

# International Journal of Educational Studies and Policy (IJESP)

Volume: 2, Issue: 2, November 2021

## Evaluation of the Curriculum on Child Nutrition in the Child Development Program According to Metfessel-Michael Program Evaluation Model

Hilal Hatice Ülkü<sup>1</sup> Ümit Gözel<sup>2</sup>

### ABSTRACT

This study aims to evaluate the curriculum of the "Child Nutrition" course, which is one of the mandatory courses of the Associate Degree Child Development Program of a university in the Aegean region, according to the Metfessel-Michael program evaluation model. This course has a curriculum and course information content. Data were collected through stakeholder views, observations and document analysis for the course within the framework of the single case pattern, which is one of the case study types based on the qualitative research approach. Semi-structured interview forms, and observation forms were used as data collection tools. The data obtained with the data collection tools were analyzed and evaluated within the framework of descriptive analysis. The participant group of the study consists of 11 students, 2 instructors, and 2 administrators. In the study, the data were handled within the framework of the purpose of students coming to the program, the current status of the program, the content and necessity of the program-course, the suitability of the course to business life, the contribution of the course to the professional development of the students, the business life after graduation, educational status, learning-teaching process, assessment, evaluation, and instructor qualifications. As a result, it has been revealed that the course and course objectives have an important place in the program, there are difficulties in the learning-teaching process, the course and course objectives are mostly tried to be conveyed by direct narration method, and measurement and evaluation are done only with exams.

**Keywords:** Program evaluation, Metfessel-Michael Program Evaluation Model, child nutrition, vocational school

**Article History:** Received 08.06.2021

Accepted 25.10.2021

**Cite as:** Ülkü, H. H. & Gözel, Ü. (2021). Evaluation of the curriculum on child nutrition in the child development program according to Metfessel – Michael Program Evaluation Model. *International Journal of Educational Studies and Policy*, 2(2), 51-72.

<sup>1</sup>Corresponding Author: Hilal Hatice Ülkü, Aydın Adnan Menderes University, Buharkent Vocational High School, Child Development Program, hilal.gulludere@adu.edu.tr, ORCID: 0000-0003-1780-3531

<sup>2</sup> Ümit Gözel, Aydın Adnan Menderes University, Student Affairs Office, umit.gozal@adu.edu.tr, ORCID: 0000-0002-6391-0998

## Introduction

Educational programs play a key role for a planned and expected education. From this point of view, education programs include the process of determining the target audience for behavioral change, the learning experiences of the target audience, and the effects of the learning experiences in the target audience, as stated in the process definition of education (Gündoğdu, Çelik, Altın and Şimşek, 2016). Evaluation in education, on the other hand, is to reveal whether the expected behavioral changes reach the targeted results with reference to the criteria in the program design (Yüksel and Sağlam, 2014).

Program evaluation is based on the systematic data gathering and analysis of a program developed using scientific research processes and is defined as the decision-making process about the accuracy, adequacy, realism, suitability, efficiency, usefulness, effectiveness, success, and practicality of the program (Uşun, 2016). While Green and Stone (1977) express program evaluation as systematically documenting the results or effects of the program, making judgements about the program, and appraising the program; Fitzpatrick, Sanders and Worthen (2012) refer to it as the starting point we will use to decide the value of the program.

When the program evaluation is considered; it is seen that the classification of the programs is made in line with their philosophies, ideologies, evaluation types, system dimensions, designs (target-based, management-oriented, beneficiary-oriented, expert-oriented, negotiation-based, participant-oriented) (Aygören and Er, 2019). In this study, it is a goal-based program evaluation as it is aimed to evaluate the child nutrition curriculum within the frame of the Metfessel-Michael program evaluation model.

This model, which consists of eight stages and main purpose of which is to evaluate school programs, was developed by Metfessel-Michael towards the end of the 1960s. Since Metfessel-Michael created the evaluation process inspired by Tyler's model (Orstein and Hunkins, 1988; Worthen, Sanders and Fitzpatrick, 2004), Tyler's principles are at the core of the model. Metfessel-Michael (1967) explains the six aims of the evaluation, which Tyler also stated:

- Obtaining information about what will be developed in the training program and the functioning of the institution through periodic control,
- Confirming hypotheses about the functions of the educational institution,
- Obtaining guiding basic information for the student's personal efficiency,
- To come up with information that will create psychological relief for students, teachers, and parents,
- To ensure continuity and improvement in public relations,
- To assist students and teachers to gain structured knowledge and redefine their goals.

Metfessel-Michael draws on experiences with school staff (administrators, teachers, students, and staff at the school). It states that in the evaluation process of school programs, revealing the potential benefit will be achieved by using multiple criteria instead of a single model. The following steps should be taken into account for the evaluation.

- Include all stakeholders in program evaluation (student, teacher, parent, administrator, etc.)
- Adapt the purpose and specific objectives to an appropriate model,
- Make specific targets applicable in the program,

- Select or create measurement tools that can measure the effectiveness of the program,
- Periodically observe tests, scales, and other behaviors appropriate to the content,
- Analyze the obtained data with statistical methods,
- Interpret the data using expected performance levels in all measurements,
- Develop forward recommendations for implementation, modification and revision of specific targets (Kuo, Wei, Chen, Wang, Ho and Yang, 2012).

In line with the 8 stages mentioned above, it can be said that the Metfessel-Michael curriculum evaluation model will guide curriculum evaluation experts in the evaluation of school programs (Uşun, 2012). Administrators, teachers, students, parents, and school staff are also effective in the evaluation of the program. As a result, it should be ensured that all individuals involved in education directly or indirectly participate in the evaluation (Demirel, 2007). It should be used in the evaluation phase by taking into account the opinions of all stakeholders about the program. Within the scope of this study, the program of the "Child Nutrition" course, in which nutrition, which has an important role in the growth and development of children, is discussed and the evaluation process will be reported Metfessel-Michael program evaluation model.

The nutritional needs of people are an unchangeable reality. Only variables such as age, employment, health, and disease status can determine nutritional needs. Especially in the growing age, children need more energy and nutrients than adults (Baysal, 2003). If sufficient and balanced nutrition is not provided in childhood, the development of the child slows down, various health problems occur, and this situation greatly affects the future life of the individual (Erkan, Yalvaç, Erginöz, Çokuğraş and Kutlu, 2007). When it comes to early childhood development, this concept includes children's physical, mental and social development and includes all necessary initiatives for nutrition, health, mental development, and social interactions of children (UNICEF, 2001). It is important to provide the necessary nutrients in this period of rapid growth (Black, 2003).

In the Child Nutrition course in the associate degree Child Development Program, which will provide intermediary staff to pre-school education institutions, it is emphasized how an individual should be fed from the mother's womb to an adult. In this context, subjects such as balanced and sufficient nutrition, nutrition in childhood, food hygiene, nutritional deficiencies, and menu preparation are discussed as course content. In this period, when the foundations of healthy lifestyle behavior and personality formation are laid, intertwined with preschool children, it is necessary to know the principles of proper nutrition and to put this information into practice.

Within the scope of the course, in addition to the principles of balanced and adequate nutrition, feeding of infants, nutrition of preschool children, and nutrition of school-age children are also discussed in detail. Considering that proper nutrition is a way of life, it is important to gain a nutritional habit from infancy. One of the most important issues to be emphasized is that preschool children often take their family members and teachers as role models. In this case, the students of the program are expected to complete this course not only to learn but also to give the right direction to their own lives.

