that pre-service teachers could communicate correctly with mistaken words and concepts. This situation has been interpreted as indicating a commonly mistaken concept formation in teacher candidates.

One of the pre-service teachers' most common ways of expression was explanations using examples. For example, pre-service teachers tried to find the concept of "quadrilateral" by saying, "Tell me the geometric shapes you know". In another example, they tried to explain the concept of "real number" by saying, "Tell all the number types we have learned". While the pre-service teachers tried to find the concepts with examples, they could not reveal the relationship between the examples they gave and the concepts. In addition, they did not try to direct the other teacher candidates to the correct concept.

In some cases, pre-service teachers tried to explain the concepts using forbidden taboo words; they stated that they could not argue because there were no words other than the banned words to describe the concept. So, they either passed the concept or completed their time before they could tell any word about the concepts. In addition, pre-service teachers claimed they could make more formal and mathematical definitions if the concepts were explained without prohibited words. Considering that the game is known and loved by the pre-service teachers, it has been noticed that the pre-service teachers were weak in explaining the geometric concepts during the game.

It was observed that the pre-service teachers tried to explain the concepts, especially the shapes, with hand gestures at the points where they were blocked. In this situation, the pre-service teachers promptly intervened and asked to verbalize. For example, while explaining the concept of "circle," some pre-service teachers tried to explain it by drawing the circle with their fingers.

When the words used by the explainer during the game were examined, some expressions pointing to the misconceptions of the pre-service teachers were found. For example, the other students in the group did not find it strange that the explainer often used the words "circle" and "circular region" as synonyms for each other. Therefore, it can be interpreted that these concepts may be confused with each other and that there may be a mistaken conception. Another example of revealing some possible mistaken conceptions of pre-service teachers is when the explainer used the expression "two-dimensional" when describing a prism.

When the pre-service teachers' explanations of the target words were compared in general, it was seen that the 4th grade students tried to explain the target words with the support of the curriculum and mathematics education. As the upper grades progressed, the students used more words related to the concepts. These upper-class students tried to explain the concept to their friends by reminding them of the class level and subject to be taught. This means that 4th grade students think and explain more as teachers.

Finally, although some pre-service teachers' motivation was low when starting the implementation, it was observed that their motivation increased over time after they started the game. This situation suggests that the using the taboo game in the lessons can also increase interest and motivation for the lesson.

In the interviews held with the pre-service teachers after the games, they were asked questions about this game. The students said that they enjoyed playing the game a lot but that they had a lot of difficulty explaining the concepts. They cited the existence of banned words as the reason for this. A pre-service teacher said, "If there were no banned words, there could be broader expressions; it would be better if only that word were banned". Another pre-service teacher commented, "I think there are words under it; they should not be so many". However, our Taboo game aimed to prevent pre-service teachers from reciting definitions by including the words in the formal definition, especially within the forbidden words.

There were also some suggestions from pre-service teachers regarding the Taboo game integrated into mathematics. They stated that the time limit in the Real Taboo game's format should be more flexible or more extended. One pre-service teacher said, "Now you want a mathematical definition and one has to think about it. But we respond without thinking due to time.". Another suggestion was to include concepts in a broader framework instead of concentrating on a few areas. One of the pre-

service teachers defended this opinion, and it was suggested to have mathematical concepts in more subjects.

The common opinion of the teacher candidates about the Taboo game was that the game was motivating and useful. They stated that it was very diversifying and different from the math games they knew. Pre-service teachers supported this idea "This can be a very nice game that children can play in their elective courses, for example..."; he also stated that he could use it in his teaching life.

**4. Conclusion and Recommendations**

Concepts have an important place in the mathematics education. As for every stage of mathematics teaching, difficulties arise in concept teaching, and misconceptions may occur for students. In recent years, many studies have been realized and are being recognized to determine these difficulties and misconceptions. In this study, the Taboo game was used to determine the misconceptions of the preservice mathematics teachers.

It has been determined that pre-service teachers use words or concepts as reminders rather than making sentences about concepts and prefer to use few words. A similar result has emerged in the studies of Genc et al. (2012) and Sarikaya and Akbas (2019), and it has been reported that the concepts are explained with one or two words without forming a sentence. This situation may be since pre-service teachers compete with time and may also indicate a low competence in using mathematics in communication.

Another observed situation is that, in some cases, pre-service teachers try to explain the concept with sentences that are not related to mathematics. In line with this result, Genc et al. (2012) stated that while students were finding concepts in their studies, they benefited from the words they learned in the lessons and analogies unrelated to the concept.

It was determined that some pre-service teachers used the wrong words and information about the concept while explaining it, and some of these words pointed to misconceptions. Thus, in parallel with the studies of Genc et al. (2012) and Sarikaya and Akbas (2019), the taboo game played in the process played a role in revealing the misconceptions.

Finally, it was revealed that as the pre-service teachers played the taboo game, their interest and motivation increased, they enjoyed playing it, but they had a lot of difficulty explaining the concepts. The positive and challenging aspect of the taboo game expressed here was similarly observed in the participants of Genc et al. (2012). Similarly, Toma et al. (2017) explained this situation as the Taboo game has an encouraging role for students to review their knowledge in a fun and exciting way and to understand the meanings of terms better.

**References**


1. Ara, S. (2009). Use of songs, rhymes and games in teaching English to young learners in Bangladesh. *The Dhaka University Journal of Linguistics*, *2*(3), 161-172.
2. Awidianingrum, A. (2012). Using "taboo game" as a technique to teach speaking descriptive text to the seventh graders of smpn 33 surabaya. *Header halaman genap: Nama Jurnal,* 1- 216.
3. Aykutlu, I., & Sen, A. I. (2012). Determination of secondary school students. *Education and Science*, *37*(166), 275-288.
4. Baki, A. (1996). Matematik öğretiminde bilgisayar herşey midir? *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi,12*, 135-143.
5. Batur, Z. & Erkek, G. (2017). A "taboo" in word teaching. *International Journal of Language Academy, 5*(2), 1-11. DOI: 10.18033/ ijla. 3546.
6. Bilgolbali, E., & Ozmantar, M. F. (2012). Matematiksel kavram yanılgıları: Sebepleri ve çözüm arayıları. In E. Bigolbali & M. F. Ozmantar (Eds.), *İlköğretimde karşılaşılan matematiksel zorluklar ve çözüm önerileri* (3 ed.). Ankara, Türkiye: Pegem Akademi.
7. Capps, K. (2008). Chemistry taboo: An active learning game for the general chemistry classroom. J. *Chem. Educ*, 85(4), 518.
8. Ekici, F., Ekici, E., & Aydin, F. (2007). Utility of concept cartoons in diagnosing and overcoming misconceptions related to photosynthesis.*International Journal of Environmental & Science Education*, *2*(4), 111-124.
9. Esen, Y., & Cakiroglu, E. (2012). İlkogretim matematik ogretmen adaylarinin hacim olcmede birim kullanımına yonelik kavrayislari. *Matematikciler Dernegi Dergisi*, *1*, 21-30.
10. Genc, M., Genc, T., & Yuzuak, A. V. (2012). Determination of misconceptions by games: Taboo game. *Mustafa Kemal University Journal of Social Sciences Institute*, *9*(20), 581-591.
11. Gonen, S., & Akgun, A. (2005). An investigation of the applicability of worksheet and class discussion on determining and remedying lack of knowledge & misconceptions. *Electronic Social Science Journal*, *4*(13), 99-111.
12. Gundogdu, R. T., & Kartal, S. (2021). The views of the 7$^{th}$-grade students on learning English vocabulary with the Taboo game. *Uluslararası Sosyal Bilimler Eğitimi Dergisi, 7*(1), 75-101.
13. Halaç, H., & Bozdogan, A. E. (2021). Ortaokul 6. ve 7. Sınıf Öğrencilerinin Tabu Oyununun Fen Eğitiminde Kullanılmasına İlişkin Görüşlerinin

Belirlenmesi. *Uluslararası Türk Kültür Coğrafyasında Sosyal Bilimler Dergisi*, *6*(1), 66-78.
14. Kose, S., Costu, B., & Keser, O. F. (2003). Determination of students' misconceptions in science: Activities through poe method. *Pamukkale University Journal of Education*, *1*(13), 43-53.
15. Morali, S., Koroglu, H., & Celik, A. (2004). Trainee mathematics teachers' misconceptions and attitudes towards abstract mathematics course. *Journal of Faculty of Education of Gazi University*, *24*(1), 161-175.
16. Nesher, P. (1987). Towards an instructional theory: The role of the students misconceptions. *For the learning of mathematics,* 7(3), 33-40
17. Ozbellek, S. (2003). *Confronted conceptions mistakes about angle, determination and elimination methods of deficient perceptions at 6th and 7th grades in primary education*, Master's thesis, Dokuz Eylul University.
18. Patton, M. (2002). *Qualitative research and evaluation methods.* Thousand Oaks: Sage.
19. Salen, K., & Zimmerman, E. (2004). Rules of play: Game design fundamentals. United States of America: Massachusetts Institute of Technology
20. Sarikaya, S., & Akbas, A. (2019). Ortaokul Öğrencilerinin Isı ve Sıcaklık Konusundaki Kavram Yanılgıları ve Giderilmesi. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, *1*(38), 31-40.
21. Schulte, A. K. (2001). *Student teachers in transformation: A self-study of a supervisor's practice.* The University of Wisconsin-Madison.
22. Serdaroglu, C., & Günes, M. H. (2019). 6. sınıf bitki ve hayvanlarda üreme, büyüme ve gelişme ünitesinin öğretiminde oyun temelli öğrenmenin akademik başarı ve tutum üzerine etkisi. *Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi*, *13*(2), 1015-1041.
23. Toma, İ. Alexsandru, C. Dascalu, M. Dessus, P. ve Metu, S. (2017). Semantic taboo- a serious game for vocabulary acquisition. *Romanian Journal of Human- Computer Interaction, 10(2),* 241-256.
24. Uzun, N. (2012). A sample of active learning application in science education: The thema "cell" with educational games. *Procedia-Social and Behavioral Science*, 46, 2932-2936.
25. Yenilmez, K. & Yaşa, E. (2008). İlköğretim öğrencilerinin geometrideki kavram yanılgıları. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi*, 21(2), 461-483
26. Yin Y. Tomita, M. K., & Shavelson, R. J. (2008). Diagnosing and dealing with student misconceptions: Floating and Sinking. *Science Scope*, 34-39.

27. Yurumezoglu, K., Ayaz, S., & Cokelez, A. (2009). Grade 7-9 students' perceptions of energy and related concepts. *Necatibey Faculty of Education Electronic Journal of Science and Mathematics Education*, *3*(2), 52-73.

## Chapter 4

# The Importance of Comparative Education in Educational Development

**Fethi Kayalar**[1]

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**Introduction**

Comparison is a subsystem of macro-level development efforts, because to talk about education is to talk about development. It is difficult for everyone involved in the national or international arena not to mention development as a reference. Therefore, a topic that is always interesting to discuss by state leaders, especially for developing countries, is the problem of development, namely how to change the state of the nation's society to make it better than it is now. From a scientific point of view, development basically has normative and subjective relativity features. Because of its relative nature, development always includes comparisons and references leading to the categories of developed, underdeveloped and developing countries, and references that usually follow the level of achievements and processes adopted by developed countries. For reference, Eastern countries such as Korea, Taiwan, Hong Kong, and Singapore are usually given as examples to compare the situation and development process, Japan and Germany for technological progress, and China as examples for organization and institutional development. For this reason, people tend to refer to western countries and societies that are still making high levels of progress in the fields of economy, technology and institutions as industrialized or developed societies. Likewise, for countries that have not reached the level according to the standards of developed countries, they are called underdeveloped or developing countries (Yahya, 2011).

Development also always involves goals that contain value judgment, which is normative, a community is said to have succeeded in achieving its development efforts if it is able to achieve certain standards of achievement, where the formulation is largely determined by preferences and inclinations or even the ideology of the community concerned. Development also means the process of overcoming all attempts to move from the present state to the desired state. What is the shape of the desired condition? This is where the subjective formulation of development goals lies.

From the cultural aspect, such as the emergence of a new national awareness, awareness of a new civilization, where self-confidence, independence, and willingness to sacrifice in order to maintain self-respect and the image of the nation and its civilization have been shared equally among members of the leading community and its social system. From an economic point of view, namely the creation of a situation where there is continuous growth and progress in output, and in turn the industrial sector can grow and develop, it can grow and develop continuously on its own strength. From the social aspect, for example, the achievement of a situation in which the community system reflects a fair and equitable distribution of opinions, and is able to transform all marginalized

members of society into a state of post-subsistence economic system. The formulation mentioned here is just an example of what is called subjective and tries to capture the nuances of development in general towards specific goals. In a general pattern formulation, it is clear how open-ended the development goals or objectives are.

In this context, it is normal for each of a country's development operational strategies to differ from the other according to the scale of priority. However, in general, experts believe that the main key to development is achieving a good level of economic growth, so attention is directed to how to increase the output from available resources, both natural resources and human resources. Therefore, the core of the problem revolves around mastery in science and technology. Concerning this description, the link between technological rulers on the one hand and improving the well-being of life on the other, to achieve potential community building, especially a nation classified as building, is a challenge that needs to be settled in the core framework of future community development strategies. Therefore, the main strategy is how the education aspect as a barometer of human resource development can be adapted to industrial services, since accelerating economic development can be integrated without having to give up the social and moral ethics (Yahya, 2011).

**Comparative Education**

Comparative Education is a field of study that deals with the comparison of existing educational theory and practice in different countries with the aim of broadening and deepening the understanding of educational problems beyond the borders of one's home country.

According to the WHEOS (1951) Comparative Education is the relatively new branch of educational science that seeks to examine the historical evolution of educational theories and practices and the political, social, cultural and economic development of the countries, thereby increasing the understanding of this general development of education in all countries.

Mallison (1957) defines it as a systematic study of culture and the school system, which is designed in such a way as to reveal not only the similarities and differences, but also the causal factors and the various variations taken in an effort to overcome the general problems faced by education.

Based on these descriptions, it can be concluded that the comparative science of education directs its study objectives to the current problems of educational theory and practice by taking into account various background factors such as political factors. Socio-cultural economy and so on, including the education history of the community concerned. History does have an important meaning

because it contains the theory and practice of education from time to time. Therefore, comparative studies have a very complex meaning, as they must cover various aspects and backgrounds that influence the development of a nation. Whereas, in the development of a nation, there are aspirations and ideals that encourage the development of that nation over a relatively long period of time. The concepts of education are essentially closely related to the aspirations and ideals that foster the development of the nation in question over a relatively long period of time. The concepts of education are closely related to the aspirations and ideals of the nation living that day. It is these aspirations and ideals that give the style and shape of the culture and civilization of the nation concerned.

Recognizing that the scope of comparative education is very broad and complex, the limitation of its understanding should also be extensive; namely, Comparative Education is the study of education and training systems and problems in different countries. In addition, by examining each system and problems in detail, it is ensured that the main factors causing the problem can be determined precisely. It can also be interpreted as an examination of the education and training system in other countries and the factors affecting it. Comparative education is also defined as the study of theories and practices of education and training followed by comparing one country with another in order to know the similarities and differences and the background influencing them. Up to this point, it can be understood that the main purpose of comparative education is to examine the systems and causes that cause problems in education and training, and the reasons that can lead to similarities and differences between education systems in various countries (Anderson, 2008; Zajda and Val, 2021;Lewis, 2022).

**Objectives and Benefits of Comparative Education**

When conducting a comparative educational study, there are certain meanings that are expected to benefit the public good. The world of science in general. In the Educational Research Encyclopedia, some of the aims and uses in comparative education research include (1) securing information that will be useful in developing the ideal educational content, method and organization across the world's various education systems, (2) serving as a theoretical and practical aid in understanding one's own education system, (3) the challenge of uncritical provincialism, (4) expansion of cultural horizons, (5) developing humanitarian ideals and practices, (6) reduction of international tensions (Yahya, 2011).

Comparative education, as a discipline, has an important position, especially for people who are in the world of education, apart from these benefits. There are

several aspects of benefits that can be derived from comparative educational studies:

*1. Scientific academic benefits*

It means that comparative studies of education as one of the disciplines have the same completeness as in science in general. It's like having a clear work object, having its own field of view along with certain methods. In addition, comparative education studies are also beneficial in examining various educational theories. It can broaden insight into the ins and outs of education. Along with the background that impresses him. Understand the relationship between education and society and the causes and effects of the relationship between the two. Therefore, education as a dynamic life process is very interesting to study and study academically and scientifically.

