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A study on the applicability of in-service hybrid education in food and beverage businesses (The example of culinary trends)

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Abstract

Gastronomy shows a continuous development as a branch of science that aims to meet the socialization needs of individuals as well as their physical needs. Considerable importance is attached to the level of technological integration as the most fundamental variable that can accelerate this development. However, scientific findings on the technological transformation experienced today and the effects of this transformation on sectoral development have not been encountered, especially in the field of in-service gastronomy education.The main purpose of this study is to determine the feasibility of in-service training as a dimension of non-formal education in the field of gastronomy education as hybrid. In this context, hybrid training on gastronomic tendencies was given to chefs working as section chefs in cold, hot and ala carte departments in the kitchen units of food and beverage businesses. In the training plan, the study group was divided into two and a pre-test and post-test study was conducted to measure their knowledge of gastronomic tendencies. Teaching about new gastronomic trends was given to one group through mutual training, and to the other group 50% of the trainings were given face-to-face and 50% via internet-based distance education. In this context, the comparative advantages and weaknesses of hybrid education and face-to-face education were compared in terms of gastronomy education.

1. Introduction

The word gastronomy, which has been translated into our language from French, is defined by the Turkish Language Association (Turkish Language Society, 2020) as "the curiosity of eating well" and "healthful, well-arranged, pleasant and delicious cuisine, food order and system". When the etymological origin of the word is examined, it is stated that it is derived from the Greek words gastros (stomach) and nomas (related to knowledge or law). For this reason, it is stated that gastronomy refers to rules and/or norms about eating and drinking. In addition, gastronomy, which focuses on art and science, is defined as art and the science of good-delicious eating in many dictionaries (Santich, 2004: 16; Zahari, Jalis, Zulfifly, Radzi, & Othman, 2009: 66; Sezen, 2020: 3).

Santich (2004: 15), who described the concept of gastronomy as a difficult process to explain and define, defined gastronomy as a field related to advice and guidance on what to eat and drink with whom, when, how, in what situations and combinations. There are other explanations and definitions made by many

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experts for this term. Considering the connection of this field, which has a long history, with different disciplines, it is stated that the existence of different definition trials about it is not surprising (Sarıışık and Özbay, 2015: 264).

While the first definitions of this concept were generally about the preparation of food and beverages, other aspects of gastronomy were also mentioned in the later definitions (Özbay, 2017: 2). Gastronomy is a field that deals with the production, preparation, presentation and consumption of all food and beverages (N. Onur and F. Onur, 2016: 472) and covers the entire process from the production to consumption of all these products (Sever, Özkan Buzlu and Yıldız, 2016: 117). Gökdeniz, Erdem, Dinç and Çelik Uğuz (2015: 16), on the other hand, defined gastronomy as bringing out the pleasure of nutrition by combining food science, culinary art and flavor creativity.

Although there are different definitions about gastronomy, the common point of all of them is that it is related to the taste and experience of food and beverage, which is the reflection of certain cultures (Özbay, 2017: 4; Serçeoğlu, Boztoprak, & Tırak, 2016: 96). Food is considered as a universal activity that includes production knowledge, cooking, serving and eating concepts and practices in order to design, process and make food suitable for human consumption (Hegarty, 2005: 10). While it is thought that eating and drinking is at the core of gastronomy, the contemporary understanding of gastronomy expands the scope of the study to food and beverage production and preparation, how, where, when and why it is consumed (Santich, 2004: 16).

Methods and tools applied in different disciplines are used in order to create knowledge and make important developments in the field of gastronomy. It is also stated that gastronomy is an interdisciplinary branch of science. It interacts with science and social sciences such as chemistry, physics, biology, anthropology, sociology, marketing, management and business (Sarıışık and Özbay, 2015: 266). However, since gastronomy is a multidisciplinary science, it has had difficulty in being an academic discipline (Scarpato, 2002: 55).