Child development practitioners, who aim for the healthy development of children in their professional lives, have to know nutrition principles, food types, age-appropriate eating habits and even prepare a menu for children based on this knowledge. Subjects such as which nutrient and how much should be taken daily in accordance with the age of the child, how to gain nutritional habits, the importance of nutrition, and alternative food types are explained within the

scope of the course<sup>1</sup>. In addition to these topics, students are also planning learning-enhancing activities such as preparing fun plates after making the menu arrangement for the children.

The nutritional needs of not only healthy children but also sick children are mentioned in the course content. Nutritional information is given in cases where special nutrition is required in relation to nutritional needs and disease status. Approach to children with nutritional problems, eating problems, and diseases that may occur as a result of unhealthy nutrition are also included in the course content. Considering that some diseases are rather related to nutrition, it is obvious that this course will raise awareness about public health and disease prevention. In particular, the biggest cause of childhood obesity is seen as wrong eating habits. This risk can be minimized by giving children appropriate eating habits.

Nutritional disorders are mostly seen when children start school (Çetin and Aydın, 1999). Thus, the nutritional context at school gains importance, and in addition to sufficient and balanced nutrition for teachers and school staff, menu planning is one of the essential issues.

When the objectives of the Child Nutrition course and the Child Development Program are examined; functionality, relationship with the life process and effect on the overall outcomes of the program can be observed. The objectives of the Child Nutrition course are given below:

- Will be able to monitor adequate and balanced nutrition,
- Will be able to apply nutrition efficiency,
- Will be able to apply nutrition activities for children with special conditions,
- Will be able to apply nutrition in accordance with developmental periods,
- To raise individuals who can plan a menu suitable for nutritional elements<sup>1</sup>.

Child Nutrition course is given as a compulsory course in the first semester of the Child Development Program, in the period when the theoretical knowledge of the students is laid and before the pre-school period<sup>1</sup>. Today, the employment status, working places, conditions, and job descriptions of child development professionals differ among institutions. Succeeding in such courses in the field preparation stage before starting their professional life is of vital importance in the following years.

The literature on child nutrition is examined regarding nutrition (Özmert, 2005; Topal, Çınar, and Altınkaynak, 2016), child nutrition (Arslan and Beygo, 1974; Bozkurt and Güneyli, 198; Erdim, Ergün and Kuşuoğlu, 2017; Karaağaoğlu, Arslan and Karaağaoğlu, 1988; Koçoğlu, Polat and Özgür, 1990; Samlı, Kara, Ünalın, Samlı, Sarper and Gökalt, 2006; Şahinöz, Bozkurt, Özçırpıcı, Özgür, Şahinöz, Acemoğlu, and Akkafa, 2005; Yetim, Yetim and Devecioğlu, 2015), mother and child nutrition (Arlı, Şanlıer, Küçükkömürler and Yaman, 2006; Karaağaoğlu and Samur, 2013), child nutrition status (Erdem, Özel, Çınar and Işıkhın, 2017; Erkan, Yalvaç, Erginöz, Çokuğraş and Kutlu, 2007; Girli, Özgönenel, Sarı and Ardahan, 2016; Güneyli, 1984; Yalçın, 1974; Hayran, Kayhan and Aksayan, 1990; Özbaş, Uskun, Küçüksoku, Hocaoğlu, Akalın and Özbaş, 2018; Yaşar, Ilıca and Rakıcıoğlu, 1999; İlçin, Toksöz, Mete and Çelik, 1987), children's eating habits (Akal, Birer and Baysal, 1986; Alphan, Keskin and Tatlı, 2002; Demirel, Üner and Kırımı, 2001; Demirezen and Coşansu, 2005; Güneyli, 1988; Haney and Erdoğan, 2013; Oguz, 2011; Oguz and Derin, 2013; Öktem, Yavrucuoğlu, Türedi and Tunç, 2005; Sütçü, 2006; Sökülmez and Uyar, 2015; Sümbül, 2009; Tokgöz, Ertem, Çelik, Gökçe, Saka and Hatunoğlu, 1995; Zembat, Kılıç, Ünlüer, Çobanoğlu, Usbaş and Bardak, 2015), nutritional

---

<sup>1</sup> <https://obis.adu.edu.tr/B9DE53FB9964D2BAA0ABECA1D0D2F5>

characteristics of children (Garipağaoğlu and Günöz, 1993; Kobak and Pek, 2015), nutrition styles of children (Arslan, 1988), nutritional problems of children (Aksu and Özcan, 1981; Güneyli and Arslan, 1981), children's nutritional behavior (Kaniogluları, 2015), nutrition practices (Garipağaoğlu and Özgüneş, 2008; Uzel, Yücecan, Ekinciler, and Özbayer, 1972), nutrition education (Ataman, 2009; Başkale, 2010; Obalı, 2009; Şanlıer and Güler, 2005; Ünver and Ünüsan, 2005), nutrition rights (Öztürk, 2008), nutrition disorders (Arslan and Köksal, 1974), school health and nutrition programs and nutrition education programs (Sormaz, 2013; Ünver, 2004; Yabancı, 2011), and nutrition education model (Aktaç, 2016). Although there are different studies mentioned above in the field of child nutrition in the literature, a program evaluation study could not be reached with any program evaluation model for the child nutrition course. In this respect, since this research will be an original study for students studying in the child development associate degree program, it is thought that it can provide insight to the with reference to the future program evaluation studies on child nutrition.

Although the number of studies carried out with reference to the Metfessel-Michael Program Evaluation Model has increased recently, it can be said that it is not enough. When we examine the studies of vocational schools that educate technical staff and fulfill the labor force needs of the intermediate market, we did not go beyond a few them and a few articles, and no study was encountered on the evaluation of the Child Nutrition course, which is the subject of this study. Considering the situation of the Child Nutrition course in the educational structure of our country, the importance of the Child Development program in the Child Development Program emerges once again. Especially in pre-school institutions, the regulation of feeding times, the creation of nutrition lists, the fact that nutrition can be healthy, regular, balanced, and nutritious in accordance with feeding hours and nutrition lists, and that it can appeal to different age and developmental characteristics, are indications that this course is one of the most important courses of the Child Development program.

Metfessel-Michael Program Evaluation Model, one of the curriculum evaluation models, was chosen for the evaluation of the program of this course because it is a model that includes all stakeholders in the evaluation, increases the validity and reliability of the study by enabling detailed data gathering through techniques as observation, interview, and document review and it is useful to evaluate all elements of the education program. For this reason, in this research it is aimed to evaluate the Vocational School, Child Care, and Youth Services Department, Child Development Program Child Nutrition course curriculum of a university located in the Aegean region, in accordance with the Metfessel-Michael program evaluation model.

## **Method**

### **Research Model**

This research was based on a qualitative comprehension. The qualitative research approach aims to gather detailed information about a situation or phenomenon under investigation, as well as to develop a deep understanding and explain the situation within itself (Saban and Ersoy, 2016). In the study, the "case study" design, which is suitable for the nature of the research, was used among the qualitative research designs. The case study design, which is widely used in the qualitative research tradition, is carried out to examine, understand and describe these situations without any intervention to the facts, events or situations, and offers the researcher the opportunity to reveal the effects of the cases, events or situations that they examine for the participants (Saban and Ersoy, 2016).

Since the evaluation of the program will be discussed in the case study, which is the subject of this research, the case was handled as a single case and the "single case design" was used. In order to understand the evaluation process of the program, the "integrated single case pattern" was used because it was studied with more than one unit that was a stakeholder in the program and had experiences and experiences related to the program (Yin, 2003).