*2. Cultural benefits*

Education is an important tool for the process of human civilization from one generation to the next. Man is only one step higher than animals without being educated throughout his life. It may not be able to recognize or produce reliable cultural products. Comparative education studies are of the opinion that education, in addition to having cultural potential, has the power to shape and change the style and content of the targeted development direction of life.

*3. Humanistic benefits*

His main focus is on the comparative study of their experience. People are thus placed at the center of society's perspective on what kind of education system is desired in order to develop and advance their society.

*4. Intellectual satisfaction*

Comparative education research is not only reading the facts of education in a society, but also reaching a logical-rational analysis of the facts with statistical analysis methods. Thanks to this approach, it is possible for a researcher to find a relationship between the facts seen and the cultural factors behind the emergence of the phenomena that characterize the education system studied. A sense of belonging will arise if the perpetrators of the research have succeeded in uncovering the secret behind the facts.

*5. Achieved operational benefits*

Comparative education studies aim to examine education problems in other countries to be used as information material to help solve education problems in

their own country. Comparative education in terms of problem solving is objective in interpreting facts. Thus, the analysis product has a high value for the expected operationalization of the education system. Another benefit that can be obtained through comparative education studies is to provide understanding and help in solving the educational problems faced by the individual, based on examples of solutions to the same problem in other countries. Education through comparative studies can make it easier for those trying to understand a nation's model of life, which can facilitate its harmonious relationship with that nation (Trethewey, 2014)

Therefore, through a comparative educational study, efforts can be made to promote world peace, at least to reduce international tensions, since its principle is to exchange visits between countries or to organize meetings in different countries. Thus, it will be able to create a deep mutual understanding and peaceful coexistence.

**The Scope of Comparative Education**

To find out how large the area is the target of a comparative educational study, it will be clearer by stating the following considerations;

According to J. P. Sarumpaet (1966), reviewing some of the most important parts of each country's education system is done in different ways. First, a brief history of education is examined to understand an existing system; then there is the management of education, especially with regard to administrative practice and problems of administration and organization. For example, France should adopt a centralized system, while the United Kingdom and the United States should adopt a decentralized education management system.

Brickman (1973) suggests that educational comparison includes (a) explaining the education system in other countries by explaining the education problems, (b) analysing the background influencing various views on current issues, both general and controversial, (c) comparison about the similarities and differences between ‘a’ and ‘b’, (d) before and after solving the problem, comparing and evaluating the main causes, both possible and controversial.

According to Nicholas Hans (1955), in his book ‘Comparative Education’, he argues that the national character of a nation is the product of the interaction of the conditions of various forms, races, linguistic adaptations, religious movements and schools, general situation and general geographical history. For this reason, education is seen as a social enterprise that ensures the continuity mentioned above. Thus, it can be said that the scope of the comparative study of education includes various social factors and conditions, active conditions such as both passive natural conditions and spiritual factors, as well as ideas such as

Humanism, Socialism, and Democracy. These factors can stimulate both simultaneously and independently the education that can be found theoretically and practically in some countries.

Kandel (1970) argues that a comparative educational study is considered inadequate by simply describing the anatomy of education, including (a) training mechanisms and techniques. (b) management. (c) curriculum. (d) school organization (e) school program, and (f) teaching methods, which would be more valuable if they were accompanied by an analysis of the background factors that make sense and enliven a nation's education.

It is argued that the comparative study has a broad scope, thus encompassing some important aspects, including (a) all information about education and training systems in different societies, (b) various theories or educational information, such as educational philosophy, educational curriculum, educational administration and budget, educational methodology, problems with teacher supply and their guidance, and applicable regulations, (c) educational history of a country, because history can explain today's educational problems, (d) the background culture of a society or nation, which influences the emergence of different education systems from one country to another. By examining the cultural factors of each society or nation, the perpetrators of the study will find the key issues that underlie the current education system. From these explanations, it can be understood that comparative education is not only to examine the education and training system that exists in a country, but also to discuss the ideas, concepts and educational theories that it has developed as the basis of a society’s education system. Comparative educational science is not sufficient to focus its studies only on the comparison of educational theories existing in a society. Likewise, comparative education is not simply observing the history of education in a country or several countries in order to know the main points of the problem. However, all of the above mentioned are nothing but part or elements of comparative education, so the scope of comparative education studies is very complex, so it must cover various areas of background factors influencing the development of a nation in a country. Hence, the comparative educational science that now exists, paying attention to the various background factors that influence it, including historical, social, cultural, economic, political factors and philosophy of life.

**Application of the Method in Comparative Education Studies**

Comparative education recognizes the study of time and space dimensions. If the time in question includes the present, the methodology that can be used is descriptive, empirical, or ex post facto. If the time in question has passed, the

methodology used is historical. Thanks to the historical method, studies can be developed by comparing educational events in the past. While the spatial approach is primarily aimed at studying adult education or current events, the methodology used is historical and philosophical (Phillips and Schweisfurth 2014; Manzon, 2018; Silova, 2019; Flessa, Bramwell and Mindreau,2021).

Some of the types of methods include Descriptive Method and Historical Method

*Descriptive method* attempts to describe an event that is currently occurring. In other words, descriptive research directs attention more towards real problems, as at the time of the research. Therefore, descriptive research method in education mostly functions to solve the practical problems of education. Its application in comparative education studies is to compare educational events based on existing facts. The use of this descriptive method is not only limited to regularly collecting facts or information, but researchers must also try to make predictions and determine the relationship between one variable and another. It would be even more perfect if the researcher could directly face and experience concrete educational situations and conditions in a country. Apart from this, written material sources are also indispensable to expand the wealth of knowledge needed. For example, the researcher wants to find similarities and differences about the phenomenon of the education crisis in the countries studied, based on the observations of experts in various countries, including (a) population explosion, which continues to increase each year, resulting in an increasing number of school-age children who cannot be placed in educational institutions, (b) the problem is that the products of educational institutions are not suitable for the objective needs of social development, (c) the administrative system is less efficient and is directly related to the technical staff of education still in the field of management, (d) inadequate educational facilities and infrastructure that hinders the smooth teaching and learning process in the relevant educational institution, (e) low cost of education, so that education personnel, including teachers, are less calm while performing their duties, as they need to seek additional income outside of non-educational duties, (f) the purpose of education is often not clearly formulated or often changes due to changes in political policies in the respective country. This can occur in both formal and non-formal education settings.

*The Historical Method* is an attempt to study and research facts and draw conclusions about past events. In this study, researchers need to be able to find, evaluate and interpret facts obtained with an objective mathematical system in order to understand the past. Findings of the past can be used as material for the present and predict future events. In the field of education, in addition to being

used in historical research, history and antiquity research, it is also used in history and archaeology research, and is also used to examine the development of education. The evaluation curriculum at times serves as a tool for assessing the current situation and even as material for the future.

There are two sources, primary sources and secondary sources, that can be used in historical research. The primary sources include documents, direct remains of events, and eyewitness records such as meeting notes, records of events, artwork, eyewitnesses, and others. The secondary sources are second-hand sources such as books, articles, research results, and encyclopaedias. In addition to determining the type of source, historical methodology also tries to determine the quality of sources by applying two types of examination techniques called external criticism and internal criticism. External criticism includes criticism that questions the authenticity and fairness of data or information sources, taking into account the presence or absence of authors and publishers. Internal criticism questions who is the author or compiler of written sources (Yahya, 2011).

**REFERENCES**


1. Anderson, C. (2008). The End of Theory: The Data Deluge Makes the Scientific Method Obsolete. Wired. Last Modified 26 May 2022.,
2. Brickman, W. W. (1973). Comparative Education: Concept, Research, and Application. Conference on Comparative Education, William W. Brickman, New York University
3. Flessa, J., Bramwell, D. & Mindreau, G. C. (2021). Educational Administration Research in Comparative Education, 1995-2018. *Comparative Education Review,* v65 n3 p419-444
4. Georgakis, S. & Graham, J. (2016). From Comparative Education to Comparative Pedagogy: A Physical Education Case Study. *The International Education Journal: Comparative Perspectives* Vol 15, No 1, 2016
5. Hans, N. (1955) *Comparative Education: A Study of Educational Factors and Traditions.* London: Routledge & Kegan Paul.
6. Kandel, I. L. (1970). *Comparative Education.* Riverside Textbook in Education. Reprint 1970
7. Lewis, S. (2022). New practices of comparison, quantification and expertise in education: Conducting empirically based research. *Comparative Education Book Review* DOI: 10.1080/03050068.2022.2107323
8. Mallison, V. (1957). *An Introduction to the Study of Comparative Education*, London Macmillan, 1957, Loc. Op. Cit dalam Menuju ke Imu Mendidik Komparatif. H.I.N. et. al. Hal.65
9. Manzon, M. (2018). Comparative Education Histories: A Postscript. *Comparative Education,* Volume 54, N1.
10. Phillips, D., & Schweisfurth, M. (2014) *Comparative and international education: An Introduction to Theory, Method, and Practice.* London: A&C Black.
11. Sarumpaet, J. P. (1966). *The Structure of Bahasa Indonesia*. Department of Indonesian and Malayan Studies, University of Melbourne, 1966.
12. Silova, I. (2019). Toward a Wonderland of Comparative Education. *Comparative Education,* Volume 55. N4.
13. Trethewey, A. R. (2014) *Introducing Comparative Education.* Elsevier: London.
14. WHEOS (1951). World Handbook of Educational Organization and Statistics, UNESCO, 1951
15. Yahya A. D. (2011). *Mengenal Ilmu Perbandingan Pendidikan*. Fakta Press, lampung, 2011

16. Zajda, J.& Val, R. (2021). *Globalisation, Comparative Education and Policy Research*. Globalisation and Comparative Education: Changing Paradigms. Globalisation, Comparative Education and Policy Research. Volume 24

## Chapter 5

# A Brief Look at Video Utilization in EFL Setting

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## 1. Introduction

With the rapid progress of technology, the way of teaching and learning English has been changing dramatically. The focus has shifted from traditional teaching tools to modern teaching techniques, such as implementing multimedia and audiovisual materials into the lesson. It is widely accepted that this method of instruction has considerable potential for improving the way students are incorporated into a classroom setting. Learners have to be exposed to a variety of different means of demonstrations, such as visual, verbal, and auditory ones, together. As a result, one of the most widely used teaching tools has become video materials such as movies, TV series, and short clips, which combine these demonstrations in their body.

## 2. Constructivist Perspectives on Video Use

Nowadays, there have been profound changes in education and teaching materials due to developments in science and technology. Many classrooms are replacing their traditional structures with more constructivist ones, which give a more relevant and independent role to the learner (Cobern, 1993). As learners find a chance to have a significant role in their own learning, they develop satisfaction of doing something by themselves which helps them take more part in the learning process.

The constructivist teaching theory effectively uses students' prior knowledge and cognitive structures based on their experiences (Mayer et al., 1999). To activate learners' imagination and prior knowledge, the changing trend in constructivism requires implementing more visual aids into the lesson plans to foster learners' curiosity and help them create their own learning atmosphere. Using videos in addition to animations, pictures and graphics activate learners' prior experiences. As stated by Moreno and Mayer (2000), incorporating visuals, animations, photographs, and graphics into interactive digital learning resources supports learning through experiences that align with the learner's visual and verbal receptacle systems. This means that learners use videos that activate their background understandings and help them make inferences and construct knowledge. Carey (1985) summarizes it by saying that students do not passively absorb information when they employ video materials for learning; instead, they experience meaningful learning, which involves actively creating and modifying knowledge structures.

## 3. Using Videos as Authentic Materials

Authentic materials are usually assumed as newspapers or articles. However, the term can also refer to content that is written in the target language but is not

intended to be explicitly educational, such as music, websites, radio and TV broadcasts, movies, leaflets, flyers, and posters. According to Gower, Phillips, and Walters (1995), anything an English-speaking person might hear, read, or use can be considered authentic, including theater programs, newspapers, magazines, poems, songs, brochures, menus, and news broadcasts and movies. Although some authentic resources are more challenging to grasp than others, they are not leveled since they are not created for EFL students.

By using authentic materials, learners are able to encounter words and constructions that they would probably never see in traditional EFL materials. These authentic materials are appropriate for learners and are effective in language learning and production. It is a fact that these resources also increase learners' motivation and better meet their needs. According to Gower, Phillips, and Walters (1995), the aim of language learning is to understand and use the target language in real life; thus, using authentic resources will teach learners what they need to know to communicate effectively.

Using authentic materials is also suitable for cultural recognition and learning. These authentic visual materials give information about the country's culture where the target language is spoken. According to Grant and Starks (2001), language teachers should seriously consider using carefully screened conversational data from video materials such as television programs to help their students learn various aspects of the target language and culture. Moreover, as it is pointed out by Grant and Starks (ibid.), video samples would help students' transition from simplified language to real-life language and provide a welcome alternative to textbook data. In addition, as stated by Ekinci and Ekinci (2017), authentic materials such as videos can also be used as an alternative to textbooks as they provide information about social and cultural contexts and give structural knowledge of the target language.

In summary, using videos as authentic materials has countless benefits for learners. The employment of video samples in the classroom helps students comment on the given material, enhances their comprehension, and provides paralinguistic and social features of the target language.

**4. Using Videos in EFL Classes**

With the rapid development of technology, audiovisual resources have increased as a means of entertainment and education. In parallel with this development, educationalists have recognized video materials' immense position and constructive power to help language learners achieve their goals and use them before, during and after classes.

With the easy accessibility of technology and multimedia materials, videos have begun to be used as language teaching and development tools. Berk (2009) articulates various outcomes of using videos in the classroom. According to him, videos can engage students, direct their attention, help them concentrate, increase interest in class, foster a sense of anticipation, energize or calm them for learning exercises, tap into their imaginations, change how they feel about the subject matter and learning, and help them connect with other students and the teacher. In addition, these videos can help students retain more information, encourage creativity, increase the flow of ideas, promote deeper learning, allow for freedom of expression, facilitate collaboration, inspire and motivate students, make learning enjoyable, set the right mood or tone, ease tension on difficult subjects, and produce memorable visual images. The interactive and facilitative features of videos can improve the students' English proficiency and provide a suitable environment for language learning.

Using videos does not just present linguistic features alone. It also addresses the paralinguistic dimension of language learning. The use of non-linguistic elements like gestures and facial expressions in the videos may help students better understand the discussions (Chapple & Curtis, 2000). Besides, the language spoken in the video materials is authentic and presented in the appropriate cultural context. Because of this, these resources may be invaluable tools for promoting more proper language use and avoiding cultural misunderstandings (Herron et al., 2002). In brief, it is possible to use video content as a teaching aid to obtain different linguistic, cultural, and communicative goals.

**5. Disadvantages of Video Use in EFL Classes**

Despite various benefits of using videos to teach and improve language components, there have been some counter-ideas about their utilization in education. To start with, the paralinguistic features that video samples offer may sometimes be confusing for learners because of many reasons. For instance, Strange and Strange (1991) express that as authentic video segments are prepared for the natives, the paralinguistic features such as body language, gestures or mimics may sometimes be unclear and unsupportive for non-native speakers. It is possible because most of the videos in the market are not prepared just for educational purposes. It is not easy to employ them without any adaptation. The cultural elements and personal relationships may seem complicated, and the learners may feel alienated if the instructors do not choose the videos carefully. It is essential that there are many video types and titles which are not suitable to

be used in the classroom. The scenes with hot topics such as sex, violence, or profanity are problematic (Gareis, 1997).

In addition, video materials entertain, fascinate and motivate language learners. Nonetheless, this entertainment and enjoyment may sometimes cause the learner to overpower the message; in other words, if the enjoyment is exaggerated, the viewers may remember only the humor but fail to learn the message or the subject matter in the material (Koumi, 2006). At this point, the teacher has the responsibility and duty to motivate learners by capturing their attention and convincing them about using videos to improve their language proficiencies instead of just watching for entertainment.

Video implementation in the language classroom may also be challenging for the teacher. First of all, it really increases the teacher's workload when it comes to selecting videos, previews and preparing the relevant activities to be used in the classroom. All of these preparation phases potentially take a tremendous amount of extra time. Ekinci (2021) states that one of the chief disadvantages of using videos for educational purposes is that it requires special preparation, which can be time-consuming for the teacher. The reason is that the teacher needs to watch the videos beforehand and adapt and edit them to make them suitable for the learners and learning context. Also, Braddock (1996) claims that another challenge for teachers is that there are no specific methodologies taught in teacher training programs for using video technology in schools. It means that the teachers need to develop their own strategies and transfer them to the teaching environment.