2. Literature

2.1. The Case of Gastronomy Education

Gastronomy education is defined as training personnel for the sector and also investing in people, culture and the future. The food and beverage industry, like all other industries, needs specialized personnel. Universities providing gastronomy and culinary arts education aim to respond to this need and provide qualified graduates (Sarıoğlan, 2014a: 261; Bostan Sarıoğlan and Deveci, 2021). Since gastronomy is an interdisciplinary field that requires practice, gastronomy education is expressed as a difficult and important science for both institutions and educators.

It is known that gastronomy education, which was first seen with the development of restaurants, occured with the master-apprentice relationship, as in many professions. Many cooks have learned the profession through apprenticeship. Chefs who learn the job practically from their experienced masters are often deprived of the theoretical knowledge behind the cooking of meal (Glass, 2005: 3; VanLandingham, 1995). It is stated that these apprentices in Europe usually start working with a chef at the age of 12-14 for low wages. Apprentices are at the bottom of the hierarchy and generally learn from their masters in exchange for food and accommodation (Brown, 2005: 49). It is stated that at the beginning of the culinary education in Turkey, as in the rest of the world, it is given with the master-apprentice relationship, that is, with the ahi-order (Kılınç, 2012: 70).

The 19th century is described as an important turning point for gastronomy education. Educational institutions opened in Europe and America during this period became leading schools for professional gastronomy education and contributed to the development of gastronomy education (Görkem and Sevim,

2016: 979). It is known that formal gastronomy education started and developed in Turkey as of the 20th century.

Today, it is seen that the number of institutions providing gastronomy education is increasing (Sarıoğlan, 2018: 272). There are several reasons for this interest. In this sense, the aims of the institutions that provide gastronomy education should be well understood. It is said that one of the main purposes of gastronomy education is to train qualified workforce for the food and beverage industry. Employees with the skills needed in this sector can only be trained by providing a quality education and training. It is stated that with gastronomy education, quality can be increased in businesses and profitability can be increased by reducing costs (Arıkan, Altınöz Sürücü and Arman, 2018: 593; Denk and Koşan, 2017: 55-56). In addition, considering today's economic conditions, it is stated that businesses do not have the opportunity to spend money or time to train their newly hired personnel (VanLandingham, 1995: 7).

When gastronomy education is considered as vocational education, it is possible to say that it has all these features. VanLandingham (1995: 9) states that with the spread of gastronomy education in the USA, new employees who start working in the sector are better educated and will be even better. In order to meet the needs of the industry, today's chefs should have knowledge about food science, food technology, food consumption and applications (Zahari et al., 2009: 67). In this sense, it can be stated that the most important purpose of gastronomy education is to contribute to the food and beverage industry by raising qualified individuals.

2.1.1. Cuisine Trends

Today, the diversification of food and beverage production and the rapid increase in their quantities have made gastronomy gain commercial value. For this reason, the fact that gastronomy has become an important sector and the diversification of products has led to the emergence of new trends.

Table 1.

Descriptive Explanation of Cuisine Trends

Key Concepts (Cuisine Trends)	**Descriptive Explanation**
Fusion Cuisine	It is considered as a trend that is described as the union of the east and west, north and south of the world in the same cuisine (Newman, 2014: 8; Sarıoğlan & Sezen, 2017).
Molecular Cuisine	It is the use of scientific methods to better understand the molecular, physicochemical and structural changes that occur in the preparation and consumption of food and beverages (Vega and Ubbink, 2008: 372).
Avant-Garde Cuisine	It is the use of many methods, ingredients and recipes from different cuisines in the same kitchens as a result of the acceleration of cultural interactions (Scarpato, 2003: 303-306).
Note by Note Cuisine	Although the first purpose of the use of pure compounds was to improve the food, it was aimed to make the meals completely from the compounds (This, 2013: 3).
Slow Food	Although it is defined as a food cooked over low heat, it refers to the communication between the producer and the consumers, the food itself, the consumer and the individuals at the table (Tencati and Zsolnai 2012:348).
Vegetarian Cuisine	Vegetarianism, which is generally defined as not consuming meat or animal foods, is a dietary habit that has been maintained for many years in Asia and the USA, especially by communities who believe in Hindu, Buddhist and Jain religions (Melina and Davis, 2010: 2).

