Prospective Teachers’ Metaphoric Perceptions of Inclusive Education

Mustafa Ersoy
Sivas Cumhuriyet University

Abstract

The need for special education stems from “a group of neurodevelopmental disorders that begin in childhood”. Today, one of the main topics discussed with regard to the education of children with special needs is inclusive education. Inclusive education, which aims to ensure that they all receive the best quality of education, is an education model based on students’ sharing experiences with their peers. The purpose of this research is to examine university students’ perceptions of inclusive education through metaphor analysis. This study aims to determine how Faculty of Education students perceive the concepts of inclusive education, inclusive students, the family of inclusive student and teacher of the inclusive student. The study group consisted a total of 200 prospective teachers from different branches, including six participants from each grade level in the 2018-2019 academic year fall semester in Faculty of Education at Sivas Cumhuriyet University. 79 of the prospective teachers were male and 121 were female. The data obtained through interviews were analysed through content analysis and descriptive analysis. 12 different metaphors for inclusive education, 11 different metaphors for inclusive student, 9 different metaphors for the family of the inclusive student, and 11 different metaphors for the teacher of the inclusive student were produced.

Keywords: Metaphoric Perceptions, Inclusive Education

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1 Mustafa Ersoy, Assist. Prof. Dr., Educational Sciences, Sivas Cumhuriyet University, ORCID: 0000-0002-7320-8844

Email: mstfrsy@gmail.com
INTRODUCTION

The need for special education stems from “a group of neurodevelopmental disorders that begin in childhood” (Uzun Çiçek, Sarı & Mercan Işık, 2020, p.1). The first systematic initiatives regarding the education of individuals with special needs in the world dates back to the 16th century (Sucuoğlu & Kargın, 2006). Today, one of the main topics discussed with regard to the education of children with special needs is inclusive education (Kauffman & Badar, 2014). In inclusive education practice, the main concern is to provide required support to students in any disability group and to ensure that they receive education in normal classrooms (Gözün & Yıkmış, 2004). “Inclusion is the process of children with disabilities being in the same educational and social institution like other normal children” (Yukay Yüksel, 2017, p. 295. Inclusive education, which aims to ensure that they all receive the best quality of education, is an education model based on students’ sharing experiences with their peers (Sucuoğlu, 2004). Children with diverse mental and physical situations are brought together for their educational purposes in inclusive education. In this vein, although the needs of each child are different, the necessity of meeting their diverse needs must be born in mind (Acarlar, 2013). As education is a fundamental right, this is also true for children with disabilities. The fact that an individual is at a different level of mental or physical development from her / his peers cannot deprive her or his of her / his right to education. This right is also guaranteed in our country with the Law on Special Education. Yalnız (2019) emphasized that the main purpose of inclusive education is to bring individuals with mild disabilities or disabilities into society. There are both individual and social gains of students getting education in the same environment with their normal peers in inclusive education.

Although the first initiatives regarding the education of those with special needs dates back to the 16th century, it can be seen that the inclusive education was introduced in the 1970s in the United States and soon after in other countries. In Turkey, an act regarding the education of children with special needs through the inclusive education was enacted in 1983, the circular issued in 1988 has adopted the definition of special education in the international literature. It is clear that the main purpose of inclusive education is providing educational and social opportunities for the children with special needs in general education schools together with their peers regardless of their handicaps (Sucuoğlu & Kargın, 2006; Aykara, 2011).

The general goals of inclusive education can be listed as follows:

- To ensure that both types of children benefit from each other and develop by doing the same activity,
- To ensure that children with normal development recognize and accept their disabled peers by providing opportunities which will help both groups of children benefit from education.
- To set environments where they can communicate within their social environments to improve their communication skills,
- To provide good personal development for individuals with disabilities and to facilitate their lives as beneficial individuals in the social environment by contributing to their personalities and social development (Darica, 1992)

Today, some individuals with special needs receive their education via inclusive education with their peers who normal development, while some continue their education in special lower-level classes in schools where this kind of education is available. In addition, private and official “special education schools” are among the institutions that provide education to children with special needs in affiliation with the Ministry of National Education. Efforts to expand inclusive education studies are ongoing (Sügürtaş & Gül, 2008). Inclusive education forms the cornerstone of the education system for individuals with special needs (Baldiris, Zervas, Fabregat & Sampson, 2016). Not only individuals
with special needs but also those who have normal development, teachers and families benefit from inclusive education (Pamuk, 2016). “The practice of Inclusion/integration; supports learning and participation in society by reducing exclusion inside and outside the classroom” (Demirbilek & Levent, 2020, p. 481). Fedulova, Ivanova, Atyukova and Nosov (2019) also stated the importance of inclusive education by saying “Inclusion is a social concept. First of all, the concept of inclusion should not be limited only to the educational sense. Inclusive education is a channel that ensures social inclusion”. According to Barut (2016), “These disabled children, that can be seen in all countries of the world, can lead a smooth life in the society as long as they are given necessary and sufficient education and psychological assistance”.

Teachers provide positive support for both themselves and their students by collaborating with special education teachers, advisory teachers, school management and families. They can make arrangements by asking for suggestions from experts when it is necessary (Batu & Kırcaali-Iftar, 2011). Through their observations, teachers recognize individuals and organize the educational environment according to students’ individual differences. In addition, by having sufficient knowledge and skills in the field, they can contribute to the education of individuals (Kandır, 2001). Several steps are taken in the process of inclusive education. At the beginning of each term, teachers should be informed about their students and should prepare necessary lesson plans. Teachers should know if there are inclusion students in their classes and be prepared for them in the educational environment. They should be informed about inclusive education and should learn the types of disabled people and the methods used by consulting special education teachers. By approaching each student equally, they must demonstrate that all students have equal rights and responsibilities in the classroom. If the teacher accepts all students unconditionally, it will be easier for children with normal development to accept their peers with special needs (Batu & Kırcaali-Iftar, 2011).