## 6. Conclusion

The study demonstrated that the use of video content provides numerous benefits for language learners who want to learn English and improve their language proficiencies. Language learning activities should not be limited solely to classroom activities, and traditional materials such as videos and other audiovisual materials might be used as alternative resources for language education. Although the use of video materials may offer a remarkable experience to EFL students with respect to language learning and improvement, these materials should be carefully screened by the language teachers as they may include offensive and unsuitable content for the students.

**References**


1. Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom. *International Journal of Technology in Teaching & Learning*, *5*(1).
2. Braddock, B. (1996). *Using films in the English class*. Hemel Hempstead: Phoenix ELT.
3. Carey, S. (1985). *Conceptual change in childhood* (Vol. 460). Cambridge, MA: MIT press.
4. Chapple, L., & Curtis, A. (2000). Content-based instruction in Hong Kong: Student responses to film. *System*, *28*(3), 419-433.
5. Cobern, W. W. (1993). Constructivism. *Journal of Educational and Psychological Consultation*, *4*(1), 105-112.
6. Ekinci, E., & Ekinci, M. (2017). Perceptions of EFL Learners about Using Mobile Applications for English Language Learning: A Case Study. *International Journal of Language Academy, 5*(5), 175-193.
7. Ekinci, M. (2021). The effects of using TV series on listening achievement level of EFL students. *International Journal of Language Academy, 9*(3), 365-378.
8. Gareis, E. (1997). Literature and film adaptations: Dealing with hot topics in the ESL and literacy classroom. *Journal of Adolescent & Adult Literacy*, *41*(3), 220-222.
9. Gower, R., Phillips, D., & Walters, S. 1995. Teaching Practice Handbook (New Edition). Oxford: Mac Millan Heinemann.
10. Grant, L., & Starks, D. (2001). Screening appropriate teaching materials Closings from textbooks and television soap operas. *IRAL-International Review of Applied Linguistics in Language Teaching*, *39*(1), 39-50.
11. Herron, C., Dubreil, B., Corrie, C., & Cole, S. P. (2002). A Classroom Investigation: Can Video Improve Intermediate-Level French Language Students' Ability to Learn about a Foreign Culture? *The Modern Language Journal*, *86*(1), 36-53.
12. Koumi, J. (2006). *Designing Video and Multimedia for Open and Flexible Learning*. New York: Routledge.
13. Mayer, R. E., Moreno, R., Boire, M., & Vagge, S. (1999). Maximizing constructivist learning from multimedia communications by minimizing cognitive load. *Journal of educational psychology*, *91*(4), 638-643.
14. Moreno, R., & Mayer, R. E. (2000). A coherence effect in multimedia learning: The case for minimizing irrelevant sounds in the design of multimedia instructional messages. *Journal of Educational psychology*, *92*(1), 117-125.
15. Strange. J. & Strange, D. (1991). Survey: Video Materials. *ELT Journal*, 45, 335-359.

## Chapter 6

# Power and Ideology in Elt Reading TEXTBOOKS[1]

**SERDA GÜZEL[2]**

1 This study is based on PHD thesis called "The Representation of Western Ideology and Sociopolitical Contexts in ELT Reading Textbooks" (İstanbul Aydın Üniversitesi,2019)

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## 1.Introduction

The study and research about the language and power in organization, social and politic aspects is popular. However, the study and research about the relationship between language, power and ideology in education is rare. In this sense, this study can contribute to understanding of ideological motivations and the hidden ideologies of the selected ELT reading textbooks. This study can provide critical language awareness (Fairclough,1989) to the language planners and textbook writers. Textbooks do not have value free and unbiased information and language is not neutral (Fairclough,1989). In this sense, it is significant to examine selected ELT reading textbooks through CDA. The thesis tries to explore the hidden ideology in selected ELT reading textbooks. In this sense, ELT industry will be questioned in this thesis. Fairclough's three dimensional framework (Fairclough,1989) and Hallidayan approach (1994) will be used in order to reveal particular discourse and hidden ideologies. Awareness of these ideologies can have significant impact for language instructions and instructional decisions (Fairclough,1998). Because language reflects, shapes, and establishes cultural and educational reality and language is not ideologically neutral, power and inequaliy are embedded in ELT reading textbooks. In this regard, the thesis tries to indicate how the ideological and political considerations and hidden western socio political agenda and patterns are employed through textual properties of ELT reading textbooks. Importantly, Fairclough's three dimensional framework is used in order to reveal explicit and implicit western agenda in selected ELT reading textbooks. Therefore, the study focuses on how textual properties of ELT reading textbooks transmit the political considerations, authority and ideologies in written texts. In this regard, the study tries to discover authoritative role of ELT reading textbooks. These issues will be questioned in this thesis because there is a connection between language, power and ideology so there is a political and ideological investiments in text and talk (Fairclough,1992:78). As a final remark, this study's research topic can be seen as a significant because norms, preferences, and ideologies of western countries take place in ELT textbooks and generally they are hidden and implicit in the textbooks. These textbooks are produced for people in other parts of the world and their beliefs, preferences, norms and ideological interpretation are different from native speakers of English. This study tries to connect social practice and linguistic practice this means that the study focuses on micro (linguistic features) and macro analysis (power, ideology) of discourse in selected ELT reading textbooks (Fairclough,1989). Furthermore, this work tries to discover covert ideology which is hidden in ELT reading textbooks.

## 2.Literature Review

Critical Discourse Analysis reveals dominance, oppression, control, power, discrimination. The ideology is coded in discourse (Fairclough,2001:1-3). CDA examines written, spoken and visual discourses in order to reveal ideology and power in discourse (Fairclough,2001). Regarding this, CDA focuses on larger units of texts or discourse so it does not focus on isolated words and sentences (van Dijk,1998:12). The inflence of ideology and power on language use is the main issue for CDA (Fairclough,2001). In addition, CDA analyzes underlying ideologies, conventions, assumptions and presuppositions in discourse (Fowler,1991:67). In daily dialogues and conversations human beings cannot be separeted from language because language is used as a tool of communication. In communication there is an interaction between speakers and hearers. In this interaction, there can be unequal power relationship between speakers and hearers. This issue can be observed from how somebody dominates in a conversation or someone can control the other's talk. Unequality in language use is examined by CDA. CDA is a discourse analytical research it studies the way of social power abuse, dominance, and inequaliy that are coded, reproduced and resisted by text and talk in social and political context. (van Dijk,1998:9). CDA examines the written, spoken and visual texts and it explores the discursive sources of power dominance, inequality and bias (Fairclough,1989:31). The term of "critical" refers to implicit and explicit relation and association between language, power and ideology (van Dijk,1998:20-21). As mentioned before, CDA tries to reveal discursive sources of power dominance, inequality and bias and it also examines written spoken and visual texts, it analyzes how the discursive sources are maintaned and reproduced within particular social, political and historical contexts (Van Dijk,1998). In the same perspective, CDA is a discourse analysis and it explores discursive practices, events and texts, social and cultural structures, relations and processes. It discovers how these practices, events and text are ideologically established by relations of power and struggles. In addition, CDA explores power and hegonony in the texts. (Fairclough,1989: 135). CDA is an approach and it has political aim. It tries to reveal hidden meanings which are encoded in language. CDA focuses on disadvantaged groups for example ethnic minorities (Fairclough,1989). CDA is a discourse analytical research and CDA tries to analyze social inequality in social and political context. Thus, this thesis focuses on sociocultural and sociopolitical contexts in ELT reading textbooks. In this regard, Fairclough's three dimensions of discourse, description, interpretation and explanation stage of discourse will be used by the study. CDA can be a suitable method in order to reveal manipulative language of reading texts in ELT reading textbooks. CDA focuses on how social identities,

relations and power relations are established in written and spoken texts. CDA tries to reveal relationship between discourses and social reality and inequalities of power which construct and shape our world (van Dijk,1998). In this sense, the study tries to reveal social, and ideological values in selected ELT reading textbooks. Notion of power, dominance, hegemony, ideology, class, gender, race discrimination interests, reproduction, institutions social structure, and social order are typical discourse analytical notions in CDA. CDA focuses on written and spoken texts and it tries to investigate discursive source of power, dominance, inequality and bias. In this sense, it analyzes how these discursive practices are shaped constructed in social, political, 17 and historical contexts (van Dijk,1998:31-32). In this perspective, CDA tries to link between discouse practices, social practices, and social structures. According to CDA, events and texts are ideologically constructed by relations of power (Fairclough,1993). In this sense, CDA tries to show how ideology and ideological processes are shaped in linguistic characteristics and processes. CDA's analytical tool based on Halliday's Systemic Functional Grammar. According to Halliday, language is seen as a social act and there is a close connection between linguistic structure and social structure (Halliday and Mathiessen,2004). Therefore, language is a social act (Fowler,1991:76). The writers or speakers make vocabulary and grammar choice, and these preferences are based on consciously or unconsciously selection and they are principled and systematic (Fowler,1991:70). In this regard these choices are ideologically based, so language is a social act and it has ideological motivation (Fowler, 1991:19).

**3.Research Questions**

Do selected ELT reading textbooks represent neutralness in terms of ideology and power? • How Western ideology and power represented in selected ELT reading textbooks? • How selected ELT reading textbooks textually portray Althusser's notion of ISAs and RSAs? • How selected ELT reading textbooks textually portray Gramscian notion of hegemony? • How selected ELT reading textbooks textually portray Marxist notion of false consciousness? • Which linguistic structures and strategies are used by the authors in order to construct Western and US centrism power and supremacist ideology through discourse?

**4.Presentation of the Textbook Name of the Textbook:**

Password 5 Date of publication: 2017 Author (s): Lynn Bonesteel Publishing House: Pearson Type of the textbook: Internationally designed material meant for teaching new words, improve readers' reading skills, explore vocabulary by means of a wide range of topics (Password, 2017:xi).

## 5. Unit 1
## Artistic Innovations

### 5.1 Chapter 3
### The History of Rap

### 5.2 Textual Structure

Based on CDA, the primary tense in this passage is present simple tense and as it is mentioned before, it indicates facts, true situations and events. The title of the reading passage is also significant “The History of Rap” so while presenting the history of rap the author uses simple present tense. It implies that the author’s source of knowledge is based on truth and history is shaped by author’s point of view (US and Western centrism). The author controls the discourse again the author does not use any grammatical devices, which are related to agreement between readers and writers such as tag question is not used in the text. The author gives information to the readers without asking or eliciting any response. This indicates that the author controls the discourse and she /he holds the power and authority and the author in the position of giving information and it implies that what he/ she says or describes is real even though the text is never neutral ( Fairclough,1989). • In the linguistic structure, the sentences are affirmative and it indicates that the author is giving information. This kind of discourse carries the particular ideology and this discourse can motivate readers to think in a particular way. The usage of simple present tense with affirmative sentences can contain hidden messages. This kind of discourse contains authority and power, Rap Music is associated with Afro American Culture, and Standard English narrates it in educational context. In addition, there is no any vernacular language (structure) which is associated with African American people. Thus, this kind of discourse can be loaded with social, political, racial practices. In this sample, racism, consist of white supremacist and privileged ideologies and negative opinions, attitudes and ideologies against blacks (Van Dijk, 1993). The omission of vernacular language implies discrimination. By means of omission, the text idealizes native speaker’s identity of English and it is racialized in the discourse. The rap music is the prominent culture of African American and while presenting this culture there is no African American vernacular language and it is narrated by American Standard English as the medium of instruction and language of textbook content. The omission of African American vernacular language is negatively stigmatized by exclusion from the text while narrating African American culture. This reproduces ideology and hegemonic practices. It implies that the American Standard English and British Standard English are superior to

African Vernacular English. This supports the idea that The American Standard English and British Standard English are only legitimate and correct English language dialects (Wolfram, 2014). To sum up, this kind of discourse carries hegemonic practices. The African American culture rap music is shaped by idealized native speaker identity (here is author of the text) and it becomes natural and common sense in the text. The extensive usage of simple present tense with affirmative sentences is the example of this hegemonic practice. The author's source of knowledge naturalized in the text. This source of knowledge becomes commonsense in the discourse. In that case, Gramsci's notion of hegemony and commonsense are achieved in the text. Based on Systemic Functional Linguistics (SFL), the author uses the informative or representational function of language and by means of this function language, the author conveys facts and information such as in line 97 "Rap is a spoken form of musical expression." The author uses the term of "African American instead of black in order to use politically correct structure. However, hidden message of the discourse reflects that there is distinction and division between people and it is based on skin color. Nonwhites linguistically stigmatized in the text. To sum up, this kind of discourse conveys certain ideological, hegemonic practices. As mentioned before it idealizes native speaker's identity of English. The author narrates history of Rap music and history of rap is narrated with Standard American English. There is no any example, phrases or words which are associated with vernacular language. This creates social inequality, discrimination and racism and as well as negative stereotypes. The superiority and dominance of US and Western centrism ideology and power are conveyed by this omission. It can be noted here, the global teaching materials in the context of ELT industry reproduce the myth that Standard American and British English are legitimate languages. Because teaching materials only legitimate and use mainstream Standard or American and British English. Based on CDA views of language as an ideological (Fairclough, 1989) this text supports this ideas and the particular US and Western centrism ideology and power are transmitted by language and discourse. The author gives information about Rap culture. The author conveys the worldviews and perspectives of Rap music. He does not cite any references associated with rap culture. It means that the author is the only authoritative figure while presenting the knowledge. The rap culture knowledge is shaped and constructed by Western point of view. This hegemonic practices support the idea of Fairclough (1989) knowledge is not neutral. The words, which are related to rap music, are presented in the text. For example, a rhythm, a turntable, disco music, verbal. The author explains the words' expressions. These words are used in order to activate background knowledge in other words with Fairclough's argument MR.

(Fairclough, 1989). As mentioned before, an African American lexical choice is significant the author uses politically correct lexical item but she/ he explains the word's meaning. Based on Systemic Functional Linguistics theauthor uses the heuristic function of language is used to obtain and explore knowledge. When the author explains the African American lexical item, he/she uses the word of black. As mentioned before, this lexical choice creates discrimination. In addition, it reflects white supremacy. In this way, the text serves certain ideology and power as related to social power and identity in terms of race. In line 1, Hip hop is a culture with its own language, clothing, styles, music, and ways of thinking and it is constantly growing and changing." The author uses the relational process and the verb of to be is used while presenting the information. In terms of relational value analysis of the text, the language establish certain ideology. Based on this, African people are different from White people. This creates a view of polarized world, us/ them world. "Them" is associated discursively with African people. Such a hegemonic term reproduces and reinforces discursively the concept of inferiority and superiority between the African and White people. The selection of syntactic and lexical choice reinforces socio cultural and socio economical gap between African and White people. Such discrimination reproduces US and Western centrism social and political ideologies. The lexical choice "ways of thinking" is significant in the text. In terms of Fairclough's MR analysis of the text (historical context of the text) African people, challenge the coding schema, predetermined themes and concepts that are imposed by white supremacy by means of rap music.