Vegan Cuisine	Vegetarianism is a type of diet in which no animal meat (red meat, chicken, fish and other sea animals) is included, and in some cases, products derived from animals (eggs, milk and dairy products) are consumed in limited or optionally (Kansanen, 2010). : 4)
Digital Cuisine	Digital gastronomy, which is based on digital online information, is the trend that allows us to change the materials and methods to be used according to our personal and social preferences as well as the nutritional contents (Zoran and Coelho, 2011: 428).
Green Cuisine	While the experienced climate changes trigger environmental issues, local development and the continuity of societies also form the basis of the understanding of sustainability (Yusof and Jamaludin, 2014: 502).
Nouvelle Cuisine	With Nouvelle Cuisine, that is, with the new culinary trend, the freshest and best quality of foodstuffs, which emphasizes the concept of serving healthy meals, has begun to be used (Civitello, 2019: 225).
Living Cuisine	The living cuisine phenomenon is expressed as combining the cuisine with recreational activities and offering a different and new service to its guests. It is aimed to provide a different eating and drinking experience in the restaurants where guests go, which is considered as a part of the kitchen in living kitchens (Erdem and Akyürek, 2017).
Street Cuisine	Street food usually includes the consumption of local cultural foods. Street food, which is generally consumed in standing places, increases interpersonal communication and socialization compared to places that are consumed by sitting at the table and indoors (Solunoğlu and Nazik, 2018: 41).
Haute Cuisine	It can be expressed as a trend where heavy sauces are replaced by sauces that are balanced in taste and appearance; meat, fish and vegetables started to be consumed fresh as transportation opportunities increased; and the use of herbs such as chervil, bay leaf, sage, tarragon and thyme has increased instead of exotic and strong spices (Rebora, 2013: 5; Beaugé, 2012).
Gourmet Cuisine	It is a movement aimed at individuals who have a sensitive palate, have a high cultural background in food and beverage, are keen on food, understand the kitchen, have knowledge about the exoticism and harmony of the ingredients in a meal or beverage, cooking methods and subtleties (Ozdogan, 2016: 1).
Robotic Cuisine	With the acceleration of the digitalization phenomenon, it can be expressed as a trend developed to target standardization with the use of robots in the production process in kitchens.
Glocal Cuisine	Glocalization (global-localization) refers to the adaptation of products and services that appeal to the whole world, formed by combining the words globalization and localization, to local markets and different cultures (Hwang et al. 2018: 3670).
Regional Cuisine	It is possible to define local dishes as foods that contain cultural elements of societies, shaped by religious or national influences, obtained from products belonging to the region, produced by using local tools and cooking styles, and also revealing the diet of the local people (Şengül and Türkay, 2017: 228).
Dark Cuisine	When dark foods are basically considered under two groups, the first is natural black foods, which are stated to be healthier than other colored vegetables and fruits, and the second is foods that are prepared and presented in completely black color with the use of products such as activated charcoal, bamboo charcoal and cuttlefish. Bozok and Yalın, 2018: 254).

2.1.2. *The Concept of In-Service Training and Hybrid Training*

In-service training is planned training activities that increase the level of knowledge, skills, behavior and productivity for the employee throughout her working life, in addition to the basic vocational and skills training given to the workforce, on the purpose of increasing efficiency, productivity and quality in production and service, reducing the errors and accidents that may occur in the production and consumption process of the product, reducing the costs, ensuring qualitative and quantitative improvement in sales and service delivery, increasing profits, tax revenues and savings. In other words, in-service training is the process of educating or training himself for his profession from the first day he started the profession to the day he left the profession. In the most common and comprehensive expression, in-service training is the training given to individuals who are employed or working in workplaces belonging to private and legal persons for a certain salary or wage, in order to gain the necessary knowledge, skills and attitudes related to their duties (Öztürk and Sancak, 2007).

