



OUTPUT NO. 1
DIAGNOSIS OF CURRENT
SITUATION IN CATERING
INDUSTRY AND VOCATIONAL
EDUCATION

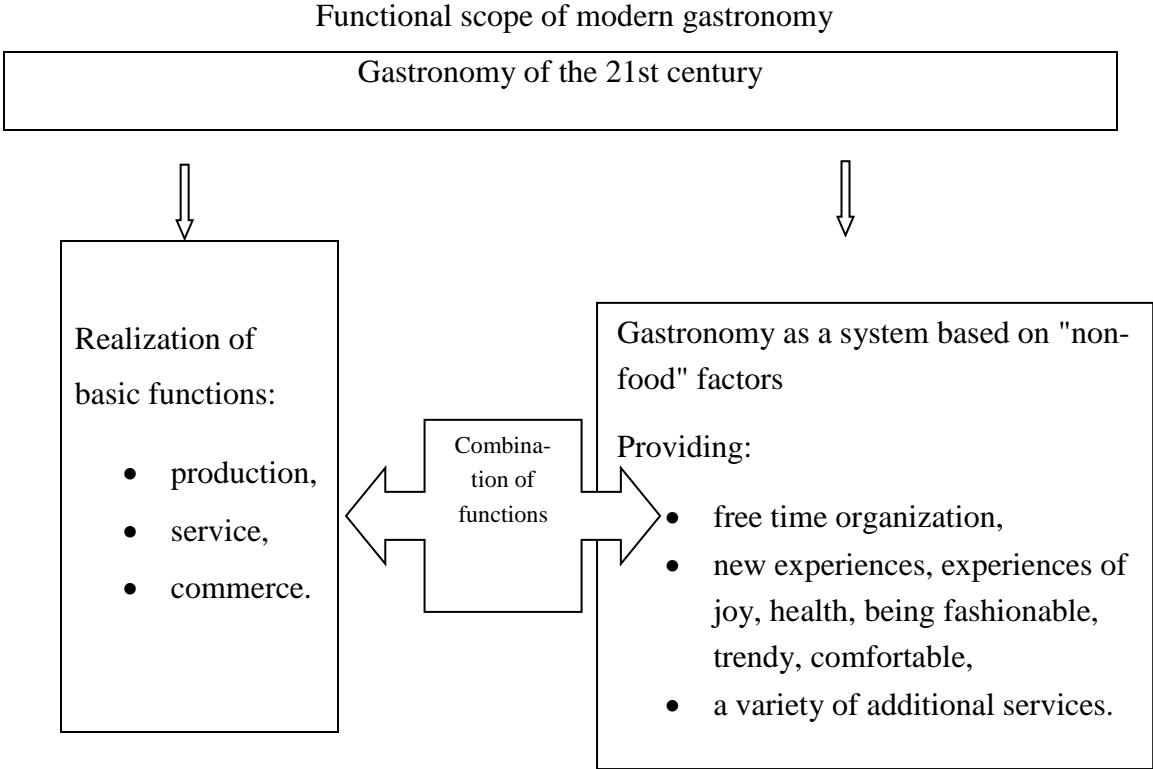
ELEMENTS OF THE REPORT:

1. Analysis of the catering industry in Poland (Spain or Lithuania). The supply of professionals in the catering industry
 2. Assessment of the expected demand for specific skills
 3. The scope of international cooperation in the catering industry
 4. The objective, expected results, methodology, methods of evaluation of the course
 5. Skills acquired after completing the course
 6. The nature of internship programs which take into account the experimental cuisine
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1. Analysis of the catering industry in Poland, Lithuania and Spain. Supply of catering professions

Gastronomy is a division of the economy belonging to the service sector as a component of trade. It is situated between the food industry and trade. Gastronomy companies carry out production, trade and service activities. Manufacturing activity consists in the production of culinary products, supplying the population with meals and beverages ready for consumption. Service activity refers to the creation of conditions for consumption, as well as providing a variety of services catering to the needs of consumers in terms of entertainment, leisure activities, rest and socializing. Gastronomic establishments may carry out additional activities such as the sale of culinary products intended for consumption at home. The commercial activity is the sale of produced meals and merchandise.

Fig. 1.



Source: Own study based on Doring H. 2008: Gastronomy of the 21st century - new challenges. Food Service, No. 3.

Gastronomy in Poland is one of the fastest-growing sectors of the national economy, with opportunities for further development. The location of catering establishments plays a big role here. Research conducted by the CSO staff shows that the highest income is achieved in shopping malls, while the lowest is located in rural areas, away from communication routes.

In the 21st century, the following trends and directions in the development of the catering industry can be observed:

Table 2.

Trends and directions in the development of the gastronomic industry
in the 21st century.

	Trends	Examples
NEW	Types of gastronomic establishments	<ul style="list-style-type: none"> • Fast casual (intermediate concept between fast food and restaurant); • Coffee shops; • Vegetarian bars.
	Forms of catering operations	<ul style="list-style-type: none"> • Franchising activities; • Catering networks; • Entrance of catering companies to the stock market; • Environmentally friendly gastronomy (sustainable food service).
	Trends in food	<ul style="list-style-type: none"> • Foods with health benefits; • Ethnic food; • Convenient food; • Eco food.
	Methods of preparation	<ul style="list-style-type: none"> • Molecular cuisine; • Fusion cuisine (mixing of flavors, national cuisine); • New catering appliances and equipment.
	Consumer service methods	<ul style="list-style-type: none"> • Computerization of the service process; • Home delivery; • Takeaway; • Notice of the nutritional value of the food in the menu.
	Types of meals	<ul style="list-style-type: none"> • Brunch; • Dinner; • Lunch; • Breakfast menu.
	Additional services provided by gastronomy facilities	<ul style="list-style-type: none"> • Hot spots; • Virtualization (order placing, online booking); • Books and cafes; • Concerts, performances in the premises; Galleries (pottery, paintings, etc.) at the premises; • Children's menu; • Children's play areas, etc.
NEW	Locations of	<ul style="list-style-type: none"> • Shopping centers (food court);

	gastronomic facilities	<ul style="list-style-type: none"> • Office centers; • Petrol stations.
	Traditions of gastronomy	<ul style="list-style-type: none"> • Valentine's Day Communion, etc.

At the same time there is a strong regional variation in catering equipment, which is still growing. Gastronomy is a very broad concept. There is a number of professions in this field. Some of them are very old, well-known and popular (such as chef, baker, butcher), while others are new ones that respond to the needs of the modern labour market (eg. sommelier, fast food restaurant worker or even pizza supplier).