**Purpose and Sub-Purposes of the Research**

The purpose of this research is to examine students’, who study in Sivas Cumhuriyet University, Faculty of Education, perceptions of inclusive education through metaphor analysis. Following this purpose, answers will be sought for the following sub-purposes.

- What are the metaphors determined by the prospective teachers regarding inclusive education?
- What are the metaphors determined by the prospective teachers regarding the inclusive student?
- What are the metaphors determined by the prospective teachers regarding the family of the inclusive student?
- What are the metaphors determined by the prospective teachers regarding the teacher of the inclusive student?

**METHOD**

Research Design

Qualitative research model and phenomenology patterns were used to determine metaphors regarding the concepts of inclusive education of prospective teachers studying at the Faculty of Education and to examine them in a cross-sectional format. In this study, it was aimed to determine how Sivas Cumhuriyet University, Faculty of Education students perceive the concepts of inclusive education, inclusive student, the family of inclusive student and teacher of the inclusive student. Therefore, phenomenological approach was used. Phenomenology study is to make sense and explain
the experiences of the individual regarding any concept or phenomenon (Creswell, 2007; Merriam, 2013). “Metaphors make it easy for people to make comparisons between two things, to draw attention to the similarities between two things, or to explain something by substituting for something else” (Güneş & Tezcan, 2019, p. 4). According to Yıldırım and Şimşek (2011), “metaphors provide a very solid, rich picture about the subject, phenomenon, event and situation which is studied, and provide a visual image”.

**Study Group**

The study group consisted a total of 200 prospective teachers, including six students at each grade level, among the students studying in different departments (Psychological Counseling and Guidance, Classroom Teaching, Turkish Teaching, Social Sciences Teaching, Science Teaching, Pre-School Teaching, Primary School Mathematics Teaching, Art Teaching, English Teaching) in the 2018-2019 academic year fall semester of Sivas Cumhuriyet University, Faculty of Education. 79 of the prospective teachers were men and 121 were women.

While determining the study group, it was paid attention that that participants were appropriate to the purpose of the study, and the study group and the researcher were compatible. Students who filled out the forms inadequately were not evaluated. The answers given by the remaining students in their forms were evaluated.

**Data Collection**

Metaphors are an important tool to reflect one's self, foresight, and develop communication skills (Moser, 2000). To reveal the metaphors of the Sivas Cumhuriyet University, Faculty of Education students, who have participated in the research were asked to write the metaphors they would see fit regarding the concepts given in the following examples. Furthermore, they were asked to indicate their reasons regarding the metaphors they chose.

1. Inclusive education is like ..., because….
2. The inclusive student is like ..., because....
3. The family of the inclusive student is like ..., because …
4. The teacher of the inclusive student is like ..., because ...

Students were asked to write their metaphors regarding the concepts of “inclusive education”, “inclusive students”, “inclusive families” and “inclusive teachers” in approximately 30 minutes. These statements written by students constituted the main data source of this research as a document.

**Data Analysis**

The forms that the participants filled in were coded by the researcher and then were written in the computer environment. First, the metaphors in the forms were determined and arranged as a list. The main categorized metaphors were identified and then grouped among themselves. The data obtained through interviews were analysed through content analysis and descriptive analysis. The stages of analysing the metaphors obtained are presented below.

**Identification, extraction, and coding of metaphors**

200 students studying at the Faculty of Education were reached for the study. The metaphors and sentences stated in the data collection tool were entered into the Microsoft Excel 2007 program together with the personal information of the participants. During the data entry process, empty and
missing forms, those which did not state metaphor, those which did not explain the reason for the metaphor even though they stated metaphor, or those that did not have a logical link with the motive were extracted. As a result, 32 of the written metaphors about inclusive education, 35 of the metaphors for the inclusive student, 43 of the metaphors for the inclusive student's family, and 37 of the metaphors for the inclusive student's teacher were extracted. Finally, evaluation of metaphors of participants were conducted through 168 for inclusive education, 165 for the inclusive student, 157 for the family of the inclusive student, and 163 for the teacher of inclusive students.

**Category development**

296 forms and metaphors used were evaluated and examined in terms of the subject, source, and the relationship between the source and the subject. As aforementioned, evaluated number of metaphors consisted of 168 for inclusive education, 165 for the inclusive student, 157 for the family of the inclusive student, and 163 for the teacher of inclusive students. Each metaphor was associated with a particular theme, by considering what participants wrote in “Because” part. As a result, 12 different conceptual categories for inclusive education, 11 for inclusive students, 9 for inclusive students' families, and 11 for inclusive students' teachers were determined.

**Editing and Analysis of Data**

The obtained data, namely, metaphors, categories, and positive-negative perceptions, was recorded in Microsoft Excel 2007 program, examined, and transferred to the Microsoft Word program. The frequency values representing 168 valid metaphors and 12 categories for inclusive education, 165 metaphors and 11 categories for inclusive students, 157 metaphors, and 9 categories for the family of inclusive students, 163 metaphors, and 11 categories for teachers of inclusion students were examined. The themes created for a better understanding of the metaphors and categories produced at this stage are shown in the forms of tables. Positive and negative concepts of the participants are also included in these tables.

**FINDINGS AND COMMENTARY**

In this part of the research, the metaphoric students’ perceptions of the inclusive education, the inclusive student, the family of the inclusive student and the teacher of the inclusive student were collected and analysed under certain categories.