### Participants

The study was carried out within the scope of the Child Nutrition curriculum in the associate degree Child Development Program of a state university in the Aegean region. The purposive sampling method was used in the selection of the study group. The study was carried out voluntarily with the participation of a total of 15 people, including 2 administrators, 2 instructors teaching the "Child Nutrition" course, and 11 students. There are 3 administrators in total in the school. Two of these administrators agreed to participate in the study. There are 2 instructors teaching the "Child Nutrition" course. Both of them agreed to participate in the study. In determining the student group participating in the study, students were reached from the lower and upper groups by taking the passing grades for this course as criteria. The interviews were continued until the data obtained from the students were sufficient and until the answers were repeated. The data regarding the participants are given in Table 1.

Table 1. Data on participants

<b>Title</b>	<b>Number of Persons</b>	<b>Gender</b>	<b>Age</b>	<b>Professional Experience Period (Year)</b>
Administrator	1	M	40	15
	1	F	35	10
Instructor	1	F	32	10
	1	F	30	8
Student	15	M	19	-
		M	19	-
		M	20	-
		M	20	-
		M	21	-
		F	18	-
		F	19	-
		F	20	-
		F	20	-
		F	21	-
		F	22	-

## **Materials**

Within the scope of this study, qualitative research techniques; interview, observation and document analysis techniques were used. Interview, which is used as a data collection method of different quality and depth, is a form of controlled and purposeful verbal communication between the researcher and the participant who is at the center of the research (Cohen and Manion, 1994). In order to collect the data, a structured form was created in which independent observers could make observations. This form contains 27 items. In the observation form, the Metfessel-Michael program evaluation model, the program elements and the lesson plan (objective, content, educational status, and assessment-evaluation) were included. Semi-structured interview forms were prepared and applied in order to get the opinions of the administrators, instructors, and students who are related or thought to be related to the Child Nutrition course. These interview forms are semi-structured forms prepared separately for each group, consisting of 5 items for the administrator, 9 items for the instructor, and 10 items for the student. The questions in the semi-structured interview form cover the education, economic, health, the current status of the course, as well as the content of the program, its necessity and place in the program, its duration, its contribution/effect on their professional development, its suitability for today's business life, the qualification of the instructor and the student, the program elements. There are questions from which in-depth information can be obtained on issues such as suitability. During the preparation of the interview form, question pools were created with the help of field experts and two doctoral students, as well as the relevant literature review. The prepared question pools were evaluated and finalized by 2 field experts, 2 assessment and evaluation experts, and 1 language expert. In addition to the main questions of the interview, explanatory and final questions were included with the assumption that the questions could not be understood or misunderstood. In addition, as document analysis, the program proposal file for the Child Nutrition course, the program information form, the course information form and all the written documents used by the instructors for the course were examined.

## **Procedure**

In the research, data were collected by two independent observers with an observation form, in a total of 6 hours as well as gathering data through semi-structured interview forms prepared for the administrator, instructor, and student. Data were collected from individuals who were within the scope of the study and volunteered to participate in the study (voluntary consent form was signed by each participant) within the sample. It has been declared by the researchers that the data obtained within the frame of the research will only be used within the scope of the research and will not be shared with second or third parties or institutions in any way. The data obtained with the semi-structured interview forms were gathered during the free hours of the administrators, instructors and students and at the time they wanted, and the observation forms were collected during the course hours.

In order to ensure the relaxation of the participants, the interviews started with conversations outside the research topic, continued with warm-up questions, questions that were not understood or thought to be unexplained were discussed again with explanatory and probe questions, and the duration of the interview was tried to be extended as much as possible so as not to bore the participants. Before starting the interviews, permission was obtained from each participant for the audio recording of the interviews, and the data were gathered through voice recording and note-taking method.

## **Analysis of Data**

The data obtained through the observations of the independent observers and the opinions of the administrators, instructors and students for the Child Nutrition course were analyzed using descriptive analysis technique. As Yıldırım and Şimşek (2016) stated, direct quotations from the data of the participants were frequently included since the data were tried to be transferred to the other party effectively in the descriptive analysis technique used. The aim here is to present the obtained data to the readers in an organized and interpreted way. Within the frame of the study, the purpose of students coming to the program, the current status of the program, the content and necessity of the program-course, the suitability of the course with business life, the contribution of the course to the professional development of the students, post-graduation business life, educational status, learning-teaching process, testing situations-measurement, evaluation, and teaching staff competencies themes were created before starting the study. Within the scope of the themes, interview questions, and observation forms were created and open coding was done with the line-by-line reading technique from the obtained data; and first of all, codes, categories, and themes were determined. The codings were performed by two researchers after coding twice in different periods. The agreement coefficient between encoders was calculated as .88 (Miles and Huberman, 1994). Codes that could not be agreed between the coders were not included in the research, and the data that were agreed between the coders were included in the research.

## **Ethics Committee Approval**

This research was carried out in accordance with the decision of Aydın Adnan Menderes University Educational Research Ethics Committee dated 05.06.2020 and numbered 84982664-100.

## **Validity and Reliability**

Regarding the validity and reliability of the research; the data gathering period of the study took approximately 26 days. Researcher 1 interviewed the instructors and institution administrators, while researcher 2 interviewed the participants who took the "Child Nutrition" course in the program. The data collection process was prolonged as the interviews took place at the time the participants wanted. The data collected by observation were carried out by an independent researcher. In addition, the syllabus and curriculum of the course were analyzed by researcher 1 and researcher 2. Thus, researchers; In accordance with the spirit of qualitative research, he spent time in the field, interviewed directly with the participants and, when necessary, lived and tried to understand the experiences of the participants during the course and between lectures during the 26-day period, and used the perspective and experience gained from the data obtained in the field and observations in the analysis of the data. In this context, the researchers had the opportunity to stay in the field as long as possible, making it a natural part of the research and investigating the research in-depth.

Interview questions and observation form items were prepared by taking the opinions of subject experts, assessment-evaluation experts, and language experts; and data collection diversity was provided within the scope of the research. The data obtained from the interviews were collected by voice recording and note-taking method, and the agreement coefficient between the coders was checked by coding the data by different coders.

## Results

The research findings were designed in accordance with the 8 stages of the Metfessel-Michael Program Evaluation Model. These stages were planned in line with each dimension of the Child Nutrition lesson and the resulting findings were expressed in the form of comments and exemplary quotes.

### *Purpose of students coming to the program*

As a result of the interviews with the students, it is seen that the purpose of coming to the program is different for most of the students. Some of them preferred this program because their score was not enough for another program, some willingly, some because they were interested in children, some because they thought it was a job they could do in the future, and some because it was a continuation of their high school programs. Some student opinions supporting these issues are as follows:

*“Normally, I didn't want this department, but I wanted to be a primary school teacher, but I chose this department because I didn't score well and it was the closest department to child development.” (S-3)*

*” The reason I chose this program is because I believe that I will love to do this job. (S-5)*

*“Actually, I wanted to be a preschool teacher, but I chose this program because I couldn't get into the preschool teacher program and because I love children and also because I thought it would be useful to children.” (S-8)*

### *Current status of the program*

When we look at the statements of 2 administrators and 2 lecturers participating in the research, it could be summarized that the situation of the Child Development Program in the economic, health, economic and current structure of our country; It has been stated that the Child Development Program has increased the need for nurseries and kindergartens due to the increasing population and women's participation in business life. In addition, the fact that the students who have completed the Child Development Program can benefit from the Pre-School Teaching, Child Development (Undergraduate), Special Education and Social Service undergraduate programs through the Vertical Transfer Exam, forming their first steps towards becoming public personnel and academic personnel in their future lives are other reasons for choosing the program.