Supply of catering professions:

- Barista is a person who is involved in selecting, milling and serving coffee. This profession comes from Italy and is a very respected profession there. The barista's responsibilities include: serving coffee in such a way so that its aroma and taste can be exposed, as well as taking care of the quality of the beans, storing, milling and taking care of the efficiency of the espresso machines,
- The bartender is a person who professionally manages complex customer service in catering establishments (eg bars, restaurants, discotheques, pubs, cafes, hotels) and also keeps sales records and waiter's settlements of accounts. The duties of this employee include, but are not limited to: making various drinks and providing information on them,
- A confectioner is a person who deals with baking of cakes and cookies. The main duties of this employee are: production of all kinds of confectionery and decorating it, as well as accounting of raw materials received and issued, organization of their own workplace and workplaces of their subordinates,
- The pizza supplier is the person who brings the pizza to the customer,
- Waiter / Waitress is a person who serves customers in restaurants, cafes, bars, pubs and other dining venues as well as guests at parties, banquets, cocktails and other events. The main responsibilities of this employee include, but are not limited to, the proper setting of the table, the arrangement of all utensils and cutlery according to the savoir vivre rules, the selection of the table and escorting guests to the table,
- Food Service Manager is responsible for overseeing and coordinating the work of subordinate staff working on the gastronomic side of the hotel, restaurants, etc. The

chief task of the manager is to ensure the highest quality of the meals being prepared, to verify the work of the staff in terms of internal quality standards and schedule,

- The head of the catering establishment is the person whose main task is to maximize the profitability of the premises and to supervise and coordinate the work of the employees. The manager is to enforce the staff of the premises to comply with internal and external rules and procedures - such as health and safety regulations and sanitation. The manager also conducts trainings for newly hired employees and verifies the applications of the candidates, who are interested in working in the premises he manages,
- The restaurant manager is the person in charge of supervising and coordinating the work of the entire staff of the restaurant and organizing the conditions for its day-to-day operation. In this regard, the manager is responsible for completing all the formalities related to running the premises, controlling compliance with internal and external standards, developing delivery schedules, schedules for individual employees, regulating employment, accepting new employees and conducting internal training,
- The shift manager is the person responsible for supervising and coordinating the work of subordinate personnel during the shift. The person appointed in this position shall designate a schedule of tasks to be carried out during the shift for each job and verify their correct implementation. The shift manager continually monitors the execution of the schedule and the use of products and raw materials at the various positions. It also controls compliance with health and safety requirements, standards and internal rules provided for in the workplace regulations,
- The Food Classifier is engaged in the analysis and evaluation of raw materials of plant and animal origin in terms of their food or feed handling. In practice this means organoleptic evaluation, weighing, or technological testing of raw materials. It is also the responsibility of the person being posted on this post to protect the place where the raw material is stored against destructive atmospheric damage, deterioration, or theft,
- A cook is a person who cooks a variety of dishes, courses, snacks and even cakes and desserts. It often happens that it is not a place, but a particular chef attracts customers. The professional chef is a great craftsman, but also a true artist who can do the culinary work. The cook working as a chef directs a team of people working in the kitchen. Its mission is to ensure the efficient organization of the kitchen and the quality of the food served. In addition, a chef is a person who organizes and supervises

the work of his staff. The main responsibilities of the chef are: to organize workstations in the production part of the catering establishment in accordance with the rules of fire safety and safety regulations, environmental protection and food quality assurance systems, planning and organizing work of the kitchen staff, organizing occasional parties,

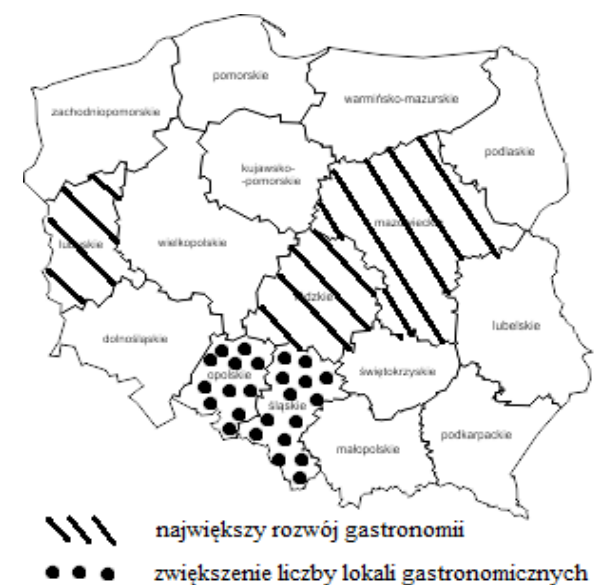
- The restaurant manager is a person who manages the restaurant and the staff. In addition, his main duties include: caring for the pleasant atmosphere, decorations, atmosphere and aesthetics of the restaurant, organizing all kinds of receptions: banquets, concerts, artistic programs, cultural events and occasional events, carrying on financial matters,
- The baker is an employee who produces a variety of breads: bread, rolls, croissants, etc. The main task of this employee is to make the bread according to the recipe. In addition, the baker serves machines, appliances, stoves and control and measuring apparatus,
- Kitchen help is a person who helps a cook in the kitchen to prepare meals and washes dishes and cleans the place ,
- The fish processing worker is involved in the processing of fresh fish in the fish processing plant. It can also be employed in the manufacture of all kinds of fish products - pastes, Hungarian goulash etc.,
- FastFood Restaurant Worker deals with a full customer service in restaurants of this type, and also helps prepare meals in the kitchen, takes care of the cleanliness of the dining room and operates the cash register,
- Butcher is a person who kills animals fit for slaughter, cuts up carcasses and dress their flesht, prepares it and participates in the production of meat products,
- Sommelier, a profession difficult to decipher after only the name of the position and still quite popular in our country. The person employed in this capacity is a specialist in the recognition of the quality and the species of wine. The post often functions in luxury hotels and restaurants - the sommelier is the waiter responsible for serving the wine to the ordered dish; He likes the drink in the presence of the client, analyzes its consistency, taste, color and smell, can determine its origin, age, maturity and even cite trivia about it. The waiter-sommelier opens the wine and serves it in the appropriate glasses, matches its type up with the ordered dish and individual preferences of the customer,

- The catering specialist is an interdisciplinary position that combines skills in the areas of catering, sales and customer service. The employee is required to prepare and create catering proposals, negotiate conditions and implement the sales process. As for catering side he should be able to construct and calculate offers. His duties often include supervising the team responsible for preparation of the order, the preparation of the events and the supervision of them, including efficient cooperation with the hotels or the organizers of the events. He bears the responsibility for high standard of service and customer satisfaction,
- The person employed as a food technologist supervises the food production process and takes care of its quality. He also develops new products and recipes. His duties include quality control of raw materials and the implementation of new technologies, as well as the development of the documentation needed.

Gastronomy in Poland in the period of 1999 - 2010 rapidly developed, with the dynamics of development accelerating after the entry of Poland into the European Union. The structure of Polish gastronomy has changed. The number of gastronomic establishments and restaurants has increased, while the number of cafeterias has decreased. The spatial arrangement of catering facilities has also changed. The greatest development of gastronomy took place in the Mazowieckie, Łódź and Lubuskie voivodships. On the other hand, an increase in the number of catering premises occurred in the Opole and Silesian voivodships, previously famous for the well-developed catering network.

Fig. 3.

The picture of the development of Polish gastronomy in recent years.



////// The greatest development of gastronomy

... Increase in the number of catering establishments

In Lithuania, one can obtain a cook's qualification in vocational schools. A recent graduate usually gets a job as a kitchen hand. After some experience, an opportunity arises for a promotion to a cook's assistant, and later – a cook. If all goes well, she finally becomes a chef – the highest position one can hope to achieve. The chef organizes and controls food preparation and leads the rest of the kitchen crew.