**1-Examination of Metaphoric Perceptions Regarding Inclusive Education**

**Metaphors used regarding inclusive education:** According to the findings obtained as a result of the research, students who study at Sivas Cumhuriyet University, Faculty of Education produced a total of 168 valid metaphors regarding inclusive education. It was observed that four participants left this question blank. These metaphors are as follows:

Fruit that grows in the poor soil, sun, salt, shield, cane, painting, car, book, table, sky, rugs, olive pie, rope, strainer, climate, soil, water, cocktail, vegetable soup, garden, ocean, mining, flower, universal cluster, umbrella, therapy, glue, string, cooking, canvas, baby, path, knitting, team play, board, sun, shoes, border, puzzle, organ, flower garden, orchestra, salad, tomato basket, tape, cooking, street light, garden, playpen, visually impaired, rain, soup, teaching how to walk, food, sleep, socialize, sapling, tribune, tree, truck, birdhouse, Doing Farabi (A student exchange program similar to Erasmus in Turkey), knot, nest, making bouquet, family, sea, thread, casting a spell, flower community, breast milk, family, school, life cycle, Konya, cloud, heaven, forest, life, lifetime, boiled salt water, ashura (a kind of traditional Turkish pudding), ice cream, muscle, medicine, Turkish coffee, rainbow, house, Turlu (A traditional Turkish food similar to stew), apple, puzzle, trying different cigarettes, pier, bus, campus, play store, sugared water, processed iron, gold, paint, brewed tea,
carpenter, computer, game, fruit salad, wedding, mirror, intercultural synthesis, friendship, life water, treasure, oxygen, football competition, friend, mixed nuts, washing machine, basil, tree vaccine, strawberry, mixture, mixer, ball, anchor, compass, correction fluid, kitchen.

As seen above, water (7), flower (7), soil (6), family (6), sun (5), garden (4), puzzle (5) are the most preferred metaphoric expressions, regarding the metaphors which were chosen by the participants for inclusive education.

**Metaphor themes related to inclusive education.** 168 metaphors used for inclusive education were combined according to their similarities, and these metaphors were collected under 12 sub-themes.

**Table 1. Metaphor Themes for Inclusive Education**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of participants (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>35</td>
</tr>
<tr>
<td>Plant</td>
<td>13</td>
</tr>
<tr>
<td>Functional tools</td>
<td>33</td>
</tr>
<tr>
<td>Art products</td>
<td>6</td>
</tr>
<tr>
<td>Food</td>
<td>21</td>
</tr>
<tr>
<td>Action</td>
<td>12</td>
</tr>
<tr>
<td>Unity and solidarity</td>
<td>18</td>
</tr>
<tr>
<td>Fun and pleasure</td>
<td>9</td>
</tr>
<tr>
<td>Human characteristics</td>
<td>15</td>
</tr>
<tr>
<td>Disciplinary and interdisciplinary</td>
<td>3</td>
</tr>
<tr>
<td>Occupation</td>
<td>1</td>
</tr>
<tr>
<td>Material value</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>168</td>
</tr>
</tbody>
</table>

As seen in the table above, when the metaphors used for inclusive education are combined and categorized, it has been observed that the most preferred metaphor theme is “nature”, with 35 participants. The themes following the first one are as follows. “Functional tools” is in the second place with 33 participants, “Food ingredients” is in the third place with 21 participants, “Unity and solidarity” is in the fourth place with 18 participants, and “Human characteristics” is in the fifth place with 15 participants.

**a. Nature:** Metaphors used in this category were sun, sky, climate, soil, water, garden, ocean, flower garden, rain, bird's nest, sea, cloud, forest, rainbow, and oxygen, and they were preferred by 35 participants.

In this theme, seven participants used the “water” metaphor regarding inclusive education. For example, a participant stated that “Inclusive education is like water because it gives life”.

**b. Plant:** Metaphors used in this category were fruit that grows in the poor soil, flowers, saplings, trees, and basil, and they were preferred by 13 participants.

In this theme, 7 people used the “flower” metaphor for inclusive education. For example, a participant wrote that “Inclusive education is like a flower because it is always different and special”.

**c. Functional tools:** Metaphors used in this category were shield, walking stick, car, rope, strainer, umbrella, glue, rope, dashboard, shoes, tomato basket, tape, street light, truck, linen, medicine, pier, bus, play store, paint, computer, mirror, washing machine, wood vaccine, mixer, anchor, compass, correction fluid, kitchen, road, border, and were preferred by 33 participants.

In this theme, three participants used the “car” metaphor for inclusive education. For example, a participant stated that “Inclusive education is like a car as it needs fuel”.

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d. Art products: Metaphors used in this category were painting, books, tables, rugs, and canvas, and were preferred by six participants.

In this theme, two participants used the “book” metaphor for inclusive education. For example, a participant wrote that “Inclusive education is like a book, as it contains multiple information about the problem and solution which leads to the resolution”.

e. Food: Metaphors used in this category were salt, olive pie, cocktail, veggie soup, salad, soup, meal, ashura (A kind of traditional Turkish pudding), ice cream, Turkish coffee, turlu (A kind of traditional Turkish food similar to stew), apple, sugared water, tea, fruit salad, mixed nuts, and strawberry, and were preferred by 21 participants.

In this theme, two participants, for each metaphor, used “turlu, apple, and cocktail” metaphors for inclusive education. For example, a participant stated that “Inclusive education is like a turlu because there are many different people in it”.

f. Action: Metaphors used in this category were mining, cooking, knitting, teaching how to walk, socializing, doing Farabi, making a bouquet, casting a spell, boiled salty water, trying different cigarettes, and processed iron, and preferred by 12 participants.

In this theme, two participants used the “cooking” metaphor for inclusive education. For example, a participant wrote that “Inclusive education is like cooking because it is a process that requires certain stages and patience”.

g. Unity and solidarity: Metaphors used in this category were team play, orchestra, tribune, nest, family, floral community, school, campus, wedding, friend, mixture, wool ball, and knot, and were preferred by 18 participants.