**5.3 Discourse Practice**

The reading passage is about the history of rap music. Rap music's historical perspectives, practices and products are presented in the text. The explicit message of the text to encourage the cultural understanding of the rap music and African People. In this way, the text is able to increase the tolerance between different cultures. The implicit hidden message of the text reinforces Standard British and American Culture. As it is mentioned before the rap music is narrated by Standard mainstream British and American English there is no example of vernacular language in the text. because rap music is based on vernacular language. This linguistic and cultural content are omitted in the text. This implies that the text does not present historical and sociological dimensions of African people. The text does not provide alternative interpretations of the world. There is theoretical information about rap culture according to mainstream US point of view. The hidden message implies that the rap music's source of knowledge and is shaped and constructed by white dominant class in the text. • The author gives

only one rap music figure. He is male. (In line 4-rap artist Grandmaster Flash. In that case, there is no woman rap music figure, in other words woman subject position in the text. In this sense, the text has sexist behavior. The text depicts the success of male subject positions associated with rap music but female subject positions associated with rap music is not linguistically presented in the text. This kind of omission creates gender bias in the text. The omission strategy implies that African Woman is passive observers and African men as active doers in artistic activities. Actually, rap music generally associated with socio political rebellion and resistance of African people for social and political inequalities. In that sense, the women are omission reflects sexual stigma and this omission creates stereotype African men struggle against inequalities and injustices but African women are only capable of occupying subordinate positions. To sum up, African women are totally excluded and marginalized by the text. This omission reflects that they are nameless, voiceless, and faceless and they are no active agency in this resistance and fighting against inequality by means of music. • The author writes about another group of people cultural and socio political features. I use the term socio political because "in line 1" the author uses "rap music is ways of thinking of African people." The linguistic form and process is selected according to author's social reality. The passage reinforces discursively the author's (White and US and Western dominance) knowledge. This dominant source of knowledge shapes the readers' mind according to US and British mainstream hegemony. Because the knowledge comes from dominant class. In addition, it serves dominant class interests. The author's social reality is presented about rap music in the text and in this way the text's hidden message promotes US and Western centrism author character is described as active and good at self-expression. Genre discourse type is article the channel is written. Intertextuality The text is about rap music but interestingly there is no direct and indirect quotes, which are, represent African people voices. The text indicates that the source of knowledge and control of knowledge is US and British mainstream stuff. The author (dominant class) is represented as agent with active voice and a third person narrator is passively talking the African people and their symbol of culture rap music. The text only gives African male subject position but the text does not reference his words in the text. He is just simple example of the author. To summarize, African men and women voices are not expressed in direct and indirect quotes. In this way, the textual portrayals of the influential women and men are represented as passive agents, they have no active voices, and a third person is just talking about them.

### 5.4 Social Practice

The male African rap music artist is presented in the text. The female subject position associated with rap music is discursively omitted in the text. This creates gender bias in the text. Actually, the male African music artist is presented in a limited way. The text does not include detailed information about his birth, education, racial ad familial background and his efforts and accomplishments are not presented as a social activist in fact rap music is associated with socio political concept of African people. They resist and fight against white supremacy and they want to promote democracy for themselves by means of music. However, the author's social reality does not present these issues. The African social identities' direct and indirect quotes are marginalized in the text. This serves the social inequality and gender bias (the only superficial example in the text is African male) and the author (dominant class) is portrayed as they have alot of to say and to do about the topic. This promotes their intellectual capacities and qualities. The author controls the knowledge and the knowledge is shaped by the author's social reality. This linguistic strategies support the Fairclough's idea knowledge is not neutral (Fairclough, 1989). The author gives only example male African rap artist. The female African rap artists (social identities) are omitted in the text. In this way, only masculine generic "he" is used in the text. This creates gender bias and social inequity in the text. This kind of discourse implies that the author's gender equality and social equality awareness of discursive construction is not presented in the text. This creates hegemonic practices. White supremacy, British, and American mainstream ideology and power are discursively transmitted in the text. The title of the reading passage is also significant "History of Rap Music". The author's omission of direct and indirect quotes of African people manipulates the history of African people. To sum up, the history of African people in this text rap music is narrated by white supremacy point of view. African people have no voice in the text while narrating their history about rap music. (Rap music can be associated with their speech freedom, their resistance against social inequality). Racial biased and sexism (no female African subject position in the text) gender biases are legitimated and reproduced in the verbal text. The text reflects sexist and male supremacist and white supremacist ideology. As mentioned before, the author's social reality shapes the discourse and History of African people is presented dominant class point of view. There is no effective and influential African people subject positions in the text. (Except superficial one male African rap artist Grand Master Flash). In addition, there is no examples of vernacular language in the text. Based on Fairclough's MR analysis (interpretative procedures, often called background knowledge (Fairclough, 1989:142) vernacular language is the significant element for rap

music in large-scale vernacular language reflects African people rebellion and resistance the white oppression. Based on Althusser and Gramsci's concept of ideologies, standard British and American English is used as a state apparatus and hegemonic power for oppression African People. This text represents linguistic and racial discrimination and apartheid. The text (the author, white dominant class) imposed Standard English Language on Africans and the omission of vernacular language (their mother tongue) impose certain white supremacy 102 ideology. This argumentation supports the Fairclough's idea that texts are never neutral (Fairclough, 1989). The text reflects the prestigious social position and significant role of the mainstream standard British and American language. Because the text omits the vernacular language. In this way, it conveys particular western and US white supremacy ideologies. The omission of the female African subject positions creates gender bias in the text. The author does not use any African people direct and indirect quotes and only one male rap artist is superficially represented in the text. The hidden message of the text suggests that Western centrism ideologies control the knowledge in this way they hold the power. In line with this, western cultures are presented as in a more positive way compared to nonwestern cultures. Advancement, popular cultures and commercialism are associated with Western social identities. In this text, the author (dominant class) presents nonwestern culture and while presenting the nonwestern culture African people are voiceless. The text reinforces the idea that there is no gender equality between women and men and there is no social equity west and nonwestern world. The text is produced by Mainstream Standard British and American language and the text legitimatizes and uses Standard British or American language. In this way, the article act as a source of official knowledge. The author's social reality gains official quality the author gives the information without citing and referencing any texts and subject positions that are related to African culture and heritage. In this respect, the discourse has strict authority white supremacist knowledge and it tries to shape and construct the African American history according to West and US centrism point of view. In terms of power relations, the text implies that White supremacy is the only source of knowledge and authority. • The reading passage focuses on history of rap music and in a large-scale African American culture. However, while presenting the information the African American social identities and their lives (except only superficial example of African male figure) are absent from the text. This article shows that art, music, culture from the African American people only have value from the perspective of White dominant class and the text does not reflect the art, music and culture of African people from their origins. To achieve and establish White supremacist US, Western ideology, and hegemonic practices the reading

passage ignores their vernacular language and their subject positions (both men and women). The text reflects the US and Western centrism ideology and power because the text reinforces the idea that the mainstream Standard American English and British English is a lingua franca. The omission of African American subject positions and their vernacular language from the text supports the idea of Pennycook (1998) English constructs and define others. This creates us/ them paradigm. Because this article promotes hegemonic power of English. The mainstream Standard American English and British English is a language of domination and power and this statement supports the Fairclough's idea again language is never neutral, it is ideological (Fairclough,1989).

**6.Presentation of the Textbook TOEFL IBT PREP PLUS 2018-2019**

Presentation of the Textbook Name of the Textbook:

Toefl IBT PREP PLUS 2018-2019

Date of Publication: 2017 Publishing House: Kaplan / Printed in the United States of America

**6.1 Home Schooling**

**6.2 Textual Practice**

In terms of relational value, the article is written declarative mode. The extensive use of simple present in declarative mode establishes discursively certainty and authority. In addition, the extensive use of verb to be - a relational process in the present simple tense establishes ultimate true and certainty. In this way the events in the article is transmitted as authoritative and they are not changeable (Johnstone, 2002). In this regard, the author tries to establish certainty and the author discursively transmit the information authoritatively. In addition, the use of the present simple tense in relational process may establish linguistically factual reality, despite the fact that the article is only a product of US and Western centrism publication. In addition, the omission of simple past tense indicates that the author does not construct background knowledge about the topic. This linguistically means that the author tries to capture here and now the present moment. This omission may also indicate that the Western centrism educational system has already known. In this way, the presupposition is used as a linguistic device in order to manipulate the target readership. • The extensive use of declarative sentences in simple present tense form of the verb – a relational process- and in terms of experiential value, positive sentences discursively establish factuality and authority. The extensive use of positive sentences imply that the author tries to convey positive message from US and West. The positive

semantic patterns, euphemistic items, and positive qualities are discursively associated with US and West. The extensive use of positive sentences in the article reproduces the selfglorification in the term of positive self-representation. In this way, the target readership can internalize and normalize US centrism constructed social realities in a positive way. • In terms of experiential value, the author discursively uses active voice in simple present form of the verbs. This discursively points out that the US and West (in this article American parents) have active voices, selfexpressive, knowledgeable and they are given agency and they are embodied in the article. The extensive use of active sentence discursively points out that the American social identities (American parents) are discursively represented as role model for the world. It can be noted here, the inclusion of American parents' influential voices indicate that they are active voices and they are active voices. The American parents are not 198 textually represented as by a third person narrator. In this way, they are not described as passive people who are acted upon others. In terms of relational value the epistemic modalities (can, may, will) are used in the article. "Can and may" reflect low degrees of modality and will reflects high degree of modality. In that case, the lower level degree of authority and high-level degree of authority discursively conveyed in order to establish coercive power and soft power. This gives sense of hegemony to the article. In terms of experiential value, the nominalization is used in order establish rhetorical effect. (See line 5). In this way, the author establishes impersonal agent in order to reduce the dominant voices of American parents. In this way, the author tries to enact neutrality and objectivity in the article. In terms of experiential value, transitivity analysis is significant for CDA. The relational process (to be simple present tense form of the verb) is extensively used in the article in order to establish authority and certainty. The events in the article are represented as factual reality and they are unchangeable in some way. (Johnstone, 2002). The existential process is not used in the article. This implies that the objectivity and neutrality are not established by using existential process. The lexical item, know, learn (See line 3) is used as mental process in the article. The term of destroy (See line 5) is used as a material process and the term of spend (see line 5) is used as a behavioral process. The ideational meaning in the article is established through the transitivity. In terms of Halliday's SFL, the informative or representational function of language is employed in order to transmit facts and information. In addition, the article includes personal function of language in order to convey American parents' feelings and beliefs about homeschooling.

### 6.3 Discourse practice

The topic is about American parents and their beliefs, opinions about homeschooling. The condition of public and private schools in America is also discursively discussed in the article. The headline of the article 199 contains one lexical item. This lexical item can be seen as an ideologically laden lexical item in terms of education system (Althusser's ISAs). In order to establish persuasion and rhetoric effect the author uses one lexical item. In terms of Architextuality, the article can be classified by title without deep reading. The headline suggests that this article must be about educational system. It can be noted here American based education system and American parents' feelings and opinions about educational system such as homeschooling is employed in the article. The article's topic explicitly convey US centrism norms, values and social realities. In this way, the topic of the article discursively conveys US Centrism ideological values and norms through the educational system. In terms of subject positions, the article employs US centrism social identities. The US Centrism social identities are represented as American parents and American children. The term of American is an ideologically laden lexical item and it reproduces American nationalism and American patriotism. The author establishes American nationality through the use of US centrism social identities. The US centrism social identities are represented parents this discursive strategy and lexical item "parents" implies American family values, norms and social realities. In this way, the term parents can be seen as an ideological item. The lexical item parents connotes family values and norms. This connotation in today's political view reflects patriarchal ideologies. The social class of American parents are not conveyed explicitly in the article. Nevertheless, the term of "working parents" implies that this article contains working class identities. It can be noted here, the article's subject positions reflect American values and norms and US centrism ideological expressions are conveyed through the subject positions. The topic seems to be universal and it can embrace all the social identities in the world. However, the topic only covers American social identities specifically American parents and children. The educational system is narrated through nuclear American family. The omission of nonwestern countries and nations family figures reproduces social inequality in terms of race. ın this way, the native speakers' identities of English are racialized and privileged in the article. This means that only (200) American parents and children have right to speak and discuss about educational system in other words schooling. This reproduces US centrism authority and US centrism academic form of power in the text. The American parents and children act as source of information. As mentioned before Halliday's personal function of language is used in the article. The American

parents' personal feelings and opinions about schooling is employed in the article. American parents are not represented as academic titles such as DR, scientists and academician. If the titles are used the article has official authority. In this way, the article's discourse has no official qualities. The authority is establish through the use of nation. (American nations). This implies that US has powerful presence among the inner circle countries in this way the use of "American" racialized images of America and native speakers' identities of English. It can be noted here the omission of titles, academic social identities implies that there is no need prestigious titles and academic qualities if you are American you are superior. The term of American reproduces nationality and self-glorification because only American voices are included in the article about schooling. In this way, their opinions and personal preferences are taken for granted knowledge, they become common sense, and this discursive strategy naturalized the exclusion of nonwestern countries and social identities. Actually, the US is not the only country talk and discuss about schooling. However, article's inclusion and exclusion discursive strategy racializes American identities. In terms of power relations, the article's only source is American parents and children and American based education and schooling system. This reproduces power and domination in the article. It can be mentioned that the article is written US centrism perspectives, norms and values. The genre discourse type is article. The channel is written. Intertextual Context The article does not contain direct and indirect reporting in this way the author does not use manifest intertextuality in the article. As mentioned before the author 201 uses number game discursive strategy in order to establish authority, power and hegemony in the text.

### 6.4 Social Practice

As mentioned before, US centrism social identities are the main characters in the article. The certain US centrism outlook about schooling is represented as ultimate true. The declarative mode and the use of simple present a relational process to be and positive sentences establishes US centrism authority and academic form of power in the article. In this way, the American parents' native speakers of English identity and personal preferences are legitimated and naturalized discursively. Nonwestern nations, countries and social identities and institutions are totally excluded from the article. This omission discursive strategy implies that only US social identities (in this sample American parents and children) and socio political institutions are able to speak and discuss about academic world. Their personal preferences and opinions regulate nonwestern nations and social identities. • Althusser's ISAs is discursively used in order to establish consensus and active consent – hegemony in the article. The article's

topic is directly related to ISAs (education) and the term of American parents, the lexical item parents connotes family institutions. According to Althusser, family is one of the ISA because mind control begins in family. The two significant ISAS family institution and education institution are used in order to give sense of hegemony to the article. According to Marxist ideology, the article uses base and superstructure. The base is (in this article) American parents, they have powerful presence and authoritative positions the nationality item American is extensively used in the article in order to reproduce American nationalism and patriotism. The base determines superstructure. The superstructure (in this article) is educational system, schooling. The US centrism educational system and schooling is legitimated by using number game. The author gives some numbers and percentages (see line 6) in order to naturalize the knowledge. The American parents' personal feelings and preferences are 202 legitimated in the article by using number game and this reproduces false consciousness in terms of Marx ideology. The target readership act, think and behave according to US centrism source of knowledge and preferences. In this case, the knowledge is discursively internalized in the article. The knowledge is taken for granted and it reproduces authority and hegemony. The active consent is discursively achieved by using Althusser (2014) Marx and Gramscian (1971) notions of ideological elements. In terms of topicalization the American parents, children and American based homeschooling are foregrounded in the article. In this way, the American values and norms are foregrounded in the text. This reproduces American centrism supremacy ideology in terms of race because in the article there is no nonwestern countries, nations and social identities. The US centrism supremacy and priority ideology is topicalized in the article. In terms of politeness strategy and relational values, the pronoun usage is important feature for CDA. The pronoun "I" is discursively omitted in the text even though the topic is related personal opinions and preferences about homeschooling. The article conveys American parents' personal beliefs and opinions but the use of "I" and its variants personal involvement is excluded from the text. As mentioned before although the article contains American parents individual voices and beliefs about homeschooling the omission of I and its variants is employed in the article as a discursive strategy in order to establish objectivity and neutrality. The number games (giving numbers and percentages are also used in order to establish objectivity and certainty). The author also does not use personal pronoun "I" for herself or himself. This gives impersonal agency and impersonal authority to the article. The US centrism ISAs and power is naturalized and normalized by this impersonal authority. The in-group pronoun or inclusive "we" is not used in the article. The positive selfrepresentation and negative other representation in other words dichotomy

between “us and them” is discursively achieved by the ideological term of “American”. This ideologically laden lexical item in terms of nationality is used instead of inclusive in-group we. The nationality agency is given in order to establish “US and THEM” paradigm. The ideologically lexical item “American” gives sense of togetherness and solidarity and US Centrism collective spirit to the article. This reproduces US centrism national self-glorification and positive self-representation. The exclusive or out-group pronoun they is used for home schoolchildren. The exclusive they is not used here in order to establish “US and THEM” paradigm in terms of race, gender. ın this way the exclusive, they may not employ sexist, racist ideology. The exclusive “they” might be used in a neutral and objective context. However, the exclusive they still marginalizes the home school education system and the children who take place in this educational system. The exclusive they is used in order to reflect the mainstream education model is popular in USA. In order to underline the popularity of mainstream educational model the exclusive they is used for the children who are part of homeschooling system. The exclusive they in this context reproduces” US and THEM” paradigm in term of ISAS mainstream traditional education and postmodern education. From this point of view, the article’s topic can be associated with emancipation. This polarization indicates the polarizations between capitalism and socialism. Because mainstream education employs capitalist ideologies and traditional values and home schooling gives more freedom and gives more opportunity to children think and behave according to their own way. The ideological term of state and private schools also reproduces polarization in terms of “US and THEM” paradigm. They are used as ISAs because both of them conveys American national traditional values, interests, and ideologies and they establish false consciousness. The children act, think and behave according to US centrism governmental interests and ideology. The term of school in this article conveyer of governmental interests and ideologies. The term of private can be seen as an ideologically lexical item in terms of capitalist and neoliberal ideologies and outlook. The emancipation and getting rid of enslavement mind can be discursively achieved homeschooling. The article’s hidden layer of the meaning may imply that ISAs (mainstream education) functions in the societies. The article can be read as questioning dominant ideologies of US. Nevertheless, this questioning and skeptical thinking about ISAs (American based educational systems of norms and values are articulated by American parents. The extensive use of American lexical item as an ideologically laden word (connotation of nationality) implies that Only US centrism social identities and institutions can criticize US norms. In this way, the omission of nonwestern nations and people implies that they have no right to