Employment opportunities are numerous. Cooks are needed in:

- 1. The private sector** (cafes, restaurants, eateries or hotels, culinary studios, wedding organization companies).
- 2. Public companies** (hospitals, kindergartens, schools).

It should be noted that the need for cooks is related to the economic level: if the country's economic level rises, the catering company network widens; therefore, the employment opportunities for cooks increase. The need for this profession is one of the main reasons why many graduates choose the trade every year.

On the other hand, in Lithuania, the cook's profession is not well-respected. Even though the level of prestige of a profession mostly depends on the place they work in and what position the cook has. Cooks that work at expensive, high-class restaurants are more respected than those who work in hospitals, kindergarten canteens, or just a simple café. Also, reputable, quality-food restaurant owners, chefs and cooks with a lot of experience, many awards, that are well-known in Lithuania or their own city earn admiration easily.

In Lithuania, there is a dominating opinion that the cook's profession is unfairly underestimated because of a lack of prestigious schools that prepare future cooks.

The Effect of Seasons on the Catering Sector. Catering Companies in Resorts

In Lithuania, many bars, restaurants and cafés are set up in resorts, in which seasonal business, i.e. catering companies work full force only during the summer time, reigns. Many catering companies in resorts simply close for the winter.

Experts from the company Creditreform, who deal in company evaluation, discovered that hospitality businesses are concentrated in Lithuanian resorts. They hold the most food and drink service companies. At the beginning of the summer of 2016, the number of companies that offered food and drink services was almost 3.3 thousand. All of them had almost 70 thousand employees at the beginning of summer. However, most of them are only in the resort cities. In Neringa, out of 100 local companies, 17 are catering companies. After Neringa, there is Palanga (13 companies offer catering), soon followed by Birštonas (12.9),

Druskininkai – 5. In Zarasai region, seven out of a hundred companies offer catering to their visitors and locals, in Birzai region – 5.6, Prienai and Trakai – 5.2 each. It should be noted that Zarasai and Trakai regions are considered resort areas.

The biggest concentration of catering companies in cities is in Kaunas (almost 5 catering companies out of 100 companies registered in the temporary capital).

Concerning the number of employees who work in companies in the catering sector, the largest personnel concentration can be seen in Birstonas. Here, more than a quarter of all resort employees work in catering companies. In Neringa, 22 employees out of a hundred are related to catering, in Palanga – 19, Kretinga – 11, Druskininkai – 10. In total, during the summer, almost three thousand people worked in the catering sector in all four Lithuanian resorts.

FORMAL TRAINING PROGRAMS for catering industry specialists

Profession title	Barman
Quantity of training institutions	30
Profile of skills and competences	
Compulsory competences:	
<ul style="list-style-type: none"> • Prepare a bar for serving customers and tidy up after work. • Provide table service using various methods. • Prepare menus for breakfast, lunch, dinner, and various parties. • Serve customers at a bar. • Select alcoholic drinks to be served with meals. • Serve food and drinks using various methods. • Use cash machines and bar equipment. • Inspect quantity and quality of products delivered to the bar. • Describe products sold at the bar. • Prepare and serve hot drinks. • Make cocktails and serve them in various ways. • Collect used glasses, cutlery, and dishes. • Settle bills with customers. • Prepare accounts for goods and finances. • Observe health and safety, and good hygiene requirements at catering institutions. 	

Profession title	Waiter
Quantity of training institutions	29

Profile of skills and competences	
Compulsory competences:	
<ul style="list-style-type: none"> • Set tables in various arrangements • Make flower arrangements • Provide table service using various methods. • Prepare menus for breakfast, lunch, dinner, and various parties. • Calculate the required number of dishes, cutlery, and tables cloths. • Take orders from customers. • Serve meals and drinks using various methods, and remove used dishes and flatware. • Select alcoholic drinks to be served with appetizers and meals. • Settle bills with customers, accept payments. • Organize and serve various parties. • Serve foreign tourists. • Prepare electronic cash machines for work and use them. • Prepare accounts for goods and finances. • Observe health and safety and good hygiene requirements at catering institutions. • Follow the requirements for health and safety, and good hygiene practice in a catering institutions. 	

Profession title	Waiter - barman
Quantity of training institutions	31
Profile of skills and competences	
Compulsory competences:	
<ul style="list-style-type: none"> • Prepare premises of a salesroom for servicing visitors. • Describe, dispense and serve bar drinks; • Make menus and pricelists. • Serve food and beverages; • Describe starters, soups, main meals as well as cold and hot drinks; • Describe alcoholic beverages and matching them with foods; • Serve special orders; • Serve customers at the bar, prepare and serve hot drinks, cocktails and mixed drinks; • Service visitors in a hall and at a bar. • Explain a technology of making dishes to a visitor. • Make simple dishes and drinks. • Service visitors in parties, receptions and celebrations as well as participants of conferences and congresses. • Service hotel residents in buffets, coffee-bars and restaurants and to be able to serve meals and drinks into rooms. • Order and accept goods and to determine their quality. • Work with technological equipment, scales and electronic cash registers. 	

<ul style="list-style-type: none"> • Make technological and calculation bar dishes and drinks cards and to use them. • Perform and formalize accounting of work and tangible assets. • Assess a business environment. • Work safely. • Use information technologies.
Optional competences:
<ul style="list-style-type: none"> • To organize meals and service for foreign guests; • To behave at the table in accordance with the requirements of etiquette.

Profession title	Hospitality services administrator (NEW from 2016) Svetingumo paslaugų administratorius
Quantity of training institutions	1 (Public Institution Kaunas Vocational Training Centre for Service Business Specialists / Karaliaus Mindaugo profesinio mokymo centras)
Profile of skills and competences	
Compulsory competences:	
<ol style="list-style-type: none"> 1. Assess the need for hospitality services while communicating with guests and potential customers. 2. Present hospitality services to guests and interested parties. 3. Develop the advertising of the hospitality service using various means of information. 4. Arrange daily catering for the visitors. 5. Organize catering for banquets and celebrations. 6. Administer room reservation and accommodation bookings. 7. Receive guests and help them settle in. 8. Analyze the needs for cultural, recreational and leisure events by interviewing the guests. 9. Develop the scenario of cultural, recreational as well as leisure events and celebrations taking into account local cultural traditions and the environment. 10. Provide information for guests about the suggested cultural, sports and entertainment events. 11. Accept the orders from the guests regarding cultural, sports, entertainment events and celebrations. 12. Carry out orders related to cultural, sports, leisure events and celebrations. 13. Prepare hospitality services business plan. 14. Perform bookkeeping for a small and medium-sized company providing hospitality services. 15. Carry out hospitality services quality control. 16. Administer payments for the provided accommodation and catering services. 17. Search for, recruit and dismiss employees. 18. Train staff. 	

Optional competences:

1. Cook meals applying **innovative food** preparation technologies.
2. Offer the services of sustainable recreational tourism.
3. Prepare dishes in compliance with the “fast food“ concept.
4. Prepare dishes in compliance with the “slow food“ concept.
5. Apply innovation in hotel performance.
6. Apply ethnic cultural traditions when providing hospitality services.
7. Apply professional foreign language skills.