Hybrid education is generally teaching 50% of a course face-to-face in real classrooms and 50% using distance education techniques (Lago, 2000: 5-7, Gilroy, 2001: 43). Blended learning, also known as hybrid learning, and mixed learning, in its simplest definition, is defined as the enrichment of traditional education method with online education materials, that is, blending. In addition to the technologies used, the use of different educational philosophies in the traditional learning environment is defined as blended learning (Alnajdi, 2014).

3. Methodology

The method used as a research model is an experimental method with a widely accepted pre-test post-test control group, in which the number of groups participating in the study, control measures, and the time and number of observations on the independent variable are taken into account (Campbell & Stanley, 1966). In the study, pre-test and post-test were carried out in five-star hotel businesses operating in Istanbul with 42 hot, cold and ala carte section chefs who had previously received gastronomy training at various levels and are still operating in the food and beverage industry. In this context, two main groups were formed, each of which consisted of twenty-one people. While the first group was given face-to-face training on culinary trends, the other group was given distance online training. An unstructured interview form was used as a data collection tool. In the data collection form, culinary trends used in international gastronomy terminology were asked as a key concept. All employees were pre-tested through the data collection form. After the pre-test, 42 section chefs were divided into different groups of 21 people and a training on culinary trends was applied for each group. After the trainings were applied, the form applied in the pre-test was applied to the study group as a post-test.

The data obtained after the application of face-to-face and online trainings on culinary trends to two different study groups were divided into four basic categories: Sentences containing scientific information, sentences containing non-scientific or superficial information, sentences containing misconceptions and no answers. By calculating the frequencies of the sentence numbers in these categories, it is aimed to determine the general tendencies of the section chefs regarding the culinary trends and to determine which training method is effective in which culinary trend.*Data Collecting Tools*

Data collecting tools should be explained. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce ac fringilla nisi. Vivamus nibh mi, pretium sed est sit amet, lacinia ultrices nunc. Aliquam laoreet ut massa vitae consequat. Nunc luctus nisi quam, vitae placerat justo vulputate ac. Donec iaculis eu nibh nec venenatis. Maecenas lobortis bibendum sem et interdum. Phasellus et egestas felis. Donec id sodales dui.

3.1. Research Findings and Comments

In this part of the study, the demographic profiles of the section chiefs in the study group and the sentences they formed about the words related to key concepts were examined. These sentences were examined by the researchers in terms of the information and meanings they contain, coded and classified in four basic ways: sentences containing scientific information, sentences containing non-scientific or superficial information, sentences containing misconceptions and no answers. While performing the classification, it was tried to determine whether the sentences formed by the section chiefs in grouping the sentences containing scientific information were both related to the key concept and whether they were scientifically correct. If the sentences created by the section chiefs are associated in the sentence with the same meaning as the words they associate with the key concept, and if this sentence is scientifically correct with all its other elements, it is included in this category. If, contrary to the answer words that the participants associated with the key concept, non-scientific sentences were formed in the sentence, which were used in daily life and were meaningful with their past experiences and traditions, the sentences were included in the grouping of non-scientific and superficial sentences. In the grouping of sentences containing misconceptions, employees tried to attribute scientific meanings to key concepts in sentences, but they were classified as those who confused these concepts with concepts and expressions with different and wrong meanings (Ercan, Taşdere & Ercan, 2010).