It is thought that graduation has positive effects on the business world due to reasons such as participation in the workforce and working life, employment opportunities, contribution to the economic and economic structure, and cost advantage. It is also stated that almost all of the graduates are preferred as intermediate staff, technical staff, and assistant staff in private kindergartens. Despite all these positive situations, it has been stated that although the place, importance and preferability of the graduates of the program in today's business world can be considered good, in our country, the idea of "more work with less salary" pushes the graduates of the program to different preferences (opening their own school, completing a bachelor's degree).

Examining, comparing, and analyzing the course information form and the program information form and looking at the results: when the relationship between the learning outcomes of the lesson and the program is evaluated, it is understood that the effect of the lesson

learning outcomes on the program has a substantial effect. Some of the views put forward on this issue are as follows:

*“Graduates are needed in the field. With the increasing population, the fact that women are in the working life and the children are directed to kindergartens, in economic terms, private institutions act with the idea of "less salary more work" and supervision should be provided in this sense.” (L-1)*

*“Child development, occupancy, and employment are also very good, the quotas are full, the fact that they are in business life increases the need for the program and I think that it will not lose its importance in the future in parallel with the need.” (A-1)*

Even if an individual studying or graduating from a child development program does not have any contribution to the business world, the practical and applied education they learn here with the thought of a possible parent candidate in the future, at least in the program that will be useful to them in real life, such as child education, child psychology, child nutrition, development, and learning. It also shows the importance of the program that the courses and concepts will guide the graduates in real life. An example view on this issue is as follows:

*“I think of it as a babysitting. I believe it should be mandatory, even mothers should receive training on the program. It should be given to expectant mothers about child education, psychology, and discipline rules. Even if she doesn't graduate from the program, she can take care of her own child.” (A-2)*

### **Content and necessity of the program/lesson**

All of the lecturers who expressed their opinions on the sufficiency and necessity of the program said that the content of the program is in a very good condition, that it is a lesson system based on maximum performance in a 2-year education, that the program and its content are constantly updated by following the new developments, that the latest publications, studies, and researches related to the field are followed. It states that the content of the program was arranged by using the program so that the content of the program is full. The following is an example quote that supports this view:

*“The program content is very full. In fact, it needs to be spread over 4 years and needs to be assimilated. The content is up-to-date and we are constantly trying to follow and update the publications.” (L- 2)*

The administrators who expressed their opinions on the necessity of the lesson stated that since the children spend almost 8 hours a day in kindergartens and schools, they not only eat right, balanced and healthy in the schools they attend but also that the right eating habits can be acquired by a proficient and experienced staff and that the graduates as staff working in these schools are the children's age and age. They expressed their opinion that the lesson is necessary for them to organize nutrition and feeding time in accordance with their development. An example quote that supports this view is as follows:

*“Your children spend all their days in school. Most of the feeding hours are spent there, so a healthy and balanced diet is important for health. Students whose child nutrition lesson is important should graduate competently.” (A-1)*

The instructors, who expressed a positive opinion about the necessity and adequacy of the course in general, aim to reorganize the course not only in the form of child nutrition but also in the form of child and mother nutrition stated that they should. In addition, according to the

results of the observations, it was determined that the objectives were attainable, suitable for students' needs, oriented towards student behaviors and partially consistent with each other; it was concluded that the content was organized according to the teaching principles and was suitable for previous subjects and learnings. A sample excerpt from the views supporting these issues is as follows:

*“Children's nutrition lesson aims to give students the habit of eating and how nutrition should be. In this respect, the first term should be given and it should be compulsory.”*  
(L-2)

All of the students who expressed their opinions on the necessity and adequacy of the lesson expressed a positive opinion. For children to eat healthily, grow up healthy and remain healthy individuals; what are the useful and harmful foods from pregnancy to the end of school age, how a healthy nutrition menu should be and how it is prepared, how many hours and how the child should be fed, what kind of menu is prepared for different age groups, etc. The fact that the subjects which are handled in course shows that the course is necessary and sufficient for the students and that the course has an important place in the program. The sample views they gave to the question of whether the course has an important place in the program and supporting these issues are as follows:

*“This lesson has an important place in the program. We need to know how to implement a healthy program when we start our profession. We can say that it is an indispensable lesson for the program.”* (S-2)

### ***Suitability of the lesson with business life***

One of the managers had a positive view on the suitability of the lesson with business life while one of them had a negative view. The manager who expressed a positive opinion stated that proper nutrition has an important place in the childhood, that is, in the growth period, by citing knowing how to prepare a sample menu and also knowing the physical and physical development of the students. The administrator, who expressed a negative opinion on this subject, states that the nutrition menus can be prepared by nutritionists, dietitians, even school principals or health professionals or guides working in the institution and states that the course is necessary but not very suitable for business life for program graduates. In the observations made, it was seen that the content was decent for living conditions. Positive and negative managerial views supporting this view are presented below respectively:

*Preparing a sample menu and providing a balanced diet also means knowing the mental, physical and physical development of children. Therefore, children need to be fed correctly, balanced and regularly, especially during the periods when growth is fastest after birth. I think the course is appropriate for today's business world as our students who will do this that is to provide these opportunities and conditions is our output.”* (A-1)

*“Considering that our graduates are generally employed as auxiliary personnel in kindergartens and schools, I think that the lesson hours, feeding times, and nutrition menus in these institutions can even be made by more specialized hands (manager, specialist, dietitian ...). For this reason, I can think that the course is necessary, but it is not possible to say that it is very suitable for business life.”* (A-2)

Instructors state that the lesson is suitable for business life. While one of the instructors (S-1) stated that he was only suitable for business life because the students could prepare a nutrition menu suitable for all criteria. The other (S-2) stated that the lesson was even more than

business life because the lesson included not only childhood but also adolescence. It also emphasizes how a healthy diet should be. However, information and practices are provided outside the pre-school period also means that it will be a burden for a staff who will work in the preschool period and may not be of use to them. An example excerpt supports these views is as follows:

*“The content is compatible with business life. The menu planning knowledge given to the students in class is something they will use in their work. It is important in that sense.”*  
(S-1)

*“There is a little bit more to business life, too. When we say child nutrition, we deal with the needs of the individual, how nutrition should be in all periods from birth to adolescence. But considering that most students will work in the preschool period, the content may not match.”* (S-2)

While all of the students state that the lesson is suitable for business life, only one of the students states that the lesson content is not sufficient even though the course is suitable for business life. The students, who stated that their job is to take care of children and the health of children is the most important thing when taking care of them, attributed the basic condition for children to be healthy primarily to a healthy diet. Considering that this course is taught to them within the scope of this lesson, they state that the course is very suitable for business life. A sample excerpt from student opinions supporting these views is as follows:

*“We take care of children, and the most significant thing when taking care of them is their health, so this lesson is one of our most essential lessons. It is up to us to keep them healthy. If we prepare a healthy diet, if we provide a balanced, regular and clean diet, taking into account all the development of children, we will raise healthy individuals. We learn this information within the scope of the course. For this reason, I think this course is very suitable for business life.”* (S-5)

### ***Contribution of the course to the professional development of students***

Instructors state that every student is a parent as well as a prospective teacher, so the lesson is as important for students' personal development as their professional development and voluntarily performs. The sample quoted opinion supporting these views is as follows:

*“I care about them since each of them will be a teacher and then a parent. In their professional development, it is very important to be able to raise individuals who eat nutrition, child nutrition, and most importantly, to be able to eat healthy.”* (L-1)

Views of the students also support the views of the instructors. All of the students who participated in the interview should attend this lesson for their professional development and personal development, so that they will be intertwined with children in their professional life, they will be individuals who carry out healthy nutrition, they can prepare a healthy nutrition program and become an experienced and conscious teacher in this regard and prepare a balanced and healthy nutrition program in business life state that their contribution is positive and undeniably important. They also state that when they become prospective parents in the future, they will be able to adapt this information to their own lives. The sample opinion supporting these issues is as follows:

*“Since we will all be in kindergartens and intertwined with children in the future, we learn how to feed children more healthily in our professional life, so it contributes to us.”*  
(S-5)

### ***Business life after graduation***

As a result of the interviews with the students, in their business life after graduation; By completing a bachelor's degree, they see themselves as a child development or kindergarten teacher, as an academician, by opening their own schools, and as an ideal teacher. Examples of student opinions supporting these issues are as follows:

*“First of all, I want to finish school and complete my undergraduate degree. My goal is to be an academician, but I think I will have difficulties in this regard, so I want to be a kindergarten teacher. Even if I do not work in the government, I will continue my profession in private companies.” (S-9)*

*“I want to finish my school first. Afterward, I want to study an undergraduate program related to my field, if not, I want to study from open education and become a civil servant. I want to work in private institutions or open my own school if I have the opportunity.” (S-10)*

*“I aim to develop myself more and open my own school. As a final step, I would like to add graduate and academic studies.” (S-11)*

### ***Educational situations, learning-teaching process***

In order to increase the effectiveness of the lesson, the instructors first used the lecture method in the lesson, then planned the nutrition plan, the nutrition menu (breakfast plate, fruit plate) together, and tried to learn by doing, learning on the spot, and teaching what they learned in a way that they could apply in real life. They also stated that as an activity, they prepare and present special nutrition menus in accordance with the development of children (with regard to different age groups). Pursuant to the results of the observation, the practices in the learning-teaching process are partially compatible with the contemporary teaching principles, students' prior knowledge is checked at the entrance to the lesson, the introduction to the lesson (curiosity, drawing attention, informing the target), the transition to the lesson and the teaching of the lesson (hint, reinforcement, feedback, correction) was applied effectively, and the method and technique were partially chosen appropriately. An example opinion supporting these points is as follows:

*“It is important to keep the student active in order to increase the learning effectiveness, so I open a discussion after each topic. We share in the form of questions and answers. In addition, we prepare special nutrition menus for the child every semester and offer them at the end of the semester (main and snacks).” (L-2)*

Almost all of the students expressed contradictory opinions with the instructors regarding the learning-teaching situations and the effectiveness of this process. While only one of the students is content with the functioning of the learning process, the others state that the instructors should teach by diversifying techniques and methods. This course should be practiced in nursery and kindergartens, the nutrition programs of nursery and kindergartens should be examined and analyzed, observation should be made at meal times of kindergarten students, meals should be eaten in the same environment with the children, students should prepare a sample plate and present it as homework, as well as another meal in the classroom as a presentation. The instructors should present the lesson not only through lectures but also by diversifying the method and technique and making presentations, slides, videos, etc. They also

stated that they should teach by using the materials. Examples of opinions on this subject are as follows:

*“You can go to kindergarten and examine the nutrition programs there. For example, we could watch students over a breakfast. We could see what foods they like to eat.” (S-3)*

*“We should not just read through the book, we should make use of all the details about the nutrition lesson, be it slides or videos...” (S-6)*

*“We could go to the kindergarten and prepare a plate there and observe. We could see the children's reactions.” (S-11)*

### ***Test situations-measurement and evaluation***

Instructors state that they do the measurement and evaluation process in a similar way. They state that they evaluate a semester with midterm (40%) and final (60%) exams at the time and date determined by the university, and they make their criteria through open-ended questions and multiple-choice tests while making the assessment. In addition to these, (S-2) who finds the measurement-evaluation processes insufficient, states that he wants homework at the end of the term. In the observations made, it was seen that the targets were achieved and the measurement-evaluation activities reflected the process. An opinion on this issue is as follows:

*“Students have midterm and final grades. But I prefer to make the exams more classical and multiple choice. However, with the thought that this evaluation is insufficient, I also have sample menu plates prepared at the end of the term or fun plates in regard to the age group.” (S-2)*

Students expressed different opinions about the measurement-evaluation process. Some of them stated that the exams are simple and that they should be made more difficult and the duration of the exam should be increased, some of them stated that only the exam time should be increased, some of them stated that the duration is insufficient but the content validity is very good, and some of them are content with everything done. However, in general, the students state that they are satisfied with the evaluation criteria and evaluation conditions, even if they express different opinions. Examples of opinions supporting these issues are as follows:

*“I think it's appropriate. Instructors took into account important information and asked them.” (S-1)*

*” “Exam time is short, but we took the exam from what we learned, I think it's useful.” (S-7)*

*“The exams should be made a little more difficult. Exam time should be increased.” (S-10)*

### ***Instructor qualifications***

While one of the administrators who participated in the interview stated that he found the instructor sufficient on the grounds that he could show an exemplary nutrition menu, the other administrator had to know the proficiency of the students in order to know the adequacy of the instructor. He stated that he had no idea. Some of the views that support these points are as follows:

*“I think the instructors are sufficient. It can show a sample menu.” (A-1)*

*"In order for me to know the competence of the instructors, I need to know the competence of the students. It is necessary to measure the achievements of the student, to look at their goals, to see how much can be transferred across. I have no idea." (A-2)*

While one of the lecturers who participated in the interview stated that he did not consider himself fully competent, but aimed to improve himself in order to be better in the coming years, the other lecturer stated that he considered himself sufficient, but still acted with the motto of how can I be better in my profession:

*"Maybe I can be better. I believe it will be even better in the coming years. I will try to bring in activities that develop myself and improve the lesson (if I have the lesson)" (L-1)*

*"I see it as enough, but I am always researching how I can convey it better. Because I want students to have a perception that they are willing to learn and how I can do better, not just out of fear of passing the course as a lesson." (L-2)*

Students participating in the interview; He found the instructors sufficient because he taught the lesson with his knowledge from the book and his daily life, gave presentations, taught in a conversational style, gave examples from the instructors' own lives, and conveyed all the necessary information. Two students who do not agree with these views state that they do not have sufficient equipment and still feel deficiencies in themselves that the lesson is in the air of an elective lesson and that the instructors do not feel proficient. Examples of citations that support these views are as follows:

*"Good information was given, but I do not think it is enough. The information did not fit well in my head. I still feel lacking. It was like an elective, less succinct." (S-9)*

*"As the lecturer teaches from the book and her knowledge of daily life, it becomes more permanent." (S-11)*

### **Discussion, Conclusion and Suggestions**

In this study, in accordance with the basic stages of the Metfessel-Michael Program Evaluation Model, the "Child Nutrition" curriculum was evaluated using observation, interview and document review techniques and in line with the opinions of the program stakeholders. Since the learning outcomes of the course are thought to have a high effect among the learning outcomes of the program, it was obtained as a result of the examination of the course information forms that the course has a high level of relationship with the program. Therefore, it can be said that the course is a course with significant outputs that affect the program achievements to a high degree (which constitutes almost 20% of the program goals).

As a result of the interviews with the students, the reason for choosing this program is that most of the students have a different purpose and the reasons for choosing this program are that their score is not enough for another program, they prefer the program willingly, they have an interest in children, they think that it is a profession they can do in the future, and the reasons for choosing this program are the factors for continuation of their high school programs. Considering the current structure of the program in line with the opinions of the participants, the need for kindergartens has increased due to the increasing population and women's participation in business life, and therefore the need for qualified and intermediary staff to work here will increase, it is thought that individuals who graduate from the program will be needed for a long time. Considering the participation of graduates in the workforce and working life, employment opportunities, and the fact that graduates of the program can generally be employed as

intermediate staff and auxiliary personnel, we encounter the discourse of extremely low wages in today's Turkey. Therefore, it has been determined that students tend to be public employees, academician or open their own schools while they are still studying in the program. In addition, the fact that the students who come to the program can benefit from the Preschool Teaching, Child Development (Undergraduate), Special Education, and Social Work undergraduate programs through the Vertical Transfer Exam constitutes the program's attractive point.