Profession title	Cook
Quantity of training institutions	41 Note: some institutions provide studies for disabled students.
Profile of skills and competences	
Compulsory competences:	
<ul style="list-style-type: none"> • Choose equipment, inventory and tools for work. • Prepare a cook's working place. • Choose food stuff, raw materials and materials for preparing dishes. • Calculate quantity of required food stuff. • Determine a quality of food stuff, raw materials and dishes. • Prepare food stuff and raw materials for making semi-finished products and dishes. • Make various semi-finished products, determine a quality of semi-finished products. • Choose and apply thermal preparation methods. • Prepare foodstuff and make ready-to-cook dishes. • Make and serve soups and sauces. • Make and serve main courses, side dishes and snacks of vegetables and pulse. • Make and serve main courses, side dishes and snacks of groats, pasta, flour, curds and eggs. • Make and serve main courses and snacks of fish and sea food. • Make and serve meat, poultry dishes and snacks. • Make and serve salads, starters and snacks. • Make and serve sweet dishes. • Make and serve diet and vegetarian dishes (provides only few training institutions). • Garnish and serve meals. • Lay tables. • Operate food preparation equipment (thermal, mechanical, freezing, weighing, lifting, and transportation) and use inventory. • Record outputs of raw material, semi-finished, and finished products. • Follow the requirements for health and safety at work, good hygiene practice, and internal regulations of catering institutions. • Optimally organize activities. 	

Optional competences:

1. To make pastries;
2. To make and serve festal / occasional dishes;
3. To make and serve healthy food;
4. Make and serve dishes Lithuanian cuisine.

Profession title	Confectioner
Quantity of training institutions	28
Profile of skills and competences	
Compulsory competences:	
<ul style="list-style-type: none"> • Choose and determine a quality of raw materials and food additives, prepare them for production; • Calculate the amounts of products required; • Mix doughs and to prepare confectionary semi-products; • Prepare yeast dough and batter; • Evaluate a quality of dough by using senses; • Prepare flour confectionary; • Prepare cream confectionary; • Prepare sugar confectionary and decoration elements; • Prepare bread and pastries; • Prepare healthy and low calorie confectionary products. • Form, bake and decorate products; • Prepare various types of bread dough, decorate products, and pack them; • Evaluate a quality of products; • Use thermal, mechanical, weighing, transportation, and refrigeration equipment and inventory; • Observe health and safety requirements; • Observe good hygiene requirements for food processing institutions; • Economically use energy and raw materials. • Manage the accounts of a bakery. 	
Optional competences:	
<ol style="list-style-type: none"> 1. To prepare national confectionary products; 2. To bake „baumkuchen“; 3. To prepare confectionary products for children. 	

Profession title	Hotel employee
Quantity of training institutions	18

Profile of skills and competences	
Compulsory competences:	
<ul style="list-style-type: none"> • Select cleaning detergents, tools, and equipment. • Clean various surfaces. • Clean and tidy hotel premises. • Keep hotel rooms in order, replace bed linen and make beds. • Wash and iron clothes. • Prepare for servicing visitors. • Serve hotel guests: welcome, receive, accommodate and see off. • Provide information to a guest and to fulfil simple orders of a guest. • Perform primary food processing. • Make snacks and dishes for a breakfast. • Prepare simple dishes for serving. • Lay tables. • Serve food and drinks. • Serve a breakfast and other snacks in a room. • Arrange and prepare halls for parties, conferences and meetings and to service guests. • Provide information about a hotel, events and recreational resources. • Organize and offer recreational activities. • Communicate with guests and clients in the official and foreign languages. • Assess a business environment. • Fill in a hotel's documents and accounting documents in an ordered manner • Safely use housekeeping equipment. • Work with equipment and devices of catering undertakings. 	

Profession title	Conveyor of feeding and settlement service
Quantity of training institutions	3
Profile of skills and competences	
Compulsory skills and competences:	
<ul style="list-style-type: none"> • Choose tools, inventory and technological equipment suitable for work. • Work safely with various equipment for preparing meals, laundry equipment, domestic appliances as well as with cleaning and washing means. • Assess a business environment and to meet civil law requirements. • Properly organize a working place, to keep rooms, premises and surrounding in order and to wash. • Perform works according to sanitary and hygiene requirements • Choose raw materials and materials for producing food stuff. • Determine a quality of dishes, drinks and products. • Use information technologies. • Make culinary and confectionary products. 	

- Choose and apply thermal preparation methods.
- Make hot dishes and culinary products.
- Make and serve cold and sweet dishes, snacks and drinks.
- Provide accommodation services.
- Keep accounting of tangible assets.

Profession title	Kitchen's assistant worker
Quantity of training institutions	24
Profile of skills and competences	
Compulsory skills and competences:	
<ul style="list-style-type: none"> - Recognize kinds of food stuff and evaluate a quality of food stuff by using senses. • Use kitchen tools, equipment and inventory in a safe manner. • Perform initial processing of raw materials. • Apply technologies of preparing semi-finished products. • Prepare semi-finished products from fish, meat, grains, pasta, vegetables, curt and flour products. • Follow good hygiene practice and to meet occupational safety and health requirements applied to catering companies. • Apply technological knowledge of preparing dishes (cold and hot snacks, soups, sauces, garnishes, second courses, desserts, hot and cold drinks) at work. • Operate technological equipment (thermal, mechanical, refrigeration, hoisting and transportation) and inventory for preparing meal. • Do initial processing of raw materials (vegetables, mushrooms, fruit, fish and meat). • Perform auxiliary meal preparation functions (chopping, thermal processing, dividing into serving pieces, decorating and serving dishes). • Wash dishes, kitchen inventory and equipment. 	

In Lithuania vocational schools usually have their formal training program consist of two vocational training cycles: theory-based teaching and practical training. The practical training is divided into two stages: development of primary vocational skills – practical training at the training workshops under the supervision of a professional teacher, and the second stage, during which a cook develops and assesses the skills necessary for his/her profession by completing an apprenticeship at catering companies.

People with basic education may apply for the cook training program. Formal vocational training lasts from 1 up to 3 years. The duration of studies depends on what education the person has before entering to vocational school and what level of qualification he/she wants to gain – level 1,2 or 3 (Cook2, Cook3, Cook4).

Overview of non-formal learning programs

In Lithuanian vocational schools, cooking learning programs are very similar and standardized. Non-formal learning programs offer a wider variety of topics, which are more specific.

Lithuanian Non-formal learning programs are for people who seek to gain new skills and competencies needed for working in the catering business and more experienced catering specialists who seek to improve existing skills and competencies.

As of today, there are no courses related to experimental (molecular) cuisine in Lithuania.

The most popular and quite specific (more interesting) Non-formal learning programs and courses in Lithuania are listed below.

Cook Professional training

During theoretical courses, students are taught about the changes in culinary and production organization, working with the newest products and additives, the rules of good hygiene and production practices, safety when working with newest equipment. Skills like business organization, accounting and calculation, computer skills and foreign language skills are improved.

Diet meal preparation

During theoretical courses, students are taught diet meal preparation techniques, fundamentals of dietetics, introduced to newest equipment, food products, and production organization when preparing diet meals, keeping with good hygiene practice requirements.