In this theme, six participants used the “family” metaphor. For example, a participant stated “Inclusive education is like a family because it accommodates everyone”.

h. Entertainment and pleasure: Metaphors used in this category were puzzle, playpen, crossword, football competition, and game, and preferred by nine participants.

In this theme, five participants used the “puzzle” metaphor for inclusive education. For example, a participant wrote “Inclusive education is like a puzzle because it makes sense when you put the pieces in the proper places”.

i. Human characteristics: Metaphors used in this category were baby, organ, visually impaired, sleep, breast milk, life cycle, heaven, life, lifetime, muscle, hand, mother, life water, and Konya, and preferred by 15 participants.

In this theme, two participants have the “mom” metaphor for inclusive education. For example, a participant stated “Inclusive education is like a mother because she sees the student as her child”.

j. Disciplinary and interdisciplinary: Metaphors used in this category were universal cluster, intercultural synthesis, and therapy, and preferred by three participants.

In this theme, a participant used the “intercultural synthesis” metaphor for inclusive education, and stated “Inclusive education is like intercultural synthesis because every different individual becomes beautiful when they are together”.

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**k. Occupation:** Metaphor used in this category was carpenter, and preferred by one participant.

In this theme, a participant used the “carpenter” metaphor for inclusive education, and stated “Inclusive education is like a carpenter because it surfaces as it works”

**l. Material value:** Metaphors used in this category were gold and treasure, and preferred by two participants.

In this theme, a participant used the “gold” metaphor for inclusive education, and stated “Inclusive education is like gold because it needs to be polished”.

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**2-Examination of Metaphoric Perceptions Regarding the Inclusive Student**

**Metaphors used regarding inclusive education:** According to the findings obtained as a result of the research, participants produced a total of 165 valid metaphors regarding the inclusive student. It was observed that four participants left this question blank. These metaphors are as follows.

Painting, book, canvas, table, art, flower, tree, branch, orchid, waterless flower, endemic plant, cactus, snowdrop, tulip in rose garden, unopened flower, violet, wheat, rose, root of tree, plane tree, sapling, white rose, pale flower, seed, grafted branch, sunflower, four leaf clover, chamomile with missing petals, unprocessed jewel, pearl grain, gemstone, diamond, iron, raw gold, ruby, treasure, hidden treasure, magnet, coal, blank sheet, tabula-rasa, country, undiscovered continent, white swan, ugly duckling, cat, bee, kitten, lamb, ant wing broken bird, albino lion, dough, olive, sugar, fruit, tea, caviar, salt, cloud, clear water, sun, sea, clay, oasis, garden, rain, soil, star, source, rainbow, butt, child that doesn’t grow, angel, farmer, newborn baby, sibling, regular student, apprentice, child, disappearing climber, ambassador, big brother, scout, car, pen, laundry, chair with missing foot, ship, application to be updated, rope, bottle, road, patch, black box, symbol, bowling ball, play dough, new player, game room, rainbow blue, white.

As seen above, when the metaphors used by the attendants for the inclusive student were examined, flower (32) and newborn baby (10) were the most preferred metaphors.

**Metaphor themes for the inclusive student:** The 165 metaphors used for the inclusive student were combined according to their similar characteristics, and these metaphors were collected under 11 sub-themes.

**Table 2. Metaphor Themes for Inclusive Students**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of participants (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>7</td>
</tr>
<tr>
<td>Plant</td>
<td>60</td>
</tr>
<tr>
<td>Mineral-Material</td>
<td>19</td>
</tr>
<tr>
<td>Discipline and interdisciplinary</td>
<td>4</td>
</tr>
<tr>
<td>Animal</td>
<td>12</td>
</tr>
<tr>
<td>Food</td>
<td>7</td>
</tr>
<tr>
<td>Nature</td>
<td>17</td>
</tr>
<tr>
<td>Human characteristics</td>
<td>21</td>
</tr>
<tr>
<td>Color</td>
<td>2</td>
</tr>
<tr>
<td>Functional tools</td>
<td>12</td>
</tr>
<tr>
<td>Fun and pleasure</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
</tr>
</tbody>
</table>

As seen in the table above, when the metaphors used for inclusive education are combined and categorized, the most preferred metaphor theme is "plant", with 60 participants. Following it, “human and human values” is in the second place with 21 participants, “those which express mine and material value” is in the third place with 19 participants, “nature and beings in nature” is in the fourth place.
with 17 participants, “animal” and “functional tools” themes share the fifth place with 12 participants each.

a. **Art:** Metaphors used in this category were painting, book (2), canvas, painting (2), and art, and preferred by seven participants.

In this theme, two people, for each metaphor, used the “book, table” metaphors for the inclusive student. For example, a participant stated “Inclusion student is like a book because s/he changes the way people view life”.

b. **Plant:** Metaphors used in this category were flower (32), tree (2), branch, orchid (2), non-watered flower, endemic plant (3), cactus (2), snowdrop, tulip in a rose garden, unopened flower, violet, wheat, rose, the root of a tree, plane tree, sapling, white rose, pale flower, seed (2), inoculated branch, sunflower, four-leaf clover, and deficient chamomile, and preferred by 60 participants.

In this theme, 32 participants used the “flower” metaphor for the inclusive student. For example, a participant wrote “The inclusive student is like a flower because s/he flourishes as s/he is being taken care of”.

c. **Mineral-Material:** Metaphors used in this category were unprocessed jewellery, pearl grain (3), gemstone (2), diamond (2), iron, raw gold (3), ruby, treasure, hidden treasure, magnet, and coal (3), and preferred by 19 participants.

In this theme, three participants, for each, used the “coal, raw gold, pearl grain” metaphors for the inclusive student. For example, a participant said “Inclusive student is like coal because s/he turns into a diamond”.

d. **Disciplinary and Interdisciplinary:** Metaphors used in this category were empty plate (2), country, and undiscovered continent, and preferred by four participants.