This research consists of two parts in order to determine the demographic characteristics of the study group and to determine the level of knowledge about culinary trends in terms of education methods. In the first part, when the demographic characteristics of the study group were examined; 42.8% of the participants were between the ages of 36-50 and 28.5% were between the ages of 26-35, 73.8% were men and 26.2% were women. It was revealed that 30.9% of the study group had 11-15 years of professional experience and 28.5% had 16-20 years of professional experience. It was determined that 45.2% of the participants had an income of 4001-6000TL and 40.4% had an income of 6001-8000TL. When the education levels of the study group were evaluated, it was determined that 38.1% of them were at the undergraduate level and 26.1% at the associate degree level. However, it was concluded that 52.4% of the participants in the study received their gastronomy training from private education institutions. Demographic characteristics of kitchen workers are presented in Table 2 below.

Table 2.

Demographic Characteristics of Kitchen Workers Participating in the Research

Variables	Frequency (n)	Percentile (%)
Age Ranges of the Study Group		
Under 18	--	--
Ages 19-25	7	16,66
Ages 26-35	12	28,56
Ages 36-50	18	42,88
Ages 51-65	5	11,90
Over 66	--	--
Total	42	100,0
Genders of the Study Group		
Female	11	26,18
Male	31	73,82
Total	42	100
Professional Experience Periods of the Study Group		
Less than 1 year	-	--
2-5 years	4	9,52
6-10 years	9	21,42

11-15 years	13	30,98
16-20 years	12	28,56
21 years and above	4	9,52
Total	42	100
Average Revenues of the Study Group		
0-2825 TL	--	--
2825-4000 TL	--	--
4001-6000 TL	17	40,46
6001-8000 TL	19	45,26
8001-10000 TL	3	7,14
Over 10001 TL	3	7,14
Total	42	100
Education Levels of the Study Group		
Primary School	--	--
Secondary School	4	9,52
High School	9	21,42
Associate Degree	11	26,18
Undergraduate Degree	16	38,12
Master's degree	2	4,76
Doctorate Degree	--	--
Total	42	100
Type of Gastronomy Education of the Study Group		
Formal Gastronomy Education	7	16,66
Public Education Center	4	9,52
Apprenticeship Training	3	7,14
Private Courses	22	52,40
Others	6	14,28
Total	42	100

In the second part, the working group divided into two parts; the first part was given face-to-face education about culinary trends, and the second part was given distance education about culinary trends. As a result of face-to-face and distance training, the knowledge of kitchen workers about culinary trends was measured. Before the training, the pre-test and post-test were made after the training, and the sentences containing the scientific information they produced about the culinary trends were classified and their numbers were determined. The analysis results of both groups under the theme title created for comparison are given in Table 3. When evaluated in terms of the number of sentences containing scientific information; It has been concluded that there is a positive difference in the knowledge level of fusion cuisine, living cuisine, street cuisine, molecular cuisine, note by note cuisine and vegan cuisine, and that face-to-face education is effective in the culinary trends listed above.

When evaluated in terms of the number of sentences containing scientific information; It has been concluded that there is a positive difference in the knowledge level of vegetarian cuisine, regional cuisine, living cuisine, slow food and note by note cuisine, and distance education is effective in the culinary trends listed above. In addition, it can be said that the study group, which is given distance education in other culinary trends, is quite successful in producing sentences containing scientific knowledge.

Table 3.

Number of Sentences Containing Scientific Information Frequency Table

	Number of Sentences Containing Scientific Information			
Key Concepts	**Face to face Education**		**Distance (Online Education)**	
(Culinary Trends)	**Pre-Test**	**Post-Test**	**Pre-Test**	**Post-Test**
Fusion Cuisine	22	28	28	48
Molecular Cuisine	17	19	19	40
Avant-Garde Cuisine	3	4	4	20