Pizza preparation

The goal of the program – to prepare a competent catering company worker – pizza cook in a short amount of time. During the course, the student will learn about traditional Italian, thick-crust, calzone and other pizza preparation methods, how to prepare, combine food products and spices when preparing pizza fillings, classical sauce preparation techniques, used food product assortment, their primary and thermal preparation principals, how to calculate the amounts of ingredient ratios, and will be introduced to occupational safety and good hygiene practice requirements, rational production organization.

Pizza maker learning program

The course is set up to prepare workers with in-depth knowledge of their trade, who are able to work with new equipment, are always improving their pizza recipes, are interested in the experiences of other countries. Pizza makers will be able to prepare a perfect pizza crust

by choosing the right ingredients. They will learn to form the crust according to the selected type (classical or calzone); during the theoretical part, students will be taught about a variety of pizza toppings and their combinations. During their studies, future pizza makers will be taught the varieties and types of flour, the chemical make up and properties of baking, the carrier usage rules, the variety of pizza toppings: meat, cheeses, fish and sea food, fruit and vegetable combinations, their chemical make up and nutritional values, storage and usage conditions.

Vegetarian and diet meal preparation

Students are taught vegetarian and diet meal preparation methods, introduced to newest equipment and occupational safety, production organization when preparing dishes, while keeping with hygiene practice requirements.

Pastry chef

Students are taught bread roll and bread preparation techniques, introduced to ingredients, equipment, good hygiene practice rules, occupational safety.

Confectioner

Students are taught confectionary product techniques, working with newest ingredients and additives, changes in production organization when preparing confectionary goods, in accordance with good hygiene and production practice rules.

Work basics of a cook

The goal of the course is to prepare a student for the position of a qualified cook, that is able to work in public food service companies, has excellent knowledge of technical processes of culinary good production, is able to prepare cold starters, appetizers, hot appetizers and desserts, to decorate them, to evaluate their quality and to present them.

Food preparation and presentation for social events

The goal of the program is to teach students to prepare technically complex culinary dishes and innovatively present them in various occasions. Students are taught the newest dish preparation and presentation techniques tailored for social events, how to use newest ingredients, are introduced to modern technological equipment, their safe use, how to prepare safe and healthy food using the HACCP (hazard analysis and critical control points) system.

Waiter and bartender PT (professional training)

Students are taught about recent changes in customer service organization in food service companies and bars, good hygiene practices, business organization, newest selection of food products and drinks. Students also have the opportunity to improve professional ethics and communication psychology skills, are introduced to and taught how to use with modern

technological equipment, which are used when working as a waiter and bartender, improve their IT and foreign language skills.

Food supplier

The goal of the program is to prepare a **food supplier for work in personal healthcare institutions and care homes**. During the course, the students will be introduced to dietary meal preparation properties, dietetics, personal hygiene requirements, common food poisonings and will be taught good hygiene and food production practices, general psychology and professional ethics.

Buffet worker

The goal of the program is to train a bar employee – buffet worker, that is able to organize work in a bar (buffet), greet guests and take orders, present drinks and snacks to guests, settle the payment with the guests of the bar/buffet, prepare drinks, keep the bar clean, maintain bar equipment. Students are taught buffet worker organization, food product selection, culinary characteristics of dishes served, bar equipment, accounting and payment methods, good hygiene practice rules, and introduced to worker health and safety principals.

Sommelier courses

A student who has completed the course will know the history of wine, its production, variety, how to present it to the client, wine etiquette rules. He or she will also be able to: recommend a wine according to its taste, to present it correctly (temperatures, how to open it and pour it in a glass), apply wine etiquette rules, including other drinks to match a selected dish. (Training institution MB "VYNAS IR DRAUGAI")

Professional training for a cook-confectioner

The learning program was designed to prepare qualified cooks that are able to make confectionary goods. Students will be introduced to **preparing new dishes and confectionary goods**, production organization in the kitchen and confectionary lines, taught to work with the newest catering company and confectionary line equipment (Training institution – Public institution “Profesijų spektras”)

Cook Professional training

Students will improve the following professional competencies: preparing and presenting dishes, choosing **matching sauces and garnishes**. After completing the learning program, a student will know: the history of gastronomy and changes in cuisine; the selection, properties, nutritional values of newest ingredients and food additives used for preparing dishes; food product and dish assessment indicators; changes in food preparation techniques; ways of processing via heat, changes in food during processing; food product combinations,

fundamentals of choosing sauces and garnishes; occupational safety rules, how to use technological equipment; the rules of using and maintaining technological equipment; sanitary and hygiene requirements (Training institution – public institution Panevėžio darbo rinkos mokymo centras)

Cook

This program is set up according to the needs of the labour market and employer interests. More time during the course is set aside for practice, **especially for producing vegetarian dishes**. The goal of the learning program – to prepare a cook for culinary work: introduce food products, production organization, accounting and calculation, hygiene and production practice rules, business organization basics. (Training institution UAB “Takoskyra”)

Preservation of Aukštaitija culinary heritage

A program designed for cooks. The goal and tasks – to introduce the culinary heritage of the Aukštaitija region, its traditional nutrition culture, traditions of food preparation and consumption, Lithuanian customs. The instructors aim to provide knowledge of national heritage food products, traditional techniques, utensils, equipment of food preparation.

Dessert preparation and presentation

The goal of the learning program is to teach students to make **desserts and present them**; organize work; use and maintain production facilities and equipment; be able to ensure dessert quality.

Fast food preparation worker

The purpose of this program is to train kitchen workers to have the skills necessary for fast food preparation using innovative technological equipment. Upon completion of the training program, workers will be able to organize the work area, make chebureks, make and deep fry dumplings, make a burger, hot dogs, cheese burgers, and waffles; cook vacuum-sealed food in a circulator or a steam oven (Sous Vide); make sauces; safely operate technical equipment, rationally organize tasks, evaluate the quality of raw materials and products. (Training institution – Public Institution Daugai Technology and Business School)

Fast food preparation worker training program

Students are taught to make fast food – sushi, pizza, sandwiches, rolls, kebabs, hot-dogs, etc. The training program acquaints students with a professional kitchen up-close, introduces the specifics of gastronomy, teaches how to prepare raw materials, and introduces the subtleties of food production. Fundamentals of nutrition physiology and hygiene, labor laws, occupational safety and health are introduced. Students are also taught the principles of

kitchen equipment operation and opportunities to use it during the food production process, techniques for menu arrangement, as well as learn to work in a kitchen brigade. (Training institution JSC “Dantera”, PI “NAVIS-RC”)

Kebab cook

The purpose of this training program is to train a kebab cook to be able to use innovative technological equipment, prepare and cook kebabs, as well as serve them, evaluate the quality of a product.

Mushroom preparation worker

Theory-based classes will introduce the prospective mushroom preparation workers to different types of mushrooms found in the forests of Lithuania, the rules for mushroom picking, stages in mushroom processing, canning techniques for different varieties of mushrooms, etc. Practical training at mushroom processing companies. (Training institution – Public institution “Profesijų spektras”)

Healthy food production and serving training program

The training program is designed to train healthy food production workers to be able to recognize and evaluate the quality of raw materials, know the variety of such food, be familiar with storage conditions and expiration dates; know the methods of thermal preparation of healthy food; be able to prepare healthy meals from fish and non-fish sea products as well as serve them.