It has been determined that all of the administrators, instructors, and students expressed positive opinions about the necessity and content of the course. In the same way, the contribution of the lesson to the professional development of the students was welcomed by the instructors and students, but based on the fact that there are better-equipped individuals in kindergartens and nurseries in business life, the emphasis that all work and operations related to child nutrition can be performed by more technical and well-equipped hands is also very realistic with the business life of the course. Although it is not compatible, it has been concluded that graduates have an extremely important place in terms of personal accumulation and personal development.

Considering the achievements related to the Child Nutrition lesson, it is seen that there are problems related to the teaching-learning process and that the problems experienced create problems in reaching the goals. When the learning-teaching process was evaluated from this point of view, it was emphasized by the students that the activities should be enriched by restructuring the learning-teaching process in order to achieve goals and improve learning. The findings obtained from the regular in-class observations and interviews made by the researchers, which are included in the 8 basic stages of the Metfessel–Michael curriculum evaluation model, confirm the analysis.

While one of the lecturers interviewed did not feel sufficient in this regard, the other stated that he felt sufficient, and almost all of the students criticized the current situation negatively. It is emphasized that the education-teaching process is mostly based on lecture, discussion, and question-answer methods-techniques, but the learning should be more permanent and the individual differences of those in the classroom should be taken into account. At the same time, the process should be based on modern education understanding within the scope of the concept of andragogy. In this case, it is thought that enriching the learning-teaching process with visuals, videos, and slides in order to restructure and organize the process, on-site observation and examination with trips to nurseries and kindergartens, and practical assignments can motivate students towards the lesson and increase the effectiveness of the process.

With respect to the results of the observations made and the interviews with the students and instructors, it was seen that the instructors tried to explain the lesson through expression rather than using different methods and techniques, and tried to enrich the activity, lesson and process partly with discussion and question-answers. This situation is not a situation that encourages learning, but can be seen as a deficiency that limits the quality, permanence and effectiveness of learning. Similarly, as stated in Yakar and Saracaloğlu's (2013) study conducted within the scope of the Metfessel-Michael evaluation model, new and different activities are needed; content, learning-teaching process, and evaluation dimensions are similar to the finding that there are similar problems. It is similar to the findings of program evaluation studies conducted at different school levels. Similarly, the same findings were reached in the study conducted by Gündoğdu et al. (2017) within the scope of Metfessel-Michael program evaluation, Human Resources Management Program, Human Relations course. All these findings show that

it is necessary for the programs to be developed in the light of contemporary principles and for the instructors to be trained in this direction.

During the measurement and evaluation phase of the lesson, it is measured with two exams, as midterm and final application, as stated in the lesson information form and stated by the instructors, and it has been determined that the instructors use multiple-choice tests and open-ended questions as measurement tools in these exams. It would be appropriate to say that an evaluation process in which the process is dominated and the result is evaluated, rather than result-oriented, as the students want in the interviews, will be effective on the motivation of the students and instructors.

As a result, it is seen that the course and its objectives have an important place in the program, the content of the lesson is not limited to a single source, there are problems in the learning-teaching process, the lesson is tried to be conveyed mostly through lectures, and the assessment and evaluation are done only with exams. Considering this situation, the two educational situations in which the greatest difficulty is experienced are the learning-teaching process and measurement and evaluation. For this reason, the following recommendations can be made. These:

Regarding the teaching-learning process,

In the teaching-learning process, the general difficulties experienced in almost all higher education institutions were encountered and it was observed that most of the lessons were taught as presentations, and processes such as demonstration, application, demonstration and show were almost not implemented except for practical lessons. Two situations are considered as the reason that either the lesson content is too intense or the instructors do not have sufficient knowledge and equipment on strategy, method, and technique. Therefore, the instructor can simplify the lesson content. In addition, the instructor can be encouraged to improve himself or participate in in-service training.

Regarding Measurement-Evaluation,

Assessment and evaluation should be consistent with the objectives of the course, exam periods should be planned in regard to the content of the exam. Considering that classical measurement and evaluation criteria are applied in general from primary school to higher education in Turkey and this alone is not sufficient, it is known that classical measurement and evaluation is result-oriented. However, it is important to evaluate both the duration and the result in the constructivist education system. For this reason, alternative measurement and evaluation methods should be included the process.

## References

- Akal, E., Birer, S. & Baysal, A. (1986). 3-12 yaş grubu çocukların beslenme alışkanlıklarının dış sağlığı üzerine etkisi. *Beslenme ve Diyet Dergisi*, 15, 19-30.
- Aksu, B. & Özcan, C. (1981). Okul çağı çocuklarında beslenme sorunları ve bazı öneriler. *Beslenme ve Diyet Dergisi*, 10, 19-25.
- Aktaç, Ş. (2016). *Okul öncesi çağ çocuklar için aile katılımı beslenme eğitim modelinin geliştirilmesi ve çocukların beslenme bilgi ve davranışları üzerine etkisinin değerlendirilmesi*. Yayımlanmamış doktora tezi. Başkent Üniversitesi Sağlık Bilimleri Enstitüsü. Ankara.
- Alphan, E., Keskin, Y. & Tatlı, F. (2002). Özel okul ve devlet okulunda öğrenim gören adolesan dönemindeki çocukların beslenme alışkanlıklarının karşılaştırılması. *Beslenme ve Diyet Dergisi*, 31(1), 9-17.
- Arlı, M., Şanlıer, N., Küçükkömürler, S. & Yaman, M. (2006). *Anne ve çocuk beslenmesi*, (3. baskı). Ankara: Pegem Akademi.
- Arslan, P. (1988). 0-1 yaş grubu çocukların beslenme şekillerinin ağırlık ve boy uzunluğu üzerine etkisi. *Beslenme ve Diyet Dergisi*, 17(2), 191-206.
- Arslan, P. & Beygo, M. (1974). Çocuk beslenmesi 1. *Beslenme ve Diyet Dergisi*, 3(1), 8-18.
- Arslan, P. & Köksal, G. (1974). Süt Çocuğu Çağında Görülen Beslenme Bozuklukları ve Diyet Tedavileri. *Beslenme ve Diyet Dergisi*, 3(3), 1-9.
- Ataman, Ü. (2009). *Okul öncesi beslenme eğitiminde çocuktan çocuğa eğitim*. Yayımlanmamış doktora tezi. Selçuk Üniversitesi, Sosyal Bilimleri Enstitüsü, Konya.
- Aydın Adnan Menderes Üniversitesi, Buharkent Meslek Yüksekokulu, Çocuk Gelişimi Programı, Çocuk Beslenmesi Dersi Bilgi Formu, (2019). <https://obis.adu.edu.tr/6117AA650E4F23AF2227CD81A208BA> adresinden 13.06.2019 tarihinde erişim sağlanmıştır.
- Aygören, F. & Er, K. M. (2019). *Eğitimde program değerlendirme: Sınıflamalar-modeller*, (2 baskı), Ankara: Pegem Akademi.
- Başkale, H. (2010). *Okul öncesi çocuklara verilen beslenme eğitiminin çocukların beslenme bilgisine, davranışlarına ve antropometrik ölçümlerine etkisi*. Unpublished doctorate dissertation. Dokuz Eylül Üniversitesi, Sağlık Bilimleri Enstitüsü, İzmir.
- Baysal, A. (2003). Sosyal eşitsizliklerin beslenmeye etkisi. *C. Ü. Tıp Fakültesi Dergisi*, 25 (4), 66-72.
- Black, M. M. (2003). Micronutrient deficiencies and cognitive functioning. *J Nutr*;133, 3927S-3931S.
- Bozkurt, N. & Güneşli, U. (1986). Ankara Etimesgut-Çubuk köylerinde yaşayan 0-36 ay arasındaki çocukların beslenme ve gelişim durumlarının etkileşimleri. *Beslenme ve Diyet Dergisi*, 15, 7-17.
- Cohen, L. & Manion, L. (1994). *Research methods in education (4th ed.)*. London: Routledge.