speak and criticize US in other words constructed dominant ideologies and norms. • In terms of address, the US centrism and Western centrism social identities are not nominated through formalization. For example, the author does not use the academic or prestigious titles; in addition, the author does not use title such as Mr. Mrs. and Miss that can categorize man or woman. The social actors in other words subjects are not nominated informally by their names, surnames or full family names. They are only functionalized according to their family relations parents mother or father. In this way, they are identified according to family institution father and mother. They have no proper names and they are not individualized they are identified with mother and father. The social identities are classified through relational identification this reproduces traditional heterosexuality family. The patriarchal and sexist ideology is conveyed by using stereotypical role of women as mothers and men as fathers. The traditional family values are discursively achieved by using ideologically laden word parent reinforce the idea that parents are fond of their children. Children are regulated and controlled by family institution. Again, Althusser (2014) ISAs family is used in order to establish authority and hegemony. The term of parent also connotes the marriage institution. The marriage and family institutions are used in order to establish traditional heterosexual family values and authority. In addition, the extensive use of children and parents establishes traditional family institution's hegemony. The social identities classified as a social role according to their ages. The children and the adult (parents). This semantic pattern connotes the age differences and concept of respect for older age. The term of parents, other adults and older siblings are used in order to construct family authority and hierarchy in terms of age. The family hierarchy is discursively establish by classification in terms of age. Because in traditional family institutions age plays important role because age determines respective and higher positions of people in the hierarchy patriarchal societies. It can be noted here, the classification of people in terms of age reproduces patriarchal ideologies, norms and values. The ideologically laden fields geology, biology and history are used in order to establish academic form of power and authority. The use of community discourse lexical item gives sense of hegemonic power in terms of education. In this way, the discourse has educative quality with education community discourse. The term of gangs or drugs are used as negative semantic pattern in other words derogatory lexical item. This discursive strategy implies that US can be recognized as center of drugs and gangs but hidden layer of the meaning of these derogatory terms imply that US governmental agencies are able to struggle with gangs and drugs. In this way by using derogatory lexical items, the author establishes US centrism authority and power. In the last line, the term of major universities and military

academies are used discursively as ideologically laden lexical items. The term of major reproduces authority and the term of university is related to Althusser's (2014) ISA. This ideologically lexical item are used as ISAs in order to establish hegemony and active consent. In this way, soft power is enacted discursively in the article. The term of "military" is also ideologically laden lexical item. The term of military reproduces coercive and physical power and it is related to Althusser's (2014) RSAs. The term of academies is used intentionally in order to reduce coercive and hard power. The term of military shows the US centrism coercive dominant power and ideology. This ideologically lexical item connotes political and military issues related US. Regarding this, Gramsican (1971) political and civil society and Althusser's (2014) RSAs and ISAs are discursively used in order to establish US Centrism hegemony, power and authority. ın addition ın terms of relational value the author uses formal academic form of English language in this way the author backgrounds causal social relationships. Because there is no daily language conservations about schooling. The article does not employ positive politeness because the omission of nonwestern features violates the concept of solidarity and sense of togetherness.

## 7. Conclusion

As stated before, this study focuses on the representation of Western ideology and socio political context in reading ELT textbooks. "Password 5 and TOEFL IBT prep PLUS 2018-2019" are examined in order to reveal ideological constructions and hegemonic practices in the selected written texts. These textbooks are preferred because they contain authentic language and they have different genres (newspaper, magazine articles, articles, essays, academic journals).The written channels are examined in the thesis. Fairclough's three-dimensional CDA model (Fairclough, 1989) is used in order to reveal linguistic discursive strategies; positive selfrepresentation and negative other representation in selected ELT reading textbooks. CDA is used in this thesis because CDA model is a discourse analytical research and it analyzes social power abuse, dominance and inequality in text and talk in social and political context (Fairclough, 1989:184-185). The discursive strategies in terms of Fairclough's relational value euphemistic and dysphemistic items and metaphors, in terms of experiential values synonyms and antonyms are examined in order to reveal how Western ideology and its socio political context are constructed and presented in selected ELT reading textbooks.

In sentence level, in terms of Fairclough's experiential value (Fairclough,1989) transitivity, nominalization, active and passive sentences, positive and negative sentences and in terms of relational value, modes,

modalities and pronouns "in group pronoun "we" and out group pronoun "they" are examined in order to reveal hegemonic practices and ideological motivations. Based on data, Self (Western and US) centrism social actors, institutions, agencies are discursively conveyed positive semantic patterns and meaning. In this sense the Self's (US and Western centrism practices, activities, values and norms are underlined and foregrounded and Self's negative activities, practices are backgrounded in the text. The non-Western nations, institutions, agencies, social actors are not textually portrayed in the selected ELT reading textbooks. They are discursively omitted in the text. The ideological constructions of otherness have been achieved by discursive strategy "omitting". This means that nonwestern nations, subjects, socio political institutions and agencies are textually excluded. The CDA of selected ELT reading textbooks indicate that there is textual ignorance and omission in selected ELT reading textbooks. The "US and Them" paradigm and positive self-representation (US, Western nations, social identities, and institutions) negative other representation (nonwestern nations, social identities and institutions) are achieved by using omitted discursive strategy. The data analysis points out that inequalities, injustices are linguistically and discursively achieved in the selected ELT textbooks by establishing ideological square. Because nonwestern nations, social identities and institutions are underrepresented and excluded from the texts. This omission discursive strategy indicates that the nonwestern nations are the receivers and they are textually portrayed passive and powerless. They are under the control of Western nations and the USA. Because the nonwestern nations, social identities and institutions' progress are not discursively portrayed in the texts. This gives sense of hegemonic practices to the written texts. By using ideological square the textbooks discursively establish the self. The self is privileged in the discourse and the other suppressed and backgrounded in the discourse (Locke, 2004:58-59). Because the nonwestern nations, social identities and institutions and agencies are excluded from the text. In addition, the selected ELT reading textbooks textually portray traditional intellectuals. The social identities that have high paid and prestigious jobs are discursively represented in the written texts. They belong to upper class, in other words, elite class in the society. Especially academicians such as professors, researchers and scientists, business people are extensively portrayed in selected written text in order to establish certainty, authority and academic form of power. They are the voice of dominant social group. The dominant discourse type is discursively established by means of Gramscian (1971) notion of traditional intellectuals. The organic intellectuals are not textually portrayed in selected written texts. For example, the African American cultural values and norms (their music genres such as hip-hop and jazz

are textually portrayed in two textbooks) are conveyed through the perspective of US and Western centrism discourse. Their musicians are textually portrayed through the eyes of US and Western centrism outlook. But they are not textually portrayed as organic intellectuals or intellectual thinkers and leading figures in the selected written texts. Their fame and fortune are superficially narrated in the selected written texts. However, their voices for African American community and their rebellion against injustice and inequality through music genres are discursively underestimated in selected written texts. From this perspective, the ELT reading textbooks are selected for CDA because textbooks can be considered as discursive practices and they have important role for manipulating and they can control and regulate way of thinking. In this sense, the human subjects can internalize the textbooks and this establishes Marxist ideology; sense of false consciousness. This statement points out that human subjects think, act and behave according to the textbooks' interests and ideologies. Conformity, common sense and active consent (Gramsci, 1971, Althusser, 2014) can be discursively achieved by means of textbooks. Because of these reasons, we analyze ELT reading textbook in order to reveal their political interests and their hidden ideological motivations and messages. Based on data analysis, the nonwestern nations are not textually portrayed in the text and this discursively means that they have primitive social structures and they are under the control of Western and US centrism social structures. Hence, Fairclough's three-dimensional CDA framework (Fairclough, 1989) and Halliday's SFL (Halliday, 1994) are suitable analytical devices for the thesis in order to find out how words (lexical items) and sentences (grammatical structures and patterns) are loaded with ideological constructions in a certain context. From this perspective, there is no neutral discourse because language is not neutral; society and social reality are reflected by particular point of view through language. (Hyatt, 2005:43). These statements, which are related to CDA, is starting point of this thesis. In this sense, the discourse of textbooks can carry particular values, norms and ideologies and these certain values, norms and ideologies, in other words, certain discourses can manipulate human subjects' minds and acts. People can internalize and accept these ideological messages, the knowledge is taken for granted, and it becomes common sense in this way the active consent and hegemony are discursively achieved by means of textbooks. Because of these reasons, the textbooks' CDA can be considered as significant in order to reveal linguistic and discursive features of textbooks. Based on data, and Althusser (2014) the selected ELT reading textbooks (texts) employ the language of violance and discrimination through linguistic and discursive strategies. This means that, the selected ELT reading textbooks are members of the education institutions in other words

schools (Schools and educational institutions are an ISAS), use the features of RSAs to shape and 291 regulate the individuals. Here, the individuals becomes subjects by means of textbook discourse (ISAs). As mentioned before, the schools and their important members textbook are ISAs. It can be noted here, the study tries to discover US and Western centrism ideological motivations in selected internationally distributed ELT reading textbooks. therefore, Fairclough's CDA (Fairclough,1989) and its principles are used in reading passages in Password 5 and Toefl IBT PREP PLUS 2018-2019. Based on the findings, the selected ELT reading textbooks are unfair and they use dominant discourse type. This means that US and Western centrism supremacy ideologies and their social, political interests are employed in the selected reading passages. The US and Western centrism outlook and ideological patterns are imposed to the target readers. Consequently, biased, ideological hegemonic practices and ideological construction of "otherness" that are encoded in selected ELT reading textbooks are discursively revealed by means of Fairclough's CDA framework (1989) in the thesis. Based on findings, the non western women and men subject positions (social identities), and non western socio political institutions, organizations and agencies are textually excluded from the selected ELT reading passages. The findings of this study are in line with Fairclough's (1989) view. The texts are never neutral and they carry hidden ideologies and messages and they are ideologically loaded (Fairclough,1989)

**References**


1. Althusser, L. (2014). On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses. London: Verso Books
2. Cots, J. (2006) Teaching 'with an attitude': Critical discourse analysis in EFL teaching'. ELT Journal, 60(4), 336 - 345.
3. Fairclough, N. (1989). Language and Power. London: Longman.
4. Fairclough, N. (1992). Critical Language Awareness. London: Longman.
5. Fairclough, N. (1993). 'Critical discourse analysis and the marketization of public discourse: The universities'. Discourse and Society, 4, 133–68
6. Fairclough, N. (1995). Critical Discourse Analysis: The critical study of language. London: Routledge.
7. Fairclough, N. (2001). Language and Power (2nd edition). Essex: Pearson Education
8. Fowler, R. (1991). Language in the News: Discourse and Ideology in the Press. London: Routledge.
9. Gramsci, A. (1971). Selections from the prison notebooks. London: Lawrence & Wishart.
10. Halliday, M. A. (1994). An Introduction to Functional Grammar. London: Edward Arnold
11. Halliday, M. A. (1994). An Introduction to Functional Grammar. London: Edward Arnold.
12. Halliday, M. A. K. & Matthiessen, C. M. I. M. (2004). Introduction to functional grammar (3rd ed.). London: Arnold
13. Hyatt, D. (2005). A Critical Literacy Frame for UK Secondary Education Contexts. English in Education, 39 (1) pp. 43-59.
14. Locke, T. (2004). Critical Discourse Analysis. London: Continuum. Longman
15. Password 5 (2017) Publishing House: Pearson
16. Pennycook, A. (1998). English and the Discourses of Colonialism. London, New York: Routledge
17. Pennycook, A. (1998). English and the Discourses of Colonialism. London, New York: Routledge
18. Toefl IBT Prep Plus 2018-2019 (2017). Kaplan Publishing
19. van Dijk, T. (1998). Ideology: A multidisciplinary approach. London: Sage Publications.
20. van Dijk, T.A. (1993). Elite Discourse and Racism. London: Sage Publications
21. Wodak, R. (1996). Disorders of Discourse. London: Longman

22. Wolfram, Walt. (2014). Intergrating language variation into TESOL: Challenges from English globalization. In A. Mahboob & L. Barratt (Eds.), English(es) in a Multicultural Context (pp. 15-31). New York: Springer

## Chapter 7

# Orienteering in Early Childhood Education

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## INTRODUCTION

In today's increasingly difficult living conditions, the majority of people are working longer hours in order to reach more comfort, while almost forgetting many of the skills and abilities that their ancestors used to have due to the influence of city life. Today's modern human societies, who escape from nature and the basic life skills that nature forces people to do by working in office environments, using vehicles for transportation and resting in the evenings in the apartment where they take the elevator, may face the loss of nerve and muscle cells associated with skills such as location perception, orientation, distance perception, map reading, avoiding dangers, walking and running in the space they cannot use (Korte, 2020; Shors et al., 2012). Not surprisingly, there are findings that people's reliance on daily unchanging routines in desk jobs shrinks brain size and reduces the number of nerve cells (Zavala-Crichton et al., 2020; Wheeler et al., 2017). The need for regular physical movement, which used to be a necessity but is now considered a leisure-time activity by most people, is a requirement of human anatomy and physiology (Owen et al., 2010; Park et al., 2020). The academic and professional development of people who gradually move away from healthy life skills and intellectual abilities such as running and walking can also be jeopardized (Gans et al., 2022; Landais et al., 2022; Szpunar et al., 2021). When this issue is examined from an anthropological point of view; the processes of primitive people searching for food all day long, finding water sources, hunting, avoiding predators and carrying the food they found at the end of the day to their caves developed people in terms of muscle strength while keeping their thinking, problem solving, decision making and action skills constantly active (Sherwood et al., 2008). However, the comforts of technology and sedentary lifestyles have unfortunately dulled these basic skills (Gomwe et al., 2022; Roaldsen, 2022).

Direction/location concepts such as "under, above, next to, in front of, etc.", which are concepts we use throughout life, are of great importance especially in the modern world. In addition to daily routine activities such as going to work, school, market and shopping center, the need for maps has increased even more as people have the opportunity to travel between continents for touristic purposes as a result of the increase and relative cheapness of transportation facilities (Kara, 2020). People with map knowledge and map reading skills can easily go where they want to go even in a different country (Buğdaycı & Selvi, 2021). With the developing technology, maps have been replaced by navigation devices used in smartphones and tablets. However, map knowledge is still required to use such applications.

True spatial mastery starts with walking. Spatial skills are the ability to understand where one is located and how to move around the world according to one's own position and to use this knowledge. A preschool child can easily distinguish concepts such as open-closed, inside-outside, separate-compound, far-close, below-above, and the shapes and sizes of objects (Bütün Ayhan, 2006). The positions of objects against each other and their distance relationship with each other and the position of the individual's body are basically used to define the concepts of direction/location. Regarding these basic concepts, the perception of location in space begins to develop in the preschool period and continues to develop until middle childhood (Piaget & Inhelder, 1967; Güven & Tığcı 2006; Kara, 2020). In the preschool period, children can find practical directions, but it is important for children to internalize these experiences within the process (Bluestein & Acredolo, 1979; Blaut et al., 2003; Catela et al., 2019).

In parallel with the academic education that starts almost from the preschool period, it is extremely important to support the concept of direction/location, one of the basic concepts that individuals will need and use throughout their lives, with activities that are appropriate and rich in content. Using the positive effect of orienteering on problem solving skills (Güler, 2009) and its fun aspect (Kelly, 2014); the direction / location concepts aimed to be gained in preschool education institutions are supportive of this experience (Filippaki & Papamichael, 1997). This situation also attributes importance to educational programs aimed at developing this skill in preschool period (Newcombe & Frick, 2010). At this point, orienteering is widely appealing regardless of age and ability. Orienteering, either as a sport or as a fun activity, offers children the opportunity to explore, solve problems, face challenges, and make exciting progress on a course (Güler, 2009). Once children learn orienteering skills, they have a magic key to unlock the door to inspiring countryside both in front of their homes and away from home. In addition, the contribution of orienteering to preschool children's cognitive, motor, social-emotional and language development areas and self-care skills is an undeniable fact (Kara, 2020).