The Lithuanian labour market offers short-term (1-year) labour market predictions with the goal to foresee workforce supply and demand flow and to evaluate the need for labour market services. Labour market predictions are prepared according to economic, demographic and workforce supply and demand indicator analysis results, employer answers to questions about business activity perspectives, new job opportunities and liquidation within firms, relevant information about foreseeable changes in the labour market, which is in the public sphere.

Qualified workforce emigration and structural unemployment during the last few years were the main challenges for Lithuania’s labour market. It is estimated that this will also be important in 2017. Employers that are unable to find suitable employees (49 per cent of asked employees face a lack of qualified employees) seek to retain qualified employees. However, lacking employees from certain professions every year, restaurant chefs being among them, employers deal with the problem by bringing in qualified work force from Third World countries.

The 2017 workforce prediction shows that companies that offer restaurant and catering services are among those to create the most jobs.

For many years now, the Lithuanian labour market has been setting up Employment opportunity barometers, in which information is provided according to employer survey data and Lithuanian labour market specialist expert knowledge on foreseeable separate profession group employment opportunities.

The 2017 Employment opportunity barometer shows that this year in Lithuania (including Klaipeda), **strong employment opportunities as always will be had by cooks**, in the whole of Lithuania – bakers and confectioners (the latter will have slightly fewer employment opportunities in Klaipeda). Average employment opportunities in the current and upcoming years both in Lithuania and in Klaipeda will be had by food and drink tasters and sorters, dairy product manufacturers.

The employment opportunity barometer is expanded by the so-called "Profession maps", in which the supply and demand situation of 155 profession groups of different municipalities is presented. Profession groups with the most and the least demand, as well as irrelevant for separate regions, are highlighted. Statistical data of the supply and demand of the last 6 years are illustrated.

When analyzing 2011-2017 profession maps, a clear tendency is seen both in Lithuania and in Klaipeda of cooks, bakers and confectioners supply slowly shrinking, but demand – gradually increasing. Cooks are always in the Top 10 most needed professions in Klaipeda and Lithuania at large.

P.S. Names of Profession groups match Lithuanian profession classifier version LPK 2012, prepared according to the international standard profession classifier ISCO-08.

The demand of chefs and sous chefs in the labour market is greatly influenced by **seasonal tourism conditions**, which are especially apparent along the coast, i.e. Klaipeda, Palanga, Sventoji, Neringa. In the smaller resort towns, including during the Fall, many catering establishments, even hotels, villas, guest houses close. For the summer season, business owners begin to prepare for in April-May. That is when the Labour market statistical data begins to change: the number of employment opportunities grows in the housing and catering sectors, a search begins for temporary waiters, bartender, kitchen staff, chefs.

The chef is a profession that is severely needed in the labour market. In April 2017, in order to train needed qualification or competency employees, the Lithuanian labour market sent 1.6 thousand people, many of which were unemployed, to gain the qualification of a chef.

As statistical data shows, during the previous year, wages gradually increased, which is believed to continue in the foreseeable future. From 2012, the fastest wage growth occurred in the service sectors, in which wages are below average. This was the result of the increasing minimal wage and people willing to work in this sector. **The fastest growing wages were in the housing and catering service sector.**

Molecular cuisine

What is molecular cuisine? It is a new approach to traditional cooking that utilizes the modern principles of technology, physics and chemistry to develop a more pronounced flavour, changed shape of meals, the way of serving and locks the useful characteristics and flavour of food.

Molecular restaurant kitchens are somewhat similar to a laboratory, since not only special ingredients, but also equipment is used.

Culinary foam: this is a molecular cuisine dish in the shape of foam. Culinary foam is considered to be the molecular cuisine's signature. Production technology allows making foam from everything, even meat or nuts. In short, culinary foam is a sauce, which contains no fat or other unnecessary components.

Food spheres and gels: on the one hand, there is nothing new about artificial red caviar. After all, they are a sort of spheres. On the other hand, this technology is used in a molecular restaurant to enhance an impression, when exquisite and unique flavours are created inside the spheres and gel membranes.

Emulsions: emulsions are made by splitting a few types of immiscible liquids. One of the first types of emulsions made was milk. A few milk droplets dispersed in water can be used in original sauces.

Sous-vide: it is a way of cooking meat, fish or vegetables that are vacuum-sealed and cooked at a temperature below 100° C in a water bath. This technique is a part of modern cuisine and is most often used in high-class restaurants abroad. Meat prepared this way is soft, juicy, and what is most important, contains vitamins and nutrients. The sous-vide technique may require a special device.

Transglutaminase is a muscle tissue bonding enzyme. It is precisely because of these enzymes surimi crab sticks can be made.

Low-temperature method: some of the meals in molecular cuisine restaurants are made using dry ice and liquid nitrogen. The latter allows making unique cold mousse and holding its structure. Chefs call liquid nitrogen the ideal ice-cream.

Many contemporary chefs do not agree with the molecular gastronomy definition, used to describe the style of food preparation. They prefer to call it modern, avant garde or experimental cuisine.

To expand the boundaries of traditional cooking, molecular cuisine chefs add practical skills, experience, chemistry and physics. Technical coordination of culinary arts and biotechnologies together with creative skills help improve the flavor of the food. With a low number of ingredients, they can realize their incredibly creative fantasies. Even experienced chefs or gourmets may be surprised by the molecular dishes. It means that sometimes even the simplest dish may come as a complete surprise. For example, food that is supposed to be sweet is sour or even salty and vice versa.

When people hear “molecular cuisine” for the first time, the first thought that comes to their mind is that such food is unhealthy. It is not surprising, given that such techniques require the use of liquid nitrogen and many other chemical substances, for example, carrageenan, maltodextrin or xanthan. However, such chemical substances used in the molecular gastronomy are of biological origin. Even though some of them were purified or recycled, the raw materials usually are marine-, plant- or animal-based.

Molecular kitchen in Lithuania

In Lithuania, molecular kitchen methods are not popular. Why? It turns out that this style just did not take root because there were not that many who embraced it. Molecular kitchen methods in the world are already pretty old. The wave of preparing food this way began a decade ago. In Lithuania, it just did not catch on because there weren't any professionals in this area. When molecular food is prepared wrongly, taste and texture suffer. Failed molecular kitchen “masterpieces” may even scare you. Some kitchen chefs claim that in Lithuania and other countries, the ideas of molecular kitchens were popular only for a short time because even if the food is strange and interesting, you would not eat it every day. However, the best chefs in Lithuania still use molecular kitchen elements even today.

Vytautas Samavicius, a famous Klaipeda kitchen master, owner of the restaurant “MOMO GRILL” and “Monai” in the city centre, who learned the secrets of the molecular kitchen as an intern in what is considered the greatest restaurant in the world – “Noma” in Copenhagen, often uses liquid nitrogen chilled to 128 degrees for making desserts. “When using liquid nitrogen from chocolate or berries, you can immediately make ice cream, mousse. It is flash cooking in minus temperatures by changing structures, for example, liquid batter turns thicker, airy, crunchy or crumbly. This preparation method is rare, therefore

interesting, and the dishes – delicious”, – believes V. Samavicius. Also, nitrogen is used to entertain guests as well as a show element in the kitchen. For one, Vilnius “Neringa” restaurant kitchen chef Darius Dobrovolskas sometimes chills meringues, so that when put on a plate, they are steamy, or freezes oil-based sauce, which crumbles on the plate like snow and soon melts. Even though Vytautas Samavicius saw a lot of principles of molecular kitchen in “Noma”, the Lithuanian only found few to be interesting. For special occasions – New Year’s or Valentine’s day – the kitchen chef offers special molecular kitchen dishes, like peach, thyme or cucumber-flavoured caviar. Another interesting device used in kitchens – the siphon. According to Vytautas Samavicius, if you pour some liquid into the small container and spray in some carbon, you can make special sauces, creams, mousses – thick, airy, soft, light, delicate.