- Çetin, E. & Aydın A. (1999). İstanbul'da yaşayan çocuk ve adolesanlarda anemi prevalansı ve anemilerin morfolojik dağılımı: Çocukların yaş, cinsiyet ve beslenme durumu ile anne babaların ekonomik ve öğrenim durumunun anemi prevalansı üzerine etkileri. *Türk Pediatri Arşivi*, 34, 29-38.
- Demirel, F., Üner, A. & Kırımı, E. (2001). Van ili kırsalındaki annelerin çocuk beslenmesindeki alışkanlıkları ve uygulamaları. *Van Tıp Dergisi*, 8(1), 18-22.
- Demirel, Ö. (2007). Eğitimde Program geliştirme, Pegem A Yayıncılık, Ankara.
- Demirezen, E. & Coşansu, G. (2005). Adölesan çağı öğrencilerde beslenme alışkanlıklarının değerlendirilmesi. *Sürekli Tıp Eğitimi Dergisi*, 14(8), 174-178.
- Erdem, S., Özel, H. G., Çınar, Z. & Işıksan, S. Y. (2017). Farklı sosyoekonomik düzeye sahip çocuklarda ailenin beslenme tutum ve davranışlarının çocuğun beslenme durumuna etkisi. *Beslenme ve Diyet Dergisi*, 45(1), 3-11.
- Erdim, L., Ergün, A. & Kuşoğlu, S. (2017). Validity and Reliability of the Child Feeding Questionnaire in School-Aged Children. *Clinical and Experimental Health Sciences*, 7(3), 100-106.
- Erkan, T., Yalvaç, S., Erginöz, E., Çokuğraş, F. & Kutlu, T. (2007). İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi Çocuk Yuvası'ndaki çocukların beslenme durumlarının antropometrik ölçümlerle değerlendirilmesi. *Türk Pediatri Arşivi*, 42(4), 142-147.
- Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2012). *Program evaluation: alternative approaches and practical guidelines*. Boston, MA: Pearson Education.
- Garipağaoğlu, M. & Günöz, H. (1993). 3-6 yaş arası İstanbul'da yaşayan çocuklarda beslenme özellikleri ve büyüme-gelişmeye yansımaları. *Beslenme ve Diyet Dergisi*, 22(2), 161-170.
- Garipağaoğlu, M. & Özgüneş, N. (2008). Okullarda beslenme uygulamaları. *Çocuk Dergisi*, 8(3), 152-159.
- Girli, A., Özgönel, S. Ö., Sarı, H. Y. & Ardahan, E. (2016). Otizmi olan çocukların beslenme durumunun değerlendirilmesi. *Çocuk ve Medeniyet Dergisi*, 1(1), 87-99.
- Green, J. L. & Stone, J. C. (1977). *Curriculum evaluation: Theory and practice*. New York: Springer Publishing Company, Inc.
- Gündoğdu, K., Çelik, B., Altın, M. & Şimşek, E. K. (2016). Uygulamalı elektronik pazarlama dersi öğretim programının eğitsel eleştiri modeline göre değerlendirilmesi: Adnan Menderes Üniversitesi örneği. *Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 3(3), 63-81.
- Gündoğdu, K., Koç, M. K., Bayık, S., Arpat, S. & Gözel, Ü. (2017). İnsan kaynakları programı çalışma ilişkileri dersinin Metfessel-Michael program değerlendirme modeline göre değerlendirilmesi. *Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 4(2), 135-148.
- Güneyli, U. (1984). Ankara'nın sosyo-ekonomik yönden farklı semtlerinde bulunan ilkokul çocuklarının beslenme durumları konusunda bir araştırma. *Beslenme ve Diyet Dergisi*, 13, 35-49.
- Güneyli, U. (1988). 4-6 yaş grubu çocuklarında beslenme alışkanlıkları ve bunu etkileyen etmenler konusunda bir araştırma. *Beslenme ve Diyet Dergisi*, 17(1), 37-45.

- Güneyli, U. & Arslan, P. (1981). Bebek ve okul öncesi çocukların beslenme sorunları. *Beslenme ve Diyet Dergisi*, 10, 8-18.
- Haney, M. Ö. & Erdoğan, S. (2013). Sağlık davranışı etkileşim modeli: Çocukların beslenme alışkanlıklarını belirlemek için bir rehber. *Dokuz Eylül Üniversitesi Hemşirelik Yüksekokulu Elektronik Dergisi*, 6(4), 218-223.
- Hayran, O., Kayhan, M. & Aksayan, S. (1990). 0-6 yaş grubu çocuklarda büyüme-gelişme ve beslenme durumu üzerine bir çalışma. *Beslenme ve Diyet Dergisi*, 19(1), 33-43.
- İlçin, E., Toksöz, P., Mete, Ö. & Çelik, Y. (1987). Farklı sosyo-ekonomik düzeyde bulunan iki ilkokulda çocukların beslenme durumları üzerine bir araştırma. *Beslenme ve Diyet Dergisi*, 16(1), 7-16.
- Kanioğulları, A. O. (2015). *Lefkoşa'da kreş ve anaokuluna devam eden çocukların beslenme davranışlarına ve vücut ağırlığına annenin çocuk besleme tutum ve davranışlarının etkisi*. Yayınlanmamış Yüksek Lisans Tezi, Doğu Akdeniz Üniversitesi, Gazimağusa.
- Karağaoğlu, N. & Samur, G. E. (2013). *Anne ve çocuk beslenmesi*, (2. Baskı), Ankara: Pegem Akademi.
- Karağaoğlu, N., Arslan, P. & Karağaoğlu, E. (1988). Okul öncesi çocukların beslenme ve büyüme-gelişme durumları. *Beslenme ve Diyet Dergisi*, 17(1), 17-35.
- Kobak, C. & Pek, H. (2015). Okul öncesi dönemde (3-6 yaş) ana çocuk sağlığı ve anaokulundaki çocukların beslenme özelliklerinin karşılaştırılması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 30(2), 42-55.
- Koçoğlu, G., Polat, H. & Özgür, S. (1990). Ailelerin beslenme olanakları ve annelerin çocuk beslenmesi konusundaki bilgileri ile çocukların fiziksel gelişimleri arasındaki ilişkiler. *Beslenme ve Diyet Dergisi*, 19(1), 11-22.
- Kuo, L. H., Wei, H. M., Chen, L. M., Wang, M. C. Ho, M. K. & Yang, H. J. (2012). An evaluation model of integrating emerging technology into formal curriculum. *International Journal of Education and Information Technologies*, 3(6), 250-259.
- Michael, W. B. & Metfessel, N. S. (1967). A Paradigm for developing valid measurable objectives in the evaluation of educational programs in colleges and universities. *Educational and Psychological Measurement*, 27, 373- 383.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis*. (2<sup>nd</sup> ed). Newbury Park, CA: Sage.
- Obalı, H. (2009). *Okulöncesi eğitimi almakta olan altı yaş grubu çocuklarına verilen proje yaklaşımıyla beslenme eğitiminin beslenme bilgi düzeyine etkisi*. Yayınlanmamış Doktora Tezi, Selçuk Üniversitesi Sosyal Bilimleri Enstitüsü, Konya.
- Oğuz, Ş. (2011). *Konya il merkezinde okulöncesi eğitim kurumlarına devam etmekte olan 60-72 aylık çocukların beslenme alışkanlıkları*, Yayınlanmamış Doktora Tezi, Selçuk Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.
- Oğuz, Ş. & Derin, D. Ö. (2013). 60-72 aylık çocukların bazı beslenme alışkanlıklarının incelenmesi. *İlköğretim Online*, 12(2), 498-511.
- Ornstein, A. C. & Hunkins, F. P. (1988). *Curriculum: Foundations, principles and issues*. USA, N.J.: Prentice-Hall.