In this theme, two participants used the “empty plate” metaphor for the inclusive student. For example, a participant stated “Inclusive student is like a blank plate because a regular development shapes him/her”.

e. **Animal:** Metaphors used in this category were white swan, ugly duckling, cat (4), bee (2), lamb, ant, a bird with a broken wing, and albino lion and preferred 12 participants.

In this theme, four participants used the “cat” metaphor for the inclusive student. For example, a participant wrote “Inclusive student is like a cat because s/he needs protection”.

f. **Food:** Metaphors used in this category were dough, olive, sugar, fruit, tea, caviar, and salt, and preferred by seven participants.

The participants in this theme used “dough, olive, sugar, fruit, tea, caviar, salt” metaphors for the inclusive student. For example, a participant wrote “Inclusive student is like dough because you can give him/her any shape you want”.

g. **Nature:** Metaphors used in this category were cloud, clear water, sun (3), sea, clay, oasis, garden, rain (2), earth, star, spring, rainbow (2), and cigarette butt, and preferred by 17 participants.

In this theme, three participants used the “sun” metaphor for the inclusive student. For example, a participant stated “Inclusive student is like the sun because s/he illuminates”.

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h. Human Characteristics: Metaphors used in this category were kid who does not grow up, angel, farmer, new-born baby (10), sibling, normal student, apprentice, child, disappearing climber, ambassador, big brother, and scout preferred by 21 participants.

In this theme, 10 participants used the “new-born baby” metaphor for the inclusive student. For example, a participant stated “Inclusive student is like a new-born baby because s/he requires attention”.

i. Color: Metaphors used in this category were rainbow blue and white and preferred by two participants.

The people in this theme used “rainbow blue, white” metaphors for the inclusive student. For example, a participant has stated “Inclusive student is like white because s/he enlightens us”.

j. Functional Tools: Metaphors used in this category were car, pencil, laundry, chair with a missing foot, ship, application to be updated, rope, bottle, road, patch, black box, and symbol, and preferred by 12 participants.

The participants in this theme used “car, pencil, laundry, chair with missing foot, ship, application to be updated, rope, bottle, road, patch, black box, symbol” metaphors for the inclusive student. For example, a participant wrote “Inclusive student is like a car because s/he has to be used with care”.

k. Entertainment and Pleasure: Metaphors used in this category were bowling ball, play dough, new player, and game hall preferred by four participants.

The participants in this theme used “Bowling ball, play dough, new player, game room” metaphors for the inclusive student. For example, a participant wrote “Inclusive student is like a bowling ball because s/he has to be hold tight.”

3-Examination of Metaphoric Perceptions Regarding the Family of the Inclusive Student

The metaphors used for the family of the inclusive student: According to the findings obtained as a result of the research, participants produced a total of 158 valid metaphors about the family of the inclusive student. It was observed that four participants left this question blank. These metaphors are as follows.

Flowing water river, pole star, rainbow, garden, water, soil, fertile soil, mountain, tree, forest, fire, plane tree, planet, sky, rock, tree branch, world, sun, nature, bird's nest, tree trunk, river, mother, bird, cat-seen mouse, oyster, bee, lion, protection bird, sturgeon, key, sword, vase, traffic sign, column, lamp, pier, truck, coat, alarm clock, shield, google, piggy bank, flowerpot, computer, tape, cap, cigarette pack, armor, abutment, detergent, bridge, equipment, light, pencil case, technology, closed box, pickle, salt, spice, tea without sugar, tea, five, warrior, manager, psychological counselor, miner, collector, detective, farmer, teacher, book writer, guide, assistant, police, security guard, master, teacher attending the most important lesson, sarraf, gardener, cook apprentice, construction, building, supporting wall, library, wall, art museum, bank, house, wagon, ordeal, state, army, horror tunnel toy, music, angler, the basis of the puzzle, fairy tale hero, eye, treasure holder, mother, time, invention, stone of patience, leader, corner of heaven, eternal day, backbone, cruise, old man, steel, mercury, diamond.

As seen above, when the metaphors used by the participants in the inclusive students' family are examined, it is that the most preferred metaphors are soil (10), water (8), plane tree (4), patience stone (4), house (3), tree (3), and mountain (3).
Metaphor themes of the inclusive student's family. 158 metaphors used for the family of inclusive students were combined according to their similar characteristics and these metaphors were collected under 9 sub-themes.

Table 3. Metaphor Themes for the Family of Inclusive Students

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of people (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>52</td>
</tr>
<tr>
<td>Animal</td>
<td>8</td>
</tr>
<tr>
<td>Functional tools</td>
<td>28</td>
</tr>
<tr>
<td>Food</td>
<td>5</td>
</tr>
<tr>
<td>Occupation group</td>
<td>22</td>
</tr>
<tr>
<td>Location and structure</td>
<td>14</td>
</tr>
<tr>
<td>Fun and pleasure</td>
<td>5</td>
</tr>
<tr>
<td>Human characteristics</td>
<td>21</td>
</tr>
<tr>
<td>Mineral-Material</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>158</td>
</tr>
</tbody>
</table>

As seen in the table above, when the metaphors used for the family of the inclusive student are combined and categorized, the most preferred metaphor theme, is “Nature and beings in nature” with 52 participants. The themes following the first one are as follows. “Functional tools” is in the second place with 28 participants, “Occupation group” is in the third place with 22 participants, “Expressions of human and human value” is in the fourth place with 21 participants, and “Statements expressing location and structure” is in the fifth place with 14 participants.

a. Nature: Metaphors used in this category were flowing water, polar star, rainbow, garden, water, soil, fertile soil, mountain, tree, forest, fire, plane tree, planet, sky, rock, tree branch, earth, sun, nature, bird's nest, tree trunk, and river, and preferred by 52 participants.