To Vytautas Samavicius’ mind, generally non-traditional food preparation methods using modern technology are uncommon in Lithuania because the kitchen personnel often lacks information about it, but you do need the will for it. “When there is a will, there is a way. Sadly, in Lithuania, other types of kitchens are dominant – faceless”, – remarks V. Samavicius. On the other hand, Lithuanian restaurant modern food preparation methods often times don’t stick because new technologies are quite expensive, leading to more expensive dishes prepared using them. “I think that only molecular kitchen restaurants are not needed in Lithuania. Our food culture is different – Lithuanians go to restaurants to fill up, not to enjoy food, not to communicate with one another, not to learn about food. There would probably not be a sufficient number of people for a molecular kitchen to survive in Lithuania”, – explains V. Samavicius.

Other kitchen chefs agree with this idea. In order to taste molecular kitchen dishes, one has to pay 100–150 euros for dinner, and these prices are only affordable to few Lithuanians. If the need would arise, the best chefs would pull out their luggage and would offer molecular kitchen dishes. They are expensive because they take time, and further, using these methods, a third of the food product is wasted, but the products themselves are of the highest quality. And you also need extra equipment – the kitchen has to resemble a laboratory, where there are pipettes, mini-spoons, mini-scales, other equipment.

All in all, the best kitchen chefs in Lithuania try to keep up with new technologies, scientific discoveries and, at least on special occasions, spoil their customers with the marvels of the molecular kitchen.

Molecular cocktails – a completely new direction in Lithuania, but already incredibly desirable in private events and wedding parties.

Culinary Studio

In Lithuania, it is becoming more fashionable to study culinary arts from professionals.

Culinary studios that offer cooking courses took off about 6 years ago; however, neither business newcomers, nor veterans have any problems with participants: the curiosity towards food culture in Lithuania yet grows.

One cooking lesson lasts about 3-4 hours and costs from 40 to 100 euros per person. Participants pay per lesson that is composed of theory and practice and a three-course meal, coffee and accompanying wine or beer, i.e., the participants eat what they make.

What kinds of people attend culinary courses? Studio owners claim that among the participants there are quite a few leaders – both high-ranking and low-ranking – as well as lawyers, marketers, advertising specialists, bankers. Not only women, but men, too. Many of the course participants belong to the wealthier class of society.

Course participants also have wildly different tastes – some study and practice Chinese, some Japanese, others – Lithuanian cuisine. And not just “cepelinai”, but Lithuanian dishes with a longer history. Some culinary studios invite foreign chefs to introduce their native cuisines. Among the most popular are Italian, French, Mexican cooking courses. Other types of courses are also available such as *fusion* cuisine, the technical basics of meat preparation, the art of desserts and so on. Courses are also organized for new mothers, mothers with children, seniors and even Alzheimer’s patients.

Famous Lithuanian chefs, the masters of the culinary arts, also present their signature dishes. Culinary studios in parties and weddings more and more often practice molecular/experimental kitchen principles aimed to impress participants, which leaves a lasting impression of the event.

After all, many of the studios’ main activity is not courses, but various culinary events for business and private parties. For example, team building parties, business meetings, weddings, birthday parties, Valentine’s Day celebration, bachelor and bachelorette parties, etc. Culinary studios claim that they hold courses not to make money, but for educational and advertising purposes because if they only organized private parties or business events, culinary studio names would be less visible and noticeable.

Food during weddings

Wedding parties – it is a big industry, which involves and gives the job for many cooks and catering companies in Lithuania. Apart traditional Lithuanian weddings, there are

getting popular modern wedding events in Lithuania. Very often you can observe here the elements of molecular cuisine.

Experts highlight these cooking tendencies during weddings of 2016-2017 (in Lithuania and abroad).

General tendencies:

- Hors d'œuvre menu (in place of dinner – never-ending hors d'œuvres);
- “Playing restaurant” (drink and food matching; inserting tastings or offering a full restaurant menu);
- Non-traditional entertainment – cooking together.
- If the groom proposed to the bride in the Caribbean, Paris or Rome, Caribbean country, French or Italian cuisine is chosen for the wedding feast.

Among the newest tendencies in the world and in Lithuania when preparing for the wedding is the so-called “street” food: Mexican tacos, hot-dogs, burgers. People also consider one common dish and barbecued food, in particular: pilaf, paella, even barbecued meat. It is also fashionable to set up different bars: beers, whiskey. Or even corners in which you can “pimp” an offered item: *Make your own cocktail; pimp your Prosecco; pimp your popcorn.*

Dinner tendencies:

- Common dinner theme;
- Decorated table for not only desserts, but snacks or cheese;
- Late night snacks;
- Food truck next to the church or for late night snacks;
- Street food influences;
- One common meal – pilaf, paella, lamb.
- Several fashionable snacks: tacos, bruschetta, vegetable rolls (marinated paprika and cheese), mushroom rolls, pumpkin focaccia, ceviche (octopus, prawn, salmon, other fish).

Dessert tendencies:

- Cakes are back in;
- Cake decorations – flowery cakes, black cakes;
- The various dessert table is even more varied;
- Naked cakes;
- Light desserts;

- Desserts with vegetables and seasoning;
- Cheese cakes.

To sum up drink tendencies, some highlights:

- Bubbles (even champagne with the newlyweds' label);
- Cocktails;
- Exotic flavours (cucumber jalapeño Margarita);
- Berry, fruit wines;
- Beer, cider bars;
- *Pimp your Prosecco* corner;
- *Make your own cocktail* corner.

The newest gastronomic tendencies in weddings 2017:

- Exotic cuisine: Caribbean, Africa, Peru, Brazil.
- Classical cuisine gains a punk tone – French, Italian cuisine.
- Slow food dinner.
- Wedding in the morning – brunch. Final wedding rehearsal.
- Minimalism/ maximalism on the plate.

In the field of Gastronomy, individualism, seasons, the quality of food products and a surprising presentation are emphasized. Chefs try to choose quality ingredients and showcase their advantages, priority being given to ecological farm meat or fish. Preparing raw fish appetizers, like ceviche or sashimi, is especially fashionable, which also includes chicken dishes, various parts of beef, game meat. Of course, traditional cuisine, like Italian or French, is not out of fashion, but they have gained more savory flavours. A popular tendency in weddings – telling stories with food: perhaps the first “yes” was said in Mexico, Cuba, Peru or Italy? Your wedding dinner may showcase the cuisine of that country: homemade Italian pasta with seafood or Mexican quesadilla for the greeting?

Appetizer tendencies: this year, brides are choosing sweet single-bite desserts, berries, savory bites on picks, cotton candy or an ice cream trolley.