In this section, under the main heading of orienteering education in preschool period, after explaining the definition and types of orienteering, information about the orienteering education process was given; after giving orienteering examples for preschool children, the contributions of orienteering to developmental areas were presented respectively.

**1. Definition and Types of Orienteering**

There are many definitions in the literature of orienteering activities, which can be involved as competitors from a very young age and have a history of more

than seventy years, and there are various types of orienteering classified for competitions.

### 1.1. Definition of Orienteering

Orienteering is a nature sport that requires mental and physical capacity and involves navigating in a largely unknown area using a map and compass (Kjellstrom, 1994). Orienteering is a sport of Swedish origin (Arnsdorf, 1978; Boga, 1997). The word orienteering was added to the dictionary in 1946 by Bjorn Kjellstrom. Orienteering basically involves a course that is completed with the help of a compass by visiting the control points marked on the map (Paliichuk, 2018). One of the concepts that should be addressed during the recognition of orienteering is *orienting* and the other is *navigating*. Orienteering skill is used in the sense of "self-positioning". For example, using a compass to change the north direction of the map to magnetic north is actually orienting the map. On the other hand, the skill of navigating, which allows you to find your way between checkpoints, is very important during the race.

The orienteering individual determines his/her own road or terrain route so as to visit each of the destinations marked on the map and aims to complete the race as soon as possible (Bergström et al., 2021). The athlete tries to find the most accurate and shortest route and act accordingly by using his/her physical potential and mental skills while going from one target to another (Tanrıkulu, 2011). On the special topographic map used, there are details showing places such as bridges, passages, pits, streams symbolized by certain shapes. Orienteering, which can be practiced in open areas such as forests and parks, is a sport that can also be practiced individually and/or with teams in sports halls (British Orienteering, 2022). Considering the need to use skills such as reaching the mentioned destinations as soon as possible, reading maps and navigating together during the race, the definition of "thought sport" about orienteering gains meaning (Kara, 2020).

Decision-making is one of the most decisive aspects of orienteering. In this sport, the goal is to reach the destinations on the path marked on the map as soon as possible, and the player needs to be strong in making fast and accurate decisions, not just athletic qualities as in a running race or performance sports. Since each decision made during orienteering will determine the athlete's next move, the ability to solve problems quickly and in a controlled manner, to maintain self-confidence in the face of disruptions that may occur due to momentary mistakes, and to calmly determine new routes are the main success criteria in the game. Orienteering also develops the mental processes that are activated when people realize that there is a discrepancy between "the model on

the map" and "what they see in front of them" (Crampton, 1988). The first step in finding a solution is to recognize the error. Thus, cognitive abilities, memories and previous experiences come into play, along with personal motivations, while the mental processes that enable one to formulate a strategy and try to solve the problem are activated (Cataldi et al., 2021; Russo et al., 2019; Spiers & Maguire, 2008).

Orienteering can be thought of as a kind of chess game that is done in motion and competed over time (Kara, 2020). It is a sport that emphasizes the mental skills of finding place-direction used in daily life. The fact that it does not require any characteristics to do this sport shows that it can be done with every age group (Güler, 2009).

### 1.2. Orienteering Terms

As there are unique terms used in every sport, there are terms specific to this sport used in orienteering. The most commonly used of these terms can be explained in basic terms as follows:

*Direction:* The angle between the North arrow on the compass and the meridians (Akcan, 2016).

*Orienteering Map:* These are geographical maps made of some special symbols and colors to be used in orienteering activities. Before the orienteering competition, the orienteering map prepared by the organizers is given to the athletes before the race (Tanrıkulu, 2011).

*Start:* The point where competitors enter the map. There is only an empty lantern. There is no control code, seal, stapler, or electronic control unit. The starting point is indicated on the map by an equilateral triangle with a side of 7 mm. The center of the figure shows the location of the starting point. One end of the triangle is drawn to show the first target (Karaca, 2008).

*Finish/Destination Point:* It is the name given to the place where the race starts and ends where the orienteering field takes place. The finish/arrival point shown on the map is indicated by two concentric circles of five and seven millimeters in diameter (Karaca, 2008).

*Control card:* These are cards with numbers on them indicating that the racers have arrived at each control area marked on the map (Taş, 2010).

*Control descriptions:* These are descriptions of the number of each control point, the control point code and the condition of the land/road, shown with international symbols (Akcan, 2016).

*Flag (Lantern):* It is a white/orange colored, triangular prism shaped material with dimensions of 30x30 cm, used to determine the location of each control point (Akcan, 2016). It can be called "control kite" for preschool children.

*Target:* It is white/orange in color and in the shape of a triangular prism, usually 30 x 30 in size, but can also be smaller for children (Taş, 2010).

*Destination (Control) code:* These are numbers marked on each control point (Akcan, 2016).

*Target (Control) point:* It refers to the points that athletes are looking for in the race, indicated by the lanterns hanging on it. The target points, which are marked on the map in the shape of a circle with a diameter of 6 millimeters, are located in the center of the circle (Taş, 2010).




**Photo 1.** Control description and flags placed on the course of an orienteering activity.

*Fine Orienteering*: It is a type of orienteering where every detail on the map is very important during the race in the field (Taş, 2010).

*Parkour:* It is a set of places marked on the map with a red circle symbol and includes all the control points which athletes need to visit (Akcan, 2016).

*Target Information Card:* The target information card, consisting of various orienteering symbols, serves to explain the connection between the target shown on the map and the beacon (IOF, 2022).

*Geographic north:* The north shown in the longitudes, which points to the North Pole, does not coincide with the magnetic north (Taş, 2010).

*Magnetic north:* The direction indicated by the red dot on the compass (Akcan, 2016).

*Plan:* It shows the relationship between land features and graphical figures and between graphical symbols themselves, transferred on paper with a correct scale (Taş, 2010).

*Control card - Pin-punch:* When the competitors reach the finish point, in order to prove that they have visited each of the target points on the course, they punch holes on the control cards in their hands with the punches located at each target. If an electronic system is used, the seal or stapler is replaced by different electronic target control units (Karaca, 2008). In orienteering activities with preschool children, children are usually asked to collect all the numbered stickers located at the target points.

*Score Orienteering Course:* It is the name given to the tracks, also called scored orienteering tracks, where each target is given points in proportion to its difficulty level and the targets on the map are traveled freely (Taş, 2010).

*Facilitated Map:* It is a map that is generally used in compass studies and line orienteering, where only the starting and ending places are marked, showing the target location and circles, with scale and meridians (Taş, 2010).

*Topographic Map:* These are maps of a specific region, which include geographical descriptions reduced to a certain scale and include landforms shown with special symbolized shapes (Taş, 2010).



**Photo 2.** Electronical systems can be used instead of control cards and pin-punchs.

### 1.3. History of Orienteering

In the early 20th century, orienteering, which emerged in Scandinavian countries, is actually an activity born in response to a need. Due to the geographical location of Sweden; being covered with snow for most of the year, the restriction of visibility in the area dominated by snow and fog caused people to have difficulty in finding their way. Therefore, people drew daily routes for themselves by identifying certain landmarks such as churches, roads, or farms. Thus, the conceptual act of orientation emerged (Aksın, 2008).

Orienteering first became a competitive sport in military training in Sweden and soon spread to civilians (Symonds, 2008). Orienteering, which became traditional in Scandinavian countries, developed over time, and then spread to the world (Deniz et al., 2014). The International Orienteering Federation (IOF) was established in Copenhagen in 1961 with the membership of 10 countries. Orienteering sport, which emerged due to challenging geographical conditions, has become a popular activity type from a very young age in terms of both entertainment and educational aspects.

### 1.4. Orienteering Types

As defined by the International Orienteering Federation, competitions include running, skiing, cycling and trail orienteering for the disabled. *Running or walking orienteering* is an endurance sport involving mental operations. It is a race in which the athlete, using a map and optionally a compass, decides on the best route to complete the course in the shortest time by stopping at a series of checkpoints in sequence while running. The overall aim is to reach the destination in the shortest time after the start of the race by finding the checkpoints in the designated order. In order to be successful in running orienteering, the athlete must have the ability to read the map on the one hand, a good concentration on the other hand, and at the same time the ability to decide on the most suitable route while running fast (Orhan, 2012).

*Ski orienteering* is an endurance-based winter sport practiced on skis in winter. It has similar rules to other types of orienteering. The competitor has to decide on one of the unlimited route options at a very high speed in each competition (Renfrew, 1997).

*Bicycle orienteering*, which attracts the attention of those interested in both orienteering and cycling, is expressed as an endurance sport. Since the course is difficult, the terrain is rugged and steep slopes are often encountered during bicycle orienteering, it is necessary to use bicycles at a good level (Orhan, 2012).

*Trail orienteering* is a type of wheelchair orienteering for people with disabilities. It is called trail orienteering because the targets are placed on the

paths that the wheelchair can travel. The main thing in this type of orienteering is to read the map within the track. Since individuals using crutches, electric or wheelchairs can also participate in trail orienteering, speed is not one of the evaluation factors (Karaca, 2008).

*String orienteering* is a recreational activity that allows preschool and primary school children to take part in the same sport with their families. In this non-competitive and time-limited process, young children have the opportunity to experience orienteering with pleasure. In string orienteering, which can be used to introduce children to some basic map reading skills, children can gain self-confidence by running through the forest and finding checkpoints (Norman & Yngström, 2003).

### 1.5. Orienteering Techniques

In orienteering, many techniques are used to reach control points. There is no rule about the use of these techniques. While making a decision, the athlete evaluates all conditions and routes and decides on the techniques and connections to be used (Anderson, 2001; Karaca, 2008; Karataş & Gökçek, 2011). Some of these techniques are as follows:

*Measurement and Pacing:* In order to use this technique, the athlete should have determined how many steps it takes to cover certain distances while walking or running. Then, if necessary, he/she measures the distance from his/her current location to the target point on the map and proceeds in how many steps he/she takes this distance, again checking his/her compass to make sure that the angle is appropriate.

*Rough Orienteering:* This technique uses large objects to help find the control point and easy lines to follow. The athlete continues to follow the map by seeing the large objects or linear lines he/she detects while running on the route. It is preferred on routes where time is likely to be wasted with detailed map reading.

*Fine Orienteering*: In this technique, the map is examined in more detail than in coarse orienteering. In order to follow the details on the map well, running speed decreases, attention, and concentration increase.

*Seeing the Terrain Structure / Simplifying the Target: The* athlete can easily reach the target point if he/she perceives the map drawing of the area he/she reaches while approaching the control point in three dimensions and can visualize a simple image by removing the details.

*Line Orienteering:* When choosing a route, if the athlete identifies a line extending towards the target point, he/she can easily follow it and gain an advantage as it will increase his/her running speed.

*Reaching the Target from the Last Point of Attack:* The athlete chooses a last catch point before reaching the control point, where he/she can secure and reach the target point faster and more confidently. It is usually the most obvious point inside the target circle or closest to it.

*Orientation:* From the last point of attack, the athlete turns fully towards the target and reaches the target point without disturbing the compass angle.

*Intentional Deviation:* The athlete leaves one checkpoint and goes around obstacles that he/she cannot pass or that will cause him/her to lose time, while at the same time returning to the angle from which he/she left in order not to disturb the target direction.

## 2. Orienteering Training

### 2.1. Aims and Objectives of Orienteering Training

In general, running target finding trainings are carried out to ensure that the orienteer reaches the target as soon as possible by using a map and compass day and night under all kinds of terrain and climatic conditions. In addition, orienteering trainings aim to enable individuals to read the map very well and evaluate the information on the map, to use the compass well, to develop the ability to make precise decisions, to have a good breath and to be careful, to have a very good physical and psychological condition (Karataş & Gökçek, 2001).

### 2.2. Orienteering Map and Meaning of the Markings on the Map

1/10000 or 1/15000 scale maps containing symbols determined by the International Orienteering Federation prepared for the purpose of training, running target finding training, running target finding practice and this competition are used. The meanings of the signs on the map are as follows (Karataş and Gökçek, 2001):

- Starting Point The starting point of the track marked on the terrain and drawn on the map as: 

- Checkpoints These are the points marked on the terrain and which must be visited on the track drawn on the map as: 

- Arrival (End) Point The end point of the track marked in the field and drawn on the map as: 

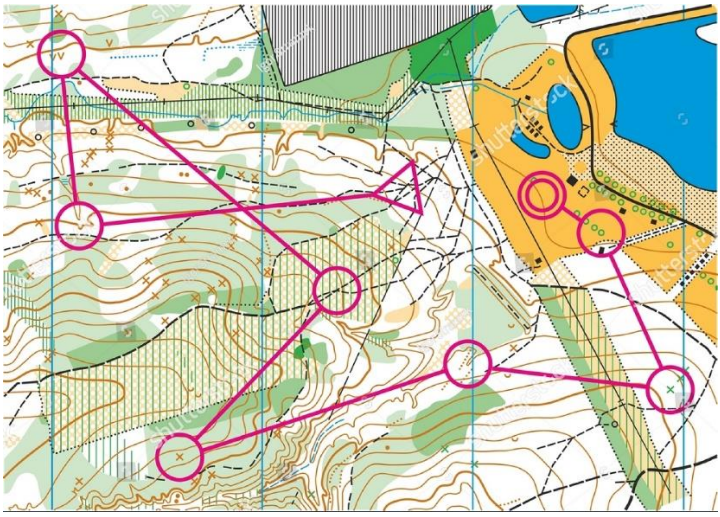


**Figure 1.** An example of a professional orienteering map

Since preschool children's ability to use a compass to make sense of maps is considered a higher-level skill, the arrow indicating the north direction is not necessary in maps prepared for young children. In addition, it is recommended by instructors that maps should be prepared vertically (with the short sides of the paper at the top and bottom), in color and without written information. Especially for maps prepared for preschool children, the actual area should be reflected on the map in a way that is as easy to understand as possible (See Figure 2).





**Figure 2.** The real and the map view of a course designed for preschoolers.

Maps for preschoolers have a *legend* section in the lower right-hand corner that visually explains at which checkpoint children should collect which previously hidden object.

### 2.3. Preparation of the Orienteering Track

Safety is one of the most important issues that instructors should pay attention to when determining a course for beginners and young children. Accordingly, safety tapes should be drawn before the competition to prevent first-time orienteers from deviating from the course and endangering themselves due to misreading the map.

In order for beginners to enjoy orienteering, difficult and hilly terrain due to vegetation should be avoided. For beginners and young children, the starting and finishing point of the course can be the same point (Güler, 2009). A whistle can be hung around the neck of young children to indicate their location in case they get lost or to ask for emergency help in any situation. In addition, measures such as the presence of adults at checkpoints, especially for young children, can be taken against possible attacks by wild natural animals that may perceive people running on the course as a threat. In addition, considering that preschool children can easily recognize the numbers between 1-5, it is thought that paying attention to the number of checkpoints on the course to be no more than five will provide a more enjoyable process for young children.

In the preparation of a course for older people, attention is paid to the following:

- In the terrain where the competition will be held, the control points to be visited by the athletes are determined and attention is paid to the presence of these determined points (For example: Water tank, fountain, pathway, quarry, etc.).

- White/orange colored and triangular prism-shaped lanterns are hung in accordance with the area covered by the checkpoints in the field and a seal/stamp is attached to the lanterns. The checkpoints are equipped with a staff member for stamping and checking the seal and a wet stamp for the seal.

- The control points, the locations of which are indicated by the lighthouse, are shown on the map with a circle symbol with a diameter of 0.5 cm. provided that the center of the lighthouse is shown, and the control points marked on the map are numbered sequentially starting from number one.

- When 1/25 000 scale maps are used, it is important that the lighthouses are located at a height of 60 cm and can be seen from a distance of 25 meters.

-The true north direction calculated with the help of existing edge information is shown on the map and other signs required in the organization are placed on the track (Güler, 2009; Kara, 2020; McNeill et al., 1997).

### 2.4. Considerations in Route Selection

Depending on elevations and landforms, sometimes the shortest route on the map may be the most difficult route, while the longest route may be the easiest. For athletes, choosing a route that is suitable for the purpose is gained through experience gained after a long practice. In order to choose the appropriate route, it is important that the following skills are practiced by the athletes:

- Estimated distance measurement,
- Going around the height instead of climbing it,
- Pay attention to special signs,
- Favoring relatively long and easy paths over difficult and short ones,
- Selecting attack points (Karataş and Gökçek, 2001).