Note by Note Cuisine	2	5	5	31
Slow Food	18	19	19	44
Vegetarian Cuisine	27	22	22	56
Vegan Cuisine	19	22	22	43
Digital Cuisine	6	7	7	27
Green Cuisine	11	10	10	31
Nouvelle Cuisine	5	7	7	22
Living Cuisine	13	18	18	49
Street Cuisine	2	6	6	17
Haute Cuisine	3	4	4	26
Gourmet Cuisine	11	12	12	20
Robotic Cuisine	8	7	7	19
Glocal Cuisine	2	8	8	17
Regional Cuisine	11	8	8	41
Dark Cuisine	1	2	2	9

When the findings presented in Table 4 are evaluated in terms of the number of sentences containing non-scientific or superficial information; it has been concluded that there is a positive difference in the level of knowledge of regional cuisine, vegetarian cuisine, vegan cuisine, digital cuisine and street cuisine, and that face-to-face education is quite effective in the culinary trends listed above. It has been determined that face-to-face training on only note by note cuisine and slow food is not effective.

When evaluated in terms of the number of sentences containing non-scientific or superficial information; It has been concluded that there is a positive difference in the knowledge level of regional cuisine, vegetarian cuisine, digital cuisine, street cuisine, living cuisine, note by note cuisine, vegan cuisine and robotic cuisine, and distance education is effective in the culinary trends listed above. It has been determined that there is a difference between the pre-test and post-test in sentences containing non-scientific or superficial information in terms of distance education in all culinary trends.

Table 4.

Number of Sentences Containing Non-Scientific or Superficial Information

	Number of Sentences Containing Non-Scientific or Superficial Information			
Key Concepts (Culinary Trends)	**Face to face Education**		**Distance (Online Education)**	
	Pre-Test	**Post-Test**	**Pre-Test**	**Post-Test**
Fusion Cuisine	11	5	14	9
Molecular Cuisine	12	3	13	6
Avant-Garde Cuisine	14	3	11	4
Note by Note Cuisine	4	5	17	3
Slow Food	11	19	18	8
Vegetarian Cuisine	19	4	20	3
Vegan Cuisine	21	3	19	8
Digital Cuisine	23	4	18	1
Green Cuisine	7	4	8	5
Nouvelle Cuisine	11	2	9	7
Living Cuisine	15	6	17	3
Street Cuisine	24	3	22	7
Haute Cuisine	13	4	11	2
Gourmet Cuisine	13	8	10	9
Robotic Cuisine	11	2	13	4
Glocal Cuisine	8	1	9	5
Regional Cuisine	29	5	30	4
Dark Cuisine	11	3	15	6

When the findings classified in Table 5 are evaluated in terms of the number of sentences containing misconceptions; It has been concluded that there is a positive difference in the knowledge level of fusion cuisine, avant-garde cuisine and vegetarian cuisine and face-to-face education is effective in the culinary trends listed above. It was determined that the misconceptions were quite high before the face-to-face training, but the misconceptions were considerably reduced after the face-to-face training.

When evaluated in terms of the number of sentences containing misconceptions; It has been concluded that there is a positive difference in the level of knowledge of fusion cuisine, vegetarian cuisine, gourmet cuisine, glocal cuisine, regional cuisine and living cuisine, and distance education is effective in the culinary trends listed above. It has been determined that there is no difference between the pre-test and post-test in the level of knowledge of street cuisine in distance education.

Table 5.

Number of Sentences Containing Misconceptions

	Number of Sentences Containing Misconceptions			
Key Concepts (Culinary Trends)	**Face to face Education**		**Distance (Online Education)**	
	Pre-Test	**Post-Test**	**Pre-Test**	**Post-Test**
Fusion Cuisine	16	1	13	6
Molecular Cuisine	7	1	9	5
Avant-Garde Cuisine	11	4	10	7
Note by Note Cuisine	6	1	11	3
Slow Food	4	1	7	1
Vegetarian Cuisine	13	2	19	4
Vegan Cuisine	7	1	10	6
Digital Cuisine	4	--	6	3
Green Cuisine	9	2	11	7
Nouvelle Cuisine	8	2	6	4
Living Cuisine	5	1	8	1
Street Cuisine	3	1	2	2
Haute Cuisine	6	3	8	2
Gourmet Cuisine	7	2	15	1
Robotic Cuisine	9	3	12	7
Glocal Cuisine	5	1	11	4
Regional Cuisine	6	2	8	1
Dark Cuisine	4	1	9	4