In this theme, 10 participants used the “soil” metaphor for the inclusive student's family. For example, a participant said “The family of the inclusive student is like soil because the flower grows in the soil”.

b. Animal: Metaphors used in this category were mother bird, a cat which has seen a mouse, oyster, bee, lion, guardian bird, and sturgeon, and preferred by eight participants.

In this theme, two participants used the “oyster” metaphor for the family of the inclusive student. For example, a participant stated “The inclusive student's family is like an oyster because they hide pearl in them.”

c. Functional tools: Metaphors used in this category were key, sword, vase, traffic sign, column, lamp, pier, truck, coat, alarm clock, shield, google, piggy bank, flowerpot, computer, tape, container, cigarette pack, armor, abutment, detergent, bridge, equipment, light, pencil box, technology, and closed box, and preferred by 28 participants.

In this theme, three participants used the “pot” metaphor for the family of the inclusive student. For example, a participant wrote “Inclusive student's family is like a flowerpot because the student grows up there.”

d. Food: Metaphors used in this category were pickle, salt, spice, unsweetened tea, and five tea, and preferred by five participants.

In this theme, the “spice” metaphor was used for the family of the inclusive student. For example, a participant said “Inclusive student's family is like spice because they must be in collaboration”.

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e. **Occupation:** Metaphors used in this category were warrior, manager, psychological counsellor, miner, collector, detective, farmer, teacher, book writer, guide, assistant, police, security guard, master, teacher who attends the most important lesson, moneylender, gardener, and cook apprentice, and preferred by 22 participants.

In this theme, two participants, for each metaphor, used the “warrior, detective, farmer, teacher” metaphors for the family of the inclusive student.

f. **Location and structure:** Metaphors used in this category were construction, building, supporting wall, library, wall, art museum, bank, house, wagon, ordeal, state, and army, and preferred by 14 participants.

In this theme, three participants used the “home” metaphor for the family of the inclusive student. For example, a participant stated "Inclusive student's family is like home because it contains, it includes different people".

g. **Entertainment and pleasure:** Metaphors used in this category were horror tunnel, toys, music, Fenerbahce fans, and the basis of the puzzle, and preferred by five participants.

In this theme, the "toy" metaphor has been used for the family of the inclusive student. For example, a participant said "The inclusive student's family is like a toy because it makes an effort to make him/her happy.".

h. **Human characteristics:** Metaphors used in this category were fairy tale hero, eye, treasure holder, mother, time, invention, patience stone, leader, corner of heaven, endless day, spine, ship traveler, and old man, and preferred by 21 participants.

In this theme, four participants used the “patience stone” metaphor for the family of the inclusive student. For example, a participant wrote "Inclusive student's family is like a stone of patience because the family has a big task.”.

i. **Mineral-material:** Metaphors used in this category were steel, mercury, and diamond, and preferred by three participants.

In this theme, the "diamond" metaphor was used for the family of the inclusive student. For example, a participant said "Inclusive student's family is like a diamond because the parents are so valuable.”.

4-Examination of Metaphoric Perceptions of the Teacher of the Inclusive Student

The metaphors used for the teacher of the inclusive student: According to the findings obtained as a result of the research, participants produced a total of 161 valid metaphors about the teacher of the inclusive student. It was observed that four participants left this question blank. These metaphors are as follows.

Water, sun, mirror, candlelight, cotton, star, universe, sun, exploration, lantern, sun, water and sun, family, light, cook, gardener, sun, compass, miner, gardener, gardener, gardener, family, mother, life water, genius, guide, lantern, jewelry box, sun, guide, sun, gardener, family, pole star, team coach, compass, gardener, gardener, pole star, chair, vizier, star, family, pencil, earth, water, night light, gardener, reading book, glue, library, earth, sun, sun, person touching the heart, surprise egg, water, earth, mining worker, parent, family, god, koala, diamond master, park, bee, water, sun, compass, sun, light, flower, sun, sun, florist, mother, light, tap, bee, mine worker, cotton, wolf, rain, traffic sign, daisy, sun, sugar, air, light, hero, wolf, moon, earth, cook, fire, puzzle person, heels, ashura, sun, world, nature, doctor, miner, world, gardener, rain, artist, candle, leader, water, lamp,
flower, light, painter, smoker, water, driver, traffic police, coach, conductor, brush, painter, angel, mother, water canal, carpenter, guide, team coach, tree, mother, rain, light, gas in the air, painter, angel of goodness, family, friend, sun, pole star, guide sun, big brother, big sister, justice, water, softener, black seed, meteorologist, builder, hops, ivy, market, angel, master, captain, cook, rescue team, spelling guide, cook.

As seen above, when the metaphors used by the participants in the study for the teacher of the inclusive student were examined, the most preferred metaphors were sun (20), gardener (9), water (7), light (6), family (7).

**Metaphor themes regarding the inclusive student's teacher:** 161 metaphors used for the teacher of the inclusive student were combined according to their similar characteristics and these metaphors were gathered under 11 sub-themes.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of people (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>53</td>
</tr>
<tr>
<td>Plant</td>
<td>8</td>
</tr>
<tr>
<td>Unity and solidarity</td>
<td>15</td>
</tr>
<tr>
<td>Location and structure</td>
<td>4</td>
</tr>
<tr>
<td>Functional tools</td>
<td>20</td>
</tr>
<tr>
<td>Occupation group</td>
<td>45</td>
</tr>
<tr>
<td>Action</td>
<td>4</td>
</tr>
<tr>
<td>Pleasure and play</td>
<td>1</td>
</tr>
<tr>
<td>Religious values</td>
<td>4</td>
</tr>
<tr>
<td>Animal</td>
<td>5</td>
</tr>
<tr>
<td>Food</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>161</td>
</tr>
</tbody>
</table>

As seen in the table above, when the metaphors used for the teacher of the inclusive student are combined and categorized, the most preferred metaphor theme is “Concepts about nature” with 53 participants. The themes following the first one are as follows. “Professional group” is in the second place with 45 participants, “Functional tools” is in the third place with 20 participants, “Concepts expressing unity and solidarity” is in the fourth place with 15 participants, and “plant” is in the fifth place with eight participants.