- Öktem, F., Yavrucuoğlu, H., Türedi, A. & Tunç, B. (2005). Çocuklarda beslenme alışkanlıklarının hematolojik parametreler ve eser elementler üzerine etkisi. *SDÜ Tıp Fakültesi Dergisi*, 12(1), 6-10.
- Özbaş, S., Uskun, E., Küçüksoku, B., Hocoğlu, Ü., Akalın, S. & Özbaş, H. (2018). Eğitilebilir zihinsel engelli çocukların besin tüketim kayıtlarına göre beslenme durumları. *Akademik Gıda*, 16(2), 192-196.
- Özmert, E. N. (2005). Erken çocukluk gelişiminin desteklenmesi-I: Beslenme. *Çocuk Sağlığı ve Hastalıkları Dergisi*; 48, 179-195.
- Öztürk, A. B. (2008). Çocuk yoksulluğunda yaşama, sağlık ve beslenme hakları. *Journal of Society & Social Work*, 19(2), 67-80.
- Saban, A. & Ersoy, A. (2016). *Eğitimde nitel araştırma desenleri*. Ankara: Anı Yayıncılık.
- Samlı, G., Kara, B., Ünalın, P. C., Samlı, B., Sarper, N. & Gökcalp, A. (2006). Annelerin emzirme ve süt çocuğu beslenmesi konusundaki bilgi, inanış ve uygulamaları: Niteliksel bir araştırma. *Marmara Medical Journal*, 19(1), 13-20.
- Sormaz, Ü. (2013). Okul beslenme eğitimi programları. *Mehmet Akif Ersoy Üniversitesi Eğitim Bilimleri Enstitüsü Dergisi*, 2(3), 36-48.
- Sökülmez, P. & Uyar, E. (2015). Farklı bölgelerde yaşayan preadölesan çocukların beslenme alışkanlıkları ve besin tüketim sıklıklarının belirlenmesi. *Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 5(3), 23-29.
- Sönmez, V. & Alacapınar, F. G. (2015) *Örnekleriyle eğitimde program değerlendirme*. Ankara: Anı Yayıncılık.
- Sümbül, E. İ. (2009). *4-6 yaş arasındaki öğrencilerin okul dönemindeki yetersiz ve dengesiz beslenme alışkanlıklarının saptanması*. Yayınlanmamış Doktora Tezi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Sütçü, Z. (2006). *Drama eğitiminin okul öncesi eğitime devam eden altı yaş grubundaki çocukların beslenme alışkanlıklarına etkisinin analizi*. Yayınlanmamış Doktora Tezi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Şahinöz, S., Bozkurt, A. İ., Özçırpıcı, B., Özgür, S., Şahinöz, T., Acemoğlu, H. & Akkafa, F. (2005). GAP Bölgesi'nde çocuk beslenmesine ilişkin uygulamaların durumu. *Beslenme ve Diyet Dergisi*, 33(1), 37-45.
- Şanlı, N. & Güler, A. (2005). İlköğretimin ikinci kademesinde eğitim gören öğrencilere verilen beslenme eğitiminin öğrencilerin beslenme bilgi düzeyi ve alışkanlıklarına etkisi. *Beslenme ve Diyet Dergisi*, 33(2), 31-38.
- Tokgöz, P., Ertem, M., Çelik, F., Gökçe, Ş., Saka, G. & Hatunoğlu, R. (1995). Üniversite öğrencilerinin beslenme alışkanlıklarının saptanmasına ilişkin bir araştırma. *Beslenme ve Diyet Dergisi*, 24(2), 229-238.
- Topal, S., Çınar, N. & Altınkaynak, S. (2016). Süt çocukluğu döneminde beslenme. *Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 6(1), 63-70.
- UNICEF. (2001). The State of the World's Children. Retrieved from: <https://www.unicef.org/reports/state-worlds-children-2001> on 27.11.2020.

- Uşun, S. (2012). *Eğitimde program değerlendirme–Süreçler, yaklaşımlar ve modeller*. Ankara: Anı Yayıncılık.
- Uşun, S. (2016). *Eğitimde program değerlendirme: Süreçler, yaklaşımlar ve modeller*. 2. Baskı. Ankara: Anı Yayıncılık.
- Uzel, A., Yücecan, S., Ekinciler, T. & Özbayer, V. (1972). Edirne ilinde beslenme araştırması II. *Beslenme ve Diyet Dergisi*, 1(3), 155-166.
- Ünver, Y. & Ünüsan, N. (2005). Okulöncesinde beslenme eğitimi üzerine bir araştırma. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14, 529-551.
- Ünver, Y. (2004). *Beş-altı yaş okulöncesi dönemi çocukları için geliştirilecek, besin gruplarına yönelik beslenme eğitim programlarının, çocuklarının beslenme bilgisi ve davranışlarına etkisi*. Yayımlanmamış Doktora Tezi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Worthen, B. R., Sanders, J. R. & Fitzpatrick, J. L. (2004). *Program evaluation: Alternative approaches and practical guidelines*. (3rd ed.) Boston: Allyn and Bacon.
- Yabancı, N. (2011). Okul sağlığı ve beslenme programları. *TAF Preventive Medicine Bulletin*, 10(3), 361-368.
- Yakar, A. & Saracaloğlu, A. S. (2016). 2013 ortaokul 5. sınıf bilim uygulamaları dersi öğretim programının Metfessel-Michael program değerlendirme modeline göre değerlendirilmesi (Muğla örneği). *Eğitimde Kuram ve Uygulama*, 12(3), 769-796.
- Yalçın, C. (1974). Ankara'nın Kuşcağız gecekondu mahallesinde çocukların beslenme durumu. *Beslenme ve Diyet Dergisi*, 3(2), 91-100.
- Yaşar, A., Ilıca, B. & Rakıcıoğlu, N. (1999). Ankara'da devlete ait ve özel ilköğretim okullarında eğitim gören çocukların beslenme durumlarına ilişkin bir araştırma. *Beslenme ve Diyet Dergisi*, 28(1), 21-28.
- Yetim, A., Yetim, Ç. & Devecioğlu, E. (2015). Iğdır'da annelerin süt çocuğu beslenmesi konusundaki bilgi ve davranışları. *Güncel Pediatri*, 13(1), 7-12.
- Yıldırım, A. & Şimşek, H. (2016). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.
- Yin, R. K. (2003). *Case study research design and methods (5 b.)*. Thousand Oaks: Sage Publications.
- Yüksel, İ. & Sağlam, M. (2014). *Eğitimde program değerlendirme*. Ankara: Pegem Akademi.
- Zembat, R., Kılıç, Z., Ünlüer, E., Çobanoğlu, A., Usbaş, H. & Bardak, M. (2015). Çocuğun beslenme alışkanlığını kazanmasında okul öncesi eğitim kurumlarının yeri. *Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 1(2), 417-424.