When the findings given in Table 6 are evaluated in terms of the number of tests left blank; It has been concluded that there is a positive difference in the level of knowledge of regional cuisine, glocal cuisine, dark cuisine, vegan cuisine and haute cuisine, and face-to-face education is effective in the culinary trends listed above. It was determined that the knowledge level of the participants about the culinary trends was low before the face-to-face training, and their level of knowledge increased after the face-to-face training.

When evaluated in terms of the number of tests left blank; It has been concluded that there is a positive difference in the knowledge level of haute cuisine, gourmet cuisine, regional cuisine, note by note cuisine, nouvelle cuisine, green cuisine and living cuisine, and distance education is effective in the culinary trends listed above. Within the scope of the number of tests left blank, it was determined that the knowledge level of the participants about culinary trends improved after face-to-face or distance education in both groups.

Table 6.

Number of Tests Left Blank

Key Concepts (Culinary Trends)	Number of Tests Left Blank			
	Face to face Education		Distance (Online Education)	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Fusion Cuisine	11	1	16	7
Molecular Cuisine	13	4	17	8
Avant-Garde Cuisine	26	10	21	2
Note by Note Cuisine	34	15	36	7
Slow Food	14	6	21	4
Vegetarian Cuisine	2	--	2	1
Vegan Cuisine	31	5	30	9
Digital Cuisine	16	--	25	8
Green Cuisine	26	9	31	16
Nouvelle Cuisine	7	4	30	7
Living Cuisine	24	7	28	3
Street Cuisine	22	9	21	11
Haute Cuisine	33	6	36	4
Gourmet Cuisine	27	11	37	9
Robotic Cuisine	22	10	27	18
Glocal Cuisine	29	4	33	17
Regional Cuisine	34	5	35	4
Dark Cuisine	23	2	31	12

4. Conclusion, Recomendations and Discussion

As a result of the study, it was concluded that the misconceptions of the section chefs who received formal and common gastronomy education at different levels cannot be ignored. This result strengthens the assumption that kitchen workers who work in the food and beverage industry but do not have training may have much higher levels of misconceptions. With the study, it has been determined that the misconceptions about the teaching of culinary trends can be eliminated with which education methods more effectively. It has been concluded that face-to-face education is more effective in teaching fusion cuisine, molecular cuisine, avant-garde cuisine, vegan cuisine, green cuisine, nouvelle cuisine, street cuisine, robotic cuisine, glocal cuisine and dark cuisine of kitchen chefs. In digital cuisine and gourmet cuisine teaching, there was no big difference in the effectiveness of both face-to-face and distance education. It has been concluded that the study group is effective in teaching note by note cuisine, slow food, vegetarian cuisine, living cuisine, haute cuisine and regional cuisine. In line with the results, the following applicable suggestions have been developed;

- As a result of working in the teaching of culinary trends in educational institutions that provide formal and non-formal gastronomy education, it should be ensured that the misconceptions that may arise by applying teaching methods suitable for the education method are eliminated,

- It should be ensured that the misconceptions about cooking techniques of kitchen workers who are still operating in the food and beverage industry can be eliminated by training for appropriate service.

- A systematized special teaching method can be developed for culinary trends.

After the study, it can be suggested to the researchers to carry out studies to determine the applicability of the section chefs with the hybrid method to determine the effectiveness of teaching in concepts such as

chopping techniques, cooking techniques, hygiene, and sanitation. In addition, studies on hybrid cuisine education can be carried out in schools that provide formal and non-formal education at different levels.

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