Preschool children do not need almost any of these skills, as they progress on a narrower and more structured course than adults who practice orienteering as a sport.

## 3. Orienteering Process in Preschool Period

There are very few studies on the effects of orienteering on the development of young children in preschool period. In addition, there are very few sources in the literature that contain a comprehensive instruction about the process of preparing orienteering activities for preschool children who are assumed to be illiterate. In this context, based on the developmental characteristics of 36-72-month-old children and the achievements and indicators in preschool education programs, the process is discussed in the form of suggestions under this title.

### 3.1 Studies on Preschool Children in the Literature

When the literature was examined, Kara (2020) reported in her master's thesis that in the treasure hunt activity that coincided with the end of the *"Orienteering Training Program"* applied to 61-71-month-old children, the children in the experimental group could easily go to the area marked on the map using a map compared to the control group. In addition, Carreira et al. (2018) conducted a project in Portugal called *"Orienteering in Kindergarten with Photography and Own Colored Drawing of Their Classroom"*. In this study, the researchers asked 7 children aged 5-6 years to find five small objects that were always hidden in the same way in the playground of their kindergarten. A total score was obtained from the time spent on the task, the number of objects actually found, and the map directions given. A color photograph of the playground was used as a map. Before starting the activity, the child was helped to find himself/herself on the map and to identify an existing building on the map. The results revealed that there was no significant difference in map skills related to gender or age. This

study shows that preschool children can successfully use a color photograph of the playground as a map. However, as age increases, they seem to be able to navigate faster and manage the spatial alignment between the map and the real space better.

At the same time, as a result of the study *"Orienteering Using Realistic Map (Colored Aerial Photography) with Kindergarten Children"* conducted with 12 children aged 3-6 years, Catela et al. (2017) did not find a gender difference but reported that older children reached the set targets faster. In addition, Zach et al. (2015) examined the effect of physical activity on spatial perception and attention in early childhood. A total of 123 children attending preschool education institutions were distributed into groups as experimental orienteering, experimental dance and control group. A computer-based test measuring spatial abilities was applied before and after the intervention. As a result of the research, no significant difference was found in the gender variable, while positive changes were observed in both experimental groups after the intervention. It was concluded that physical and cognitive skills need to be integrated to successfully perform the required tasks. Apart from these studies, it can be said that the fact that there is no other study in the literature on the orienteering training process of preschool children creates a wide field for researchers to explore.

In studies on preschool children's positioning and orienting themselves within the scope of orienteering skills, it is generally stated that young children can learn about their environment by examining maps. For example, in a study conducted with a group of children between the ages of four and seven (Uttal & Wellman, 1989), the children in the experimental group were asked to examine a map of a six-room playhouse that they did not know before. The experimental group and the control group, who had not examined the map before, had to find a route when they entered the playhouse. It was observed that the children in the experimental group who had previously examined the map found the route faster than the children who had not examined the map before. In this context, it has been found that from the age of three, children are able to position themselves in narrow spaces (Bluestein & Acredolo, 1979; Blaut et al., 2003; Catela et al., 2017). Observations with children show that three-year-olds are able to create simple but meaningful maps with toys such as houses, cars, and trees, and can also begin to form mental representations of spaces (Blaut & Stea, 1974). Children enjoy looking for hidden objects in unfamiliar areas if the map they use has a realistic aerial view of the area to be explored (Barroso, 2014). It has been reported that children's orientation capacity increases with colored maps (Gouteux & Spelke, 2001; Hermer & Spelke, 1996; Jansen-Osmann & Wiedenbauer, 2004).

If the map is similar to the real area and children can carefully analyze the map before starting the course, it is easier for children to position and orient themselves (Presson & Hazelrigg, 1984; Uttal & Wellman, 1989; Sandberg & Huttenlocher, 2001). Preschool children know that a map represents an area (Liben & Yekel, 1996). For this reason, it can be thought that orienteering education should be started with activities that are suitable for the levels of preschool children, that are attention-grabbing, and in which they can play an active role (Kara, 2020). It is also reported that children's ability to orient themselves in large areas increases with age, regardless of gender (Barroso, 2014; Cohen & Schuepfer, 1980; JansenOsmann & Wiedenbauer, 2004).

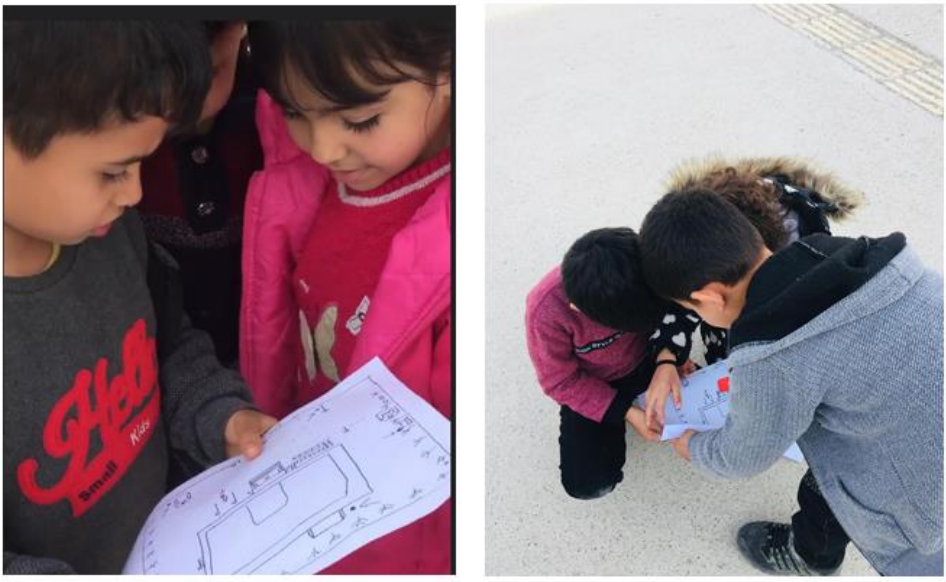


**Photo 3.** Orienteering at preschool level can turn out to be a teamwork.

### 3.2. Orienteering Activity Examples for Preschool Children

Undoubtedly, there are points to be considered when starting orienteering activities with preschool children differently from older children and adults. First of all, various activities can be planned in accordance with the developmental characteristics of young children so that they can turn the achievements that can be associated with orienteering, which are included in many preschool programs around the world, into behaviors. Although these outcomes and indicators are addressed in different ways in different education programs, they will form the basis for early orienteering skills such as positioning and orientation (See Table 1).

**Table 1.** Orienteering-Related Concepts, Gains, and Indicators Listed in Turkish Ministry of National Education - Preschool Program for 36–72-Month-old Children (MoNE, 2013)

| Concepts | Developmental Domains | Gains | Indicators |
|---|---|---|---|
| • Empty/Full<br>• In Front/Behind<br>• Flat<br>• -e/-a towards<br>• Between<br>• Backwards<br>• Front-rear<br>• Gold<br>• From inside<br>• Next to you<br>• Around<br>• Outside<br>• Separated/separated from each other<br>• On-off | COGNITIVE | Gain 1: Pay attention to the object/situation/event. | •Focuses on the object/situation/event that needs attention. |
| | | Outcome 10: Applies the instructions related to location in space. | •Places the object in the correct place according to the instruction.<br>•It takes a position in space.<br>•Uses map and sketch. |
| | MOTOR | Gain 1: Makes displacement movements. | •Walks according to the instructions.<br>•Runs according to instructions.<br>•It crawls a certain distance. |
| | | Outcome 2: Makes balance movements. | •Walks on the line in line with the instructions. |
| | LANGUAGE | Outcome 10: Reads visual materials.<br>Indicators: Examines visual materials. | •Examines visual materials.<br>•Explains visual materials. |

Before starting orienteering activities in the preschool period, teachers can place country maps, detailed plans of the city or neighborhood in the classroom learning centers for children to examine in order to improve children's map literacy. While children are examining the maps in this process, various activities can be included for children to grasp the projection of natural and man-made elevations on the maps. First of all, based on the assumption that children in this period cannot read and write, maps should be colorful, understandable and reflect the projection of environmental features one-to-one from the air. An activity on how the everyday items we use in the simplest way look from the air and how they can be processed on the map (See Figure 3) can be useful in terms of early orienteering skills.

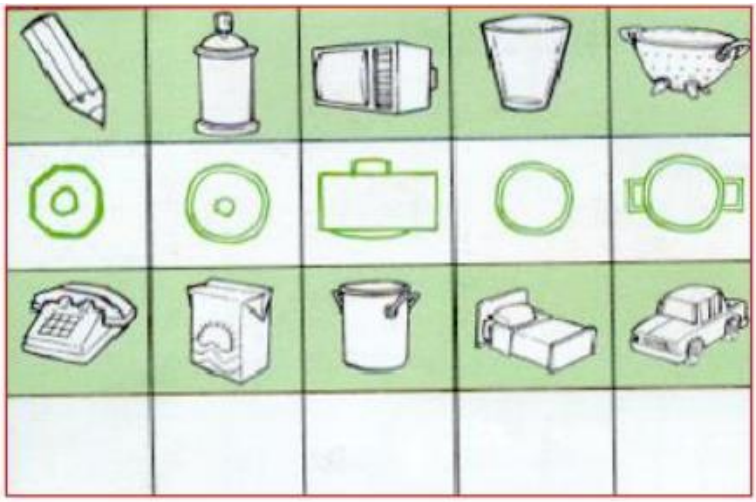


**Figure 3.** A sample activity worksheet for preschoolers to help them internalize the aerial view of objects.

After such an activity, children can be shown a simple three-dimensional model made of cardboard and asked to draw a map looking from above (See Figure 4). Since each child can focus on different details on the model, it may be a better option for children to work in groups rather than individually.



**Figure 4.** 3-D model of a landscape and children's work which can be transformed into an orienteering map.

Preschool teachers can then work with the children first on a simple plan of the classroom (showing the aerial positioning of objects in the classroom), then on a plan of the school building and then on a plan of the schoolyard. Children can be asked to draw a plan of their room at home or a plan of their house and present it to their friends the next day.

In-class and out-of-class activities can be carried out so that children can move according to the instructions on any map and visit the control points respectively, as they are familiar with from robotic coding activities (See Photo 4).



**Photo 4.** Young children are trying to find the missing pieces of a puzzle underneath the papers by proceeding carefully on a course.

*The legend* section in the lower right corner of the orienteering maps provides map symbols and meanings for older children and adults, while for preschool children there are drawings of what to find at each checkpoint (See Figure 5). Teachers should examine the different orienteering maps with children in the classroom to ensure that children understand the legend section and the orienteering signs indicating the starting point, checkpoints, and destination.




**Figure 5.** Legend samples on the right bottom of the orienteering maps for preschoolers.

*In Treasure Hunt, a* mystery activity that children usually love the most, children actually get their first orienteering experience as they find objects hidden in various places in the classroom, school building or school garden with the support of their teachers (See Photo 5).



**Photo 5.** After completing the course, preschool children are affixing the numbered stickers they have found in the hidden places to find out the whole picture.

It is very important for teachers to support and encourage children in these first experiences because children who fail in their first track experience, get lost or cannot find hidden objects may develop a negative attitude towards orienteering. In addition, it will be useful for preschool children to work together in groups in their first experiences in terms of motivation (Güler, 2009).

Later, teachers can organize field trips to develop children's orienteering skills in areas such as forests, parks, and recreation areas. *String orienteering* can reduce safety concerns, especially for preschool children, as a type of orienteering that prevents them from getting lost in the terrain and allows them to move along a certain line. In fact, family participation in these excursions can also be ensured, allowing children to spend a pleasant time with their parents on the course (See Photo 6). In preschool orienteering activities that are not based on speed and competition at first, speed-based competitions can also be organized after children gain experience.



**Photo 6.** Together with the family string orienteering can be a joyful activity for preschoolers.

## 4. The Effects of Orienteering on Development and Skill Areas of Preschool Children

Orienteering not only contributes to the physical and mental development of children, but also plays an important role in protecting nature and raising environmental awareness in children (Kara, 2020). This sport, which can respond to children's desire to embark on an adventure and explore the surroundings, contributes to all areas of development of children. This type of activity, which can be summarized as playing chess while running, also forms the basis for making the right decisions while under stress and pressure in later life and competing with time (Karaca, 2008). Finding the targets and reaching the end point during orienteering activities is both a pleasant and happy process for children. Children concentrate on finding the targets by concentrating their attention and make an effort. While these activities provide three-dimensional thinking, their effect on attention is also very important (Taş, 2010). The mapping and planning ability that already exists in the first years of life forms the basis for the child's orienteering skills and thus contributes to better cognitive-motor organization when they grow up (Fumagalli et al., 2020; Halliday et al., 2018).

### 4.1. Cognitive Development

Within orienteering activities, children experience reading maps, memorizing the symbols and signs on the map, problem solving in case of any adversity, and learning different concepts by experiencing them. In this respect, orienteering is an activity that increases memory skills and stimulates motivation for children (Etnier & Chang,

2009; Notarnicola et al., 2012; Prakash et al., 2015). In addition, problem solving experiences form the basis of learning (Bingham, 1998). Children develop problem solving skills while orienteering and trying to find control points. Independent thinking ability and reasoning skills are also developed in orienteering activities (Kara, 2020). Orienteering is a sport that requires intelligence that exercises the mind. In this context, intelligence is defined as a set of abilities such as problem solving, understanding, and using symbols, comprehending new and complex thoughts, making logical plans, and abstract thinking (Ardila, 2018).

Orienteering also supports children's concept development and offers a learning environment surrounded by rich stimuli (Kara, 2020). Concept development includes finding differences and similarities, generalizing, classifying, and sorting (Bütün Ayhan & Aral, 2007). Orienteering improves children's perception of location in space and gives children the ability to read maps (Deniz et al., 2012). They can also begin to form mental representations of spatial environments (Blaut & Stea, 1974). In early childhood, children learn practical orienteering (Filippaki & Papamichael, 1997). During orienteering, in a race that requires quick decision-making, children's ability to analyze is strengthened. The fact that a continuous control mechanism is active during the decisions made by adhering to the map, and the possibility that the decisions made quickly may be wrong leads the person to solve problems quickly and to be courageous by taking responsibility for their decisions (Kara, 2020).

### 4.2. Motor Development

The progress made in all areas of development in the preschool period also shows itself in motor development. Skills such as jumping, running, throwing, leaping, and hopping, which are named under the title of basic movement skills, develop between the ages of 2-7 (Can Yaşar & Kaya, 2016). Orienteering contributes to the development of children's basic movements (Kara, 2020). Children who participate in orienteering activities also have skills such as balance, endurance, speed, agility, coordination, which are included in the content of basic movement skills. The child's ability to reach the level of maturity in these skills is closely related to the preparation of an environment where he / she can experience, motivation and quality education (Akgün, 2019). In the process of orienteering activities, children develop in the field of gross motor development. Running, endurance, balance, and fitness are required on the orienteering track. In addition, the foundations of lifelong sports habits are laid in childhood and children are enabled to adopt an active and healthy lifestyle (Özcan, 2006). Compared to straight running, the goal of finding direction while running on a track makes orienteering an enjoyable sport.

### 4.3. Social-Emotional Development

Since group work, which is preferred especially in the preschool period during orienteering activities, requires children to work with their peers under the guidance of their teachers, children also make progress in the field of social-emotional development (Kara, 2020). In the process of finding goals with teamwork, children's leadership skills increase, and they adapt to teamwork more easily in their future lives. Orienteering generally ensures that children are happy during the process, develop helpful attitudes and socialize. At a later age and when experience is gained, the child who is able to carry out the orienteering process on his/her own learns to make his/her own decisions and take responsibility for his/her decisions. Through orienteering, children can also acquire the necessary resilience skills to face and overcome problems that can be experienced in all areas of life. The feeling of being successful develops positive self-perception in children; this helps children to realize their strengths and abilities (Deniz et al., 2014).

In city life, children, whose lives are usually confined indoors, can meet with nature through orienteering and learn to respect the lives of other living things. Orienteering helps children to be intertwined with nature and thus understand that they are a part of the environment they live in (Güler, 2009). In addition, activities such as string orienteering which preschool children participate in with family members are expected to strengthen family ties and reinforce their sense of belonging.