**a. Nature:** Metaphors used in this category were Sun (20), Water (7), Star (2), Universe, Light (6), Polar Star (3), Rain (3) Weather (2), Moon, Earth (4), Fire, Earth (2), and Nature, and preferred by 53 participants.

In this theme, three participants used the “rain” metaphor for the teacher of the inclusive student. For example, a participant said “The teacher of the inclusive student is like rain because it brings life to many living things with its drops, making nature green”.

**b. Plant:** Metaphors used in this category were Flower (2), Cotton (2), Daisy, Tree, Nigella, and Ivy, and preferred by eight participants.

In this theme, two participants used the “flower” metaphor for the teacher of the inclusive student. For example, a participant said “The inclusive student is like a flower because s/he is very special”.

**c. Unity and Solidarity:** Metaphors used in this category were Family (7), Parent, Friend, Mother (4), and Big Brother (2), and preferred by 15 participants.
In this theme, four participants used the “mom” metaphor for the teacher of the inclusive student. For example, a participant said “The teacher of the inclusive student is like a mother because she protects and watches over”.

d. **Location and Structure:** Metaphors used in this category were Library, Park, Water channel, and Market, and preferred by four participants.

   In this theme, a participant used the “water channel” metaphor for the teacher of the inclusive student, and stated “The teacher of the inclusive student is like a water channel because it is necessary to water the flowers”.

e. **Functional Tools:** Metaphors used in this category were Mirror, Flashlight (2), Compass (3), Jewelry box, Chair, Pen, Night light, Adhesive, Tap, Traffic sign, High heel shoe, Candle, Lamp, Brush, Softener, Spelling guide, and Candle Light, and preferred by 20 participants.

   In this theme, two participants used the “flashlight” metaphor for the teacher of the inclusive student. For example, a participant said “The teacher of the inclusive student is like a flashlight because it reveals things by shining light onto them”.

f. **Occupation:** Metaphors used in this category were Explorer, Cook (4), Gardener (9), Human Master, Seller of Sherbet, Master, Captain, Rescue team, Miner (4), Guide (4), Team coach (2), Carpenter, Vizier, Meteorologist, Diamond master, Florist, Hero, Doctor, Artist, Leader, Painter (3), Driver, Traffic police, Technical team coach, and Maestro, and preferred by 45 participants.

   In this theme, the participants used “carpenter, vizier, driver, seller of sherbet” metaphors for the teacher of the inclusive student. For example, a participant said “The teacher of the inclusive student is like a carpenter because s/he processes his students”.

g. **Action:** Metaphors used in this category were reading books, making puzzles, smoker, and person touching the heart, and preferred by four participants.

   In this theme, a participant used the “person touching the heart” metaphor for the teacher of the inclusive student, and stated “The teacher of the inclusive student is like the person who touches the heart because s/he creates awareness”.

h. **Pleasure and Play:** Metaphor used in this category was the surprise egg, and preferred by a participant.

   In this theme, a participant used the “surprise egg” metaphor for the teacher of the inclusive student, and stated “The teacher of the inclusive student is like a surprise egg because each teacher looks at the student differently”.

i. **Religious Values:** Metaphors used in this category were Allah (God), Angel (2), and Guardian Angel, and preferred by four participants.

   In this theme, the participants used “Allah, angel, guardian angel” metaphors for the inclusive student’s teacher. For example, a participant said “The teacher of the inclusive student is like an angel because s/he does not discriminate”.

j. **Animal:** Metaphors used in this category were Koala, Bee (2), and Wolf (3), and preferred by six participants.
In this theme, the participants used “koala, bee, wolf” metaphors for the inclusive student's teacher. For example, a participant said “The teacher of the inclusive student is like a wolf because s/he is a leader”.

**k. Food:** Metaphors used in this category were Ashura and Sugar, and preferred by two participants.

In this theme, participants used “ashura, sugar” metaphors for the teacher of the inclusive student. For example, a participant wrote “The teacher of the inclusive student is like ashura because s/he brings people together”.

**CONCLUSION AND RECOMMENDATIONS**

In this study, the metaphoric perceptions of the students studying at Sivas Cumhuriyet University Faculty of Education regarding the concepts of “inclusive education, the inclusive student, the family of the inclusive student, the teacher of the inclusive student” were examined. 12 types of metaphors for inclusive education, 11 types for the inclusive student, 9 types for the family of the inclusive student, and 11 types of metaphors for the teacher of the inclusive student were produced. Metaphors regarding inclusive education were produced on the theme of “nature” the most, and on the theme of “occupation” the least.

The fact that the concept of nature has a positive connotation indicates that prospective teachers have a positive attitude towards inclusive education. As a matter of fact, using the “profession” theme at least shows that inclusive education means more than just a profession. This result is in parallel with the other studies. Gürsoy, Aral, Öz, and Aysu (2019) stated in their study that the metaphors of teachers regarding inclusive education are “slow and hard, special attention, love and patience, difference, socialization and equal conditions”. In the study of Kumaş and Süer (2020), the concepts of nature are at the top in the metaphors created in the special education theme. In the study of Yazıcıoğlu (2019), the metaphor of “rainbow” was used the most among the metaphors regarding inclusive education. The rainbow metaphor used in this work refers to understanding differences.