### 4.4. Language Development

During orienteering activities planned in the preschool period, children develop the ability to communicate in a group. In the process of finding the targets and reaching the destination, children must be in constant communication with their groupmates and teachers for reasons such as asking for help, offering help, exchanging ideas, and saying thank you.

### 4.5. Self-care Skills

As children gain experience on the orienteering course, they are able to create their own risk maps in their minds and learn to avoid excessively risky behaviors. Children, who adopt protecting themselves against dangers and accidents as a lifestyle, also learn by doing and experiencing to choose clothes according to the season, to change clothes when they sweat, and to take care not to be thirsty and hungry during orienteering.

## REFERENCES


1. Akcan, İ. O. (2016). *Elit oryantiring sporcularının görsel reaksiyon süreleri ile karar verme stilleri arasındaki ilişki* [Yüksek Lisans Tezi, Gazi Üniversitesi].
2. Akgün, S. (2019). *Hareket eğitimi ve imgelemenin okulöncesi eğitim kurumlarındaki 4-6 yaş grubu çocuklarda motor gelişime etkisi* [Yüksek Lisans Tezi, Trabzon Üniversitesi].
3. Aksın, K. (2008). Oryantiring sporunda kent içi organizasyonlar üzerine bir inceleme. [Yüksek Lisans Tezi, Gazi Üniversitesi].
4. Ardila, A. (2018). Is intelligence equivalent to executive functions? *Psicothema*, 30(2), 159-164 doi: 10.7334/psicothema2017.329
5. Arnsdorf, E. (1978). New ideas for outdoor mathematics. *Arithmetic Teacher, 25*(7), 14-7.
6. Barroso, M., Bento, T., & Catela, D. (2014). A orientação em crianças dos 3 aos 5 anos-muito mais que só a idade! Carlos Neto, João Barreiros, Rita Cordovil, & Filipe Melo, Estudos em Desenvolvimento Motor da Criança VIII, (pp. 279-285). Cruz Quebrada: Edições FMH.
7. Bergström, Max, Jong, M., & Sæther, S. A. (2021). Orienteering from Cradle to Grave—How a Sport Could Offer Lifelong Participation. *Social Sciences 10*, 146-. https://doi.org/10.3390/ socsci10050146
8. Bingham, A. (1998). Çocuklarda Problem Çözme Yeteneklerinin Geliştirilmesi (Development of Problem Solving Skills in Children). İstanbul: Milli Eğitim.
9. Blaut, J.M., & Stea, D. (1974). Mapping at the age of three. *Journal of Geography, 73*(7), 5-9.
10. Blaut, J. M., Stea, D., Spencer, C., & Blades, M. (2003). Mapping as a cultural and cognitive universal. *Annals of the Association of American Geographers, 93*(1), 165-185.
11. Bluestein, N., & Acredolo, L. (1979). Developmental changes in map-reading skills. *Child Development,* 691- 697.
12. Boga, S. (1997). *Orienteering. United States of America*, USA: Stackpole books.
13. British Orienteering, (2022). http://www.britishorienteering.org.uk/
14. Bugdaycı, İ. & Selvi, H. Z. (2021). Do maps contribute to pupils' learning skills in primary cchools?, *The Cartographic Journal, 58*(2), 135-49. https://doi.org/10.1080/00087041.2020.1760625
15. Bütün Ayhan, A. (2006). Anaokuluna Devam Eden Altı yaş Grubundaki Çocukların Kavram Gelişiminde Bilgisayar Destekli Öğretimin Etkisinin İncelenmesi. Bilimsel Araştırma Projesi, Ankara Üniversitesi.

16. Can Yaşar, M. & Kaya, Ü.Ü. (2016). Motor Gelişim. In N. Aral (Ed.), *Çocuk Gelişimi* (pp. 59-95). Anadolu Üniversitesi Açıköğretim Fakültesi Yayını.
17. Carreira, B., Rosado, B., Ferreira, C., Marques, C., Watché, D., Domingues, F., Baldé, A., Barroso, M., Catela, D. (2019). Estudo piloto sobre orientação no pré-escolar com fotografia e com desenho colorido próprio na respetiva sala. In K. O'Hara, B. Travassos & c. Lourenço (Eds.), Estudos em Desenvolvimento Motor da Criança XIV (pp. 379-380). Covilhã, Portugal: UBI Edições. ISBN: 978-989-654-605-2
18. Cataldi, S., Volonta, V. B., & Fischetti, F. (2021). Starting a sport as outdoor education in infancy: orienteering, visual spatial memory for empowering school learning. *Journal of Physical Education and Sport, 21*(1), 696 – 701
19. Catela, D., Barrosso, M., Seabra, A.P., Figueiredo, R. & Franco, R. (2017). Orienteering Using Realistic Map(Cloured Aerial Photography) With Kindergarten Children. Revista da UIIPS – Unidade de Investigação do Instituto Politécnico de Santarém.
20. Cohen, R., & Schuepfer, T. (1980). The representation of landmarks and routes. *Child Development,* 1065- 1071.
21. Crampton, J. W. (1988). The cognitive processes of being lost. *Scientific Journal of Orienteering, 4*, 34-46.
22. Deniz, E., Karaman, G., Bektaş, F., Yoncalık, O., Güler, V., Kılınç, A., & Ateş, A. (2014). *Çocuklara Oryantiring Eğitimi.* (İkinci baskı). Kültür Ajans.
23. Etnier, J. L., & Chang, Y. K. (2009). The effect of physical activity on executive function: a brief commentary on definitions, measurement issues, and the current state of the literature. *Journal of Sport and Exercise Psychology, 31*(4), 469-483.
24. Filippaki, N. & Papamichael, Y. (1997). Tutoring Conjunctions and Construction of Geometry Concepts in the Early Childhood Education: The Case of the Angle. *European Journal of Psychology of Education, 12*(3), 235–247.
25. Fumagalli, G.F., Tortella, P., Coppola, R., &Sgrò, F. (2020). Physical or emotional scaffolding in a difficult motor task: What is better with 5-year-old children? *Journal of Human Sport and Exercise, 15(4proc)*, 1437-1445.
26. Gans, K. M., Tovar, A., Kang, A., Ward, D. S., Stowers, K. C., von Ash, T., Dionne, L., Papandonatos, G. D., Mena, N., Jiang, Q., & Risica, P. M. (2022). A multi-component tailored intervention in family childcare homes

improves diet quality and sedentary behavior of preschool children compared to an attention control: results from the Healthy Start-Comienzos Sanos cluster randomized trial. *The international journal of behavioral nutrition and physical activity, 19*(1), 45. https://doi.org/10.1186/s12966-022-01272-6

27. Gomwe H, Seekoe E, Lyoka P, Marange CS, Mafa D. (2020). Physical activity and sedentary behaviour of primary school learners in the Eastern Cape province of South Africa. *S Afr Fam Pract., 64*(1), a5381. https://doi.org/10.4102/safp.v64i1.5381
28. Gouteux, S., & Spelke, E. S. (2001). Children's use of geometry and landmarks to reorient in an open space. *Cognition, 81*(2), 119-148.
29. Güler, V. (2009). *Orienteering ve çocuklar için orientering eğitimi.* T.C. Başbakanlık Gençlik ve Spor Genel Müdürlüğü Türkiye Dağcılık Federasyonu Yayınları.
30. Güven, Y. ve Tığcı, F. (2006). *Mekânsal Algı Ölçeğinin Güvenilirlik ve Geçerlik Çalışması.* Marmara Üniversitesi 1. Uluslararası Okul Öncesi Eğitim Kongresi. İstanbul: Ya-Pa.
31. Halliday, S. E., Calkins, S. D., & Leerkes, E. M. (2018). Measuring preschool learning engagement in the laboratory. *Journal of experimental child psychology*, 167, 93-116.
32. Hermer, L., & Spelke, E. (1996). Modularity and development: The case of spatial reorientation. *Cognition, 61*(3), 195-232.
33. Hunter, M. P. (1976). Orienteering: an introduction. In M. P. Dwight, J. Oliver, M. G. Hunter & National Association for Girls & Women Sport (Eds.), NAGWS guide team handball racquetball orienteering (pp. 158-160). United States of America, USA: National Association for Girls and Women in Sport American Alliance for Health, Physical Education, and Recreation.
34. IOF (2022). *Competition Rules For International Orienteering Federation(IOF) Foot Orienteering Events.* http://orienteering.org/
35. International Orienteering Federation (2011). *Competition rules for international orienteering federation (IOF)* Foot Orienteering events. Finland.
36. Jansen-Osmann, P., & Wiedenbauer, G. (2004). Wayfinding performance in and the spatial knowledge of a color-coded building for adults and children. *Spatial cognition and computation, 4*(4), 337-358.
37. Kara, B. (2020). Oryantiring Eğitiminin 61-72 Aylık Çocukların Kavram Gelişimine Etkisi. Yüksek Lisans Tezi. Adnan Menderes Üniversitesi Sosyal Bilimler Üniversitesi Aydın.

38. Karaca, F. (2008). Oryantiring Uygulamalarının İlköğretim Programlarındaki Fonksiyonelliği. Yüksek Lisans Tezi. Gazi Üniversitesi/Sağlık Bilimleri Enstitüsü, Ankara.
39. Karataş, M. & Gökçek, N. (2001). *Koşarak hedef bulma.* Yardımcı Yayını.
40. Kelly, N. (2014). *Orienteering made simple and gps technology: An Instructional handbook. United States of America.* Author House.
41. Kjellstrom, B. (1994). *Be Expert with Map & Compass, The complate Orienteering Handbook.* Newyork.
42. Martin Korte (2020) The impact of the digital revolution on human brain and behavior: where do we stand? Dialogues in Clinical Neuroscience, 22:2, 101-111 https://doi.org/10.31887/DCNS.2020.22.2/mkorte
43. MoNE 2013. *Turkish Ministry of National Education Preschool Curriculum for 36-72 month-old Children*
44. Notarnicola, A., Vicenti, G., Tafuri, S., Fischetti, F., Laricchia, L., Guastamacchia, R., & Moretti, B. (2012). Improved mental representation of space in beginner orienteers. *Perceptual and motor skills, 114*(1), 250-260.
45. Landais, L. L., Damman, O. C., Jelsma, J., Verhagen, E., & Timmermans, D. (2022). Promoting an active choice among physically inactive adults: a randomised web-based four-arm experiment. *The international journal of behavioral nutrition and physical activity, 19*(1), 49. https://doi.org/10.1186/s12966-022-01288-y
46. Liben, L.S. & Yekel, C.A. (1996). Preschoolers' understanding of plan and oblique maps: The role of geometric and representational correspondence. *Child Development, 67*(6), 2780–2796.
47. Newcombe, N.S. & Frick, A. (2010). Early education for spatial intelligence: Why, what, and how. *Mind, Brain, and Education, 4*(3), 102-111.
48. Norman, B., Yngström, A. (2003). *Orienteering Technique From Start to Finish,* Çev.: Ferhan KARACA, GSGM Yayınları. Neyir Matbaacılık.
49. Orhan, R. (2012). Oryantiring Sporcularının Kendi Kendine Liderlik Algıları. Yüksek Lisans Tezi. Kırıkkale Üniversitesi/Sağlık Bilimleri Enstitüsü, Kırıkkale.
50. Owen, N., Sparling, P. B., Healy, G. N., Dunstan, D. W., & Matthews, C. E. (2010). Sedentary behavior: emerging evidence for a new health risk. *Mayo Clinic proceedings, 85*(12), 1138–1141. https://doi.org/10.4065/mcp.2010.0444

51. Özcan F. (2007). Oryantiring Sporunun İlköğretim öğrencilerinin Sosyal Bireysel Davranışları ile Matematik-Mantıksal Zekâ gelişimleri Üzerindeki Etkisinin İncelenmesi. [Yüksek Lisans Tezi, Dumlupınar Üniversitesi]
52. Paliichuk, Y., Dotsyuk, L., Kyselytsia, O., Moseychuk, Y., Martyniv, O., Yarmak, O. and Galan, Y. (2018). The influence of means of orienteering on the psychophysiological state of girls aged 15-16-years. *Journal Of Human Sport & Exercise, 13*(2), 443-454.
53. Park, J. H., Moon, J. H., Kim, H. J., Kong, M. H., & Oh, Y. H. (2020). Sedentary Lifestyle: Overview of Updated Evidence of Potential Health Risks. *Korean journal of family medicine, 41*(6), 365–373. https://doi.org/10.4082/kjfm.20.0165
54. Piaget, J. & Inhelder, B. (1967). *The child's conception of space.* New York: W. W. Norton.
55. Prakash, R. S., Voss, M. W., Erickson, K. I., & Kramer, A. F. (2015). Physical activity and cognitive vitality. *Annual review of psychology, 66,* 769-797.
56. Presson, C. C. & Hazelrigg, M. D. (1984). Building spatial representations through primary and secondary learning. Journal of experimental psychology. *Learning, memory, and cognition, 10*(4), 716.
57. Renfrew, T. (1997). *Orienteering.* Human Kinetics.
58. Roaldsen, K.S., Walter, C., Gäverth, J. *et al.* (2022). Between commitment and avoidance – working age stroke survivors' perceptions of physical activity and sedentary behaviour: a qualitative study. *BMC Neurol 22*, 183. https://doi.org/10.1186/s12883-022-02704-3
59. Russo, G., Nigro, F., Raiola, G., & Ceciliani, A. (2019). The role of the extra physical activity on memory storage and psychosocial features, *Journal of Human Sport and Exercise, 14* (Proc4), 948-956.
60. Sandberg, E. H., & Huttenlocher, J. (2001). Advanced spatial skills and advance planning: Components of 6- year-olds' navigational map use. *Journal of cognition and development, 2*(1), 51-70.
61. Sherwood, C. C., Subiaul, F., & Zawidzki, T. W. (2008). A natural history of the human mind: tracing evolutionary changes in brain and cognition. *Journal of anatomy, 212*(4), 426–454. https://doi.org/10.1111/j.1469-7580.2008.00868.x
62. Shors, T.J. Anderson, M.L. Curlik, D.M., & Nokia, M.S. (2012). Use it or lose it: How neurogenesis keeps the brain fit for learning *Behav. Brain Res.* https://doi.org/10.1016/j.bbr.2011.04.023

63. Spiers, H. J., & Maguire, E. A. (2008) The dynamic nature of cognition during wayfinding. *Journal of Environmental Psychology, 28,* 232-249.
64. Symonds, L. (2008). *Sportsport light: Orrienteering, PE and Sport Today.*
65. Szpunar, M., Driediger, M., Johnson, A. M., Vanderloo, L. M., Burke, S. M., Irwin, J. D., Shelley, J., Timmons, B. W., & Tucker, P. (2021). Impact of the Childcare Physical Activity (PLAY) Policy on Young Children's Physical Activity and Sedentary Time: A Pilot Clustered Randomized Controlled Trial. *International journal of environmental research and public health, 18*(14), 7468. https://doi.org/10.3390/ijerph18147468
66. Tanrıkulu, M. (2011). Harita ve pusulanın farklı bir kullanım alanı: Oryantiring. *Milli Eğitim Dergisi, 191,* 120-121.
67. Taş, M.Y. (2010). Oryantiring Sporcuları ile Sporcu Olmayan Bireylerin Stresle Başa Çıkabilme Becerileri. [Yüksek Lisans Tezi, Gazi Üniversitesi].
68. Uttal, D. H., & Wellman, H. M. (1989). Young children's representation of spatial information acquired from maps. *Developmental Psychology, 25*(1), 128
69. Wheeler, M. J., Dempsey, P. C., Grace, M. S., Ellis, K. A., Gardiner, P. A., Green, D. J., & Dunstan, D. W. (2017). Sedentary behavior as a risk factor for cognitive decline? A focus on the influence of glycemic control in brain health. *Alzheimer's & dementia (New York, N. Y.)*, *3*(3), 291–300. https://doi.org/10.1016/j.trci.2017.04.001
70. Zavala-Crichton, J. P., Esteban-Cornejo, I., Solis-Urra, P., Mora-Gonzalez, J., Cadenas-Sanchez, C., Rodriguez-Ayllon, M., Migueles, J. H., Molina-Garcia, P., Verdejo-Roman, J., Kramer, A. F., Hillman, C. H., Erickson, K. I., Catena, A., & Ortega, F. B. (2020). Association of Sedentary Behavior with Brain Structure and Intelligence in Children with Overweight or Obesity: The ActiveBrains Project. *Journal of clinical medicine*, *9*(4), 1101. https://doi.org/10.3390/jcm9041101