These studies, which are given as examples in the literature, show that most of the teachers or prospective teachers adopt a positive attitude towards inclusive education. In the study conducted by Akman, Uzun, and Yazıcı (2018), teachers’ and prospective teachers’ opinions about inclusive education were included. “Preschool teacher candidates stated that inclusive education is important; because every child has the right to education and equal opportunities and they see it as an important step for the socialization of children with special needs. On the other hand, preschool teachers emphasized the importance of supporting the developmental areas of the child. In their study, Mertoğlu, Sarı, Pusmaz, Balçın (2020) found that the opinions of prospective teachers who received inclusive education were more positive about inclusion.

Metaphors regarding the inclusive student were produced the most in the “plant” theme, and the least in the “color” theme. In the study conducted by Altıntaş, Baykan, Kahraman, and Altıntaş (2015) for prospective science teachers, the results indicated that participants produced metaphors mostly through the metaphor of the flower.

In another study, Kapucu, Aydoğdu and Benli, (2020) it is stated, “Considering the metaphors used about inclusion students, it is seen that the theme of innocence is generally at the forefront. This perception may be that teachers and students are careful to be more sensitive when choosing their behavior towards inclusion students”. The fact that some of the metaphors used in this study are “delicate grass” and “cactus” supports the findings in this article. In the study conducted by İlik and Deniz (2019), it is stated that most of the branch teachers have a positive attitude towards the inclusion students in their class. On the other hand, in the study of Perceptions of Preschool Prospective Teachers for Children with Special Needs by Kardeş and Taşkın (2020), it was seen that the first words that came to mind of teacher candidates when they talk about special needs children were
mostly negative words such as “needy, disabled, incompetence”. As the reason for this situation, “it can be said that negative perceptions of pre-service teachers towards individuals with special needs stem from the environment, social media and traditional approach” has been stated.

Metaphors regarding the family of the inclusive student were produced the most in the “nature” theme, and the least in the “material-financial” theme.

The use of the nature metaphor may be due to the positive attitude towards the inclusion student's family. In the study of Öncül and Batu (2005), parents stated that they can generally give moral support and morale to mothers with inclusive students. This situation shows that families with inclusive students are approached positively by other individuals. Değirmenci Kurt and Tomul (2020), on the other hand, draws attention to the result of not accepting the situation of their child among the results obtained regarding families in the context of the study. In this case, while a tolerant approach is displayed to the family of the mainstreaming student from outside, teachers or school administrators have some difficulties with these parents. In their study Sevim and Atasoy (2020), stated that the inclusive student's parents had problems with the school administration and other parents. In another study, Demir and Usta (2019) stated that “the existence of family-related problems, especially the family's not embracing the process and the child's refusal to accept the situation, is undeniable”.

Metaphors regarding the teacher of the inclusive student were produced the most in the “nature” theme, and the least in the “play” theme.

This result is the same as the most used metaphor for inclusion education and the family of the inclusive student. The most used metaphor for the inclusive student, "plant" is also a concept related to the nature. From this point of view, the metaphors of the four sub-problems in the study support each other. The fact that inclusive education is a challenging, laborious and demanding field may be the reason why prospective teachers mostly use the metaphor of “nature”, which makes positive associations. In the study of Akdal, Bozdağ, Aydın, and Aşkan (2020) and in another study by İnceler and Özder (2020), it was stated that the attitude levels of prospective teachers regarding the education of individuals with special needs were high. Therefore, the metaphors of teachers who will serve in this field can also be positive. On the other hand, Demirbilek and Levent (2020) have reached that counseling teachers behaved insensitive towards students with special education needs. Their study also showed that counseling teachers had a lack of knowledge about the education of these students and they could exhibit some negative behaviors towards students with special education needs. Considering the data of the researches, while there is a positive attitude towards inclusion teachers by prospective teachers, it is stated by their colleagues that teachers working with inclusive students in schools can display negative attitudes. Boyle, Anderson, and Allen (2020) stated that students, as they progress through their degrees, become less positive towards inclusion as they move through their teacher training, and supported this with other studies.

In the data analysis section, there were four negative metaphors related to inclusive education, 13 related to the inclusive student, 11 related to the family of the inclusive student, and two related to the teacher of the inclusive student. In the study of Gürsoy, Aral, Öz and Aysu (2019), it was seen that there were both positive and negative metaphors about the concept of inclusion. It was seen that the negative metaphors held this metaphorical perception because the participants were not aware of the concept of the inclusive education. In the study of Kök, Balço and Bilgiz (2017), it was concluded that the metaphors of the teachers and prospective teachers towards inclusive students were mostly positive.

In the study of Yazıcıoğlu's (2019) Investigation of Anatolian High School Teachers' Views on Inclusion Education through Metaphor Analysis, no negative metaphors were produced regarding inclusion education. Teachers participating in the study are aware of the importance and necessity of inclusive education. However, in Esmer, Yılmaz, Güneş, Tarım, and Delican's (2017) study, participant teachers stated that they found it “more difficult, more depressing, and more tiring” to
work in an inclusive student’s classroom. In the same study, there were also participants who talked about this situation positively.

To turn these negative perceptions into positive, it is suggested to increase the level of awareness by raising the number of special education courses given to the prospective teachers during their undergraduate education, by providing the necessary opportunities and time, and by having the prospective teachers receive practical training.

In addition, prospective teachers may be required to work with inclusive students in their compulsory internship education, and they can be supported to produce projects for mainstreaming students during their undergraduate education.

This research was carried out with a limited number of students. Different data collection tools and methods can be used together to examine the results obtained in the research in more detail.

- This research is a conducted with only prospective teachers. For further research, this study can be done with parents, teachers, and administrators.
- Comparative studies can be carried out between different classes to determine whether the metaphoric perceptions of special education students differ during their education or not.
- This study can be repeated with the same participants after they start teaching and the variability of the data can be controlled.
- Research can be done with the normal peers of the inclusive students.

REFERENCES