A similar tendency is seen when choosing drinks. People care about the ingredients and history. Instead of fake-coloured cocktails decorated with glittery cherries, this year, people prefer classical cocktails decorated with natural garden herbs, berries and even flower petals.

More often the traditional aperitif – champagne – is replaced with stronger elegantly presented spirits.

The situation in gastronomy in Spain is different. Excellence considers Spain one of the best tourist destinations worldwide. Since within its territory you can find a great variety of offer of geographic (beach, mountain, plateau), cultural (monuments of different civilizations of world importance), gastronomic (paella, tapas, wine) as well as social tourism (customs, traditions, festivities).

Likewise, it is one of the countries in the world where visitors double the number of national residents, resulting in one of the best places where you can get the best knowledge of services that can be taught and replicated in different parts of the world.

The history of the Spanish gastronomy is the history of a continuous exchange of cultures between different regions that shape the Iberian Peninsula and a rich legacy of historical relation with the rest of the world. During more than four hundred years Spain supported a relation favored with the “new world”. The wealth and originality of what today we perceive as a Mexican, Argentine, Chilean, Peruvian, Colombian, Venezuelan, Ecuadoran, Cuban gastronomy ... it was a product of an exchange in that Spain was most benefited. Pre-Columbian educated people that were hoarding gastronomic jewels as the cocoa, the potato, the coffee ... introduced by Spain in the rest of the European continent. But the history of the Spanish gastronomy is also the history of the receipt of the really very valuable, singular and only legacy in the European context: the Arabic gastronomy so extended in original and rich desserts and that coexisted with for eight hundred years. Definitely, it is the hour of the Spanish wines that triumph in the world, or of a Ferrán Adrià that kidnaps the front pages of the most influential diaries of the planet, there is a door for Spanish kitchen that opens itself strongly.

More than 2 million people in Spain live on tourism and gastronomy. While building has been deeply damaged by the economic crisis in Spain since 2009, the damage to the touristic sector has not been so hard. However, the biggest problem with tourism and gastronomy is the seasonality: many employees never get a steady job or permanent contract.

In 2008, the hospitality sector directly employed 1.28m people. By 2010 this had fallen to 1.23m, resulting in 50,000 less jobs, or a 3.8% reduction. Almost half of these job losses have come in the hotel sub-sector, despite it only representing 25% of the total sector turnover.

Despite the fall in the number of bars operating in Spain between 2008 and 2010, the number of employees working at each bar, on average, has remained relatively flat. On the other hand, for hotels employment per enterprise has fallen from 2008 levels.

Enterprise Focus;

- BARS: Bars account for more than 60% of hospitality enterprises, contributing 29% in turnover and 34% in employment in 2010. This reflects the wider bar culture in Spain as well as the significance of the tourist sector. Alongside the wider economic challenges facing the subsector a number of regulatory changes have also impacted overall performance. For instance, opening hours of licensed venues such as bars and restaurants were legally required to close between 2am and 3.30am following legislation implemented between 1998 and 2006 (previously they could open until 6am). In recent years, bars and nightclubs have had to adapt in order to compete in challenging market conditions. This had led to greater innovation but also some consolidation in the market, with fewer, larger operators.

- RESTAURANTS: In this sector has been experienced a favorable recovery compared with previous years. According to representatives of the sector in 2016 will be closing with a growth of 7% (compared to the projection of initial closure of 3.5%). In addition, it is expected for the next year a growth over 5% compared to 2016.

Added to this description, Deloitte adds in their report of 2017 a tendency of the "new client". This means that there is a change in the consumer profile. Now, this is more involved in the service process and adapt the existing to meet their needs.

This consequences in a change in the traditional way of service. Therefore, the importance of being updated with the new forms of care and adapting the staff on a constant basis with these new knowledge and trends.

Despite operating fewer establishments than bars in Spain, the restaurant sub-sector contributes more to turnover (37% of the total in 2010). Restaurants also possess more employees per enterprise, on average, and a more productive workforce in terms of the total output they create. Whilst the restaurant sub-sector has shown significant resilience to the economic downturn, this could be hampered by any changes, such as labor laws, which impact upon cost of operations.

- HOTELS: represent a quarter of turnover in the hospitality sector and around 17% of employment. Operators have shown particular resilience to changing demand conditions, with only a relatively small fall in the number of enterprises, despite a 10% fall in turnover since 2008. This has resulted in a lower average turnover per enterprise and stimulated the loss of jobs within the sub-sector. The continued globalization of tourism is likely to attract greater numbers of tourists to Spain in the medium term. It will, however, also increase the standard of hotel that customers expect, which means Spanish hotels have to ensure they set up quality systems and pay increased attention to tourists' demands.

Talking about Touristic sector in Valencian Region, it gets 10,1% of regional productivity (PIB) and 11,3% of employment, and products more than 10.300 mill € and 228.000 direct jobs.

The number of travelers and overnights in this region grew up until 2007, reaching 7,8 million travelers and 25,7 millions of overnights, concentrating 9,5 % of the tourist demand of Spain. Since 2010, Valencian Region receives more than 6,9 million travelers a year and 24 millions of overnights.

2. Assessment of the anticipated demand for specific skills

a) Hard competencies

These are the specific, measurable, essential characteristics for performing a given job in catering. They can be confirmed by diplomas, certificates or during subsequent stages of the recruitment process. These features are subject to development opportunities through learning, participation in training and courses, and work in a given position. Hard competencies are often referred to as basic ones, without which we can not employ at a particular position. Hard competencies are described by means of a zero-one system: either we have competence, or there is no other option.

Examples of hard competencies in catering:

- expertise and skills,
- knowledge of foreign languages,
- ability to handle computer programs,
- having a driving license,
- cash register operating, ability to issue invoices and other documents,
- Coordination of warehouse and supply work and cooperation with suppliers.

b) Soft competencies

They concern the psychophysical and social skills needed in the catering industry. They focus on the behaviour of man, attitudes, the way of living. They primarily deal with personal management, motivation and interpersonal skills.

A lot of young people have their first job in life connected with gastronomy. They often take up a position of waiter or bartender because they are not required to be highly qualified and the skills they need can be learned quite quickly. The first job in the field of

catering is a very good start to life as a young person learns many important things that are useful later in a career even in another industry.

Examples of soft skills in gastronomy:

- creativity,
- passion,
- ability to work in a team,
- time management,
- resistance to stress,
- Communicativity,
- dynamism and flexibility in action,
- ability to adapt to existing rules,
- adherence to standards,
- Respect for work,
- following the principles of culture and ethics,
- anticipating the effects of the actions taken,
- openness to change,
- observance of professional secrecy,
- responsibility for the actions taken,
- ability to negotiate terms of agreements.

Both hard and soft skills affect the quality of the work performed as well as its effectiveness. Our suitability is determined by the possession of qualities from both groups. Key competences are different for each workplace in the catering industry. The situation on the labour market in the catering industry means that the development of the employee should be carried out throughout all his professional life. A working man of the 21st century must be flexible, he should make the most of the time and opportunities to build his position.

If we want to compare this situation **to Spain** we have to say that the Valencian tourist offer is high quality, near 45% correspond to 4 and 5 stars hotels. This offer of top category has taken place in agreement with the growth of the urban cores that concentrate a high index of activity. On the coast regions, touristic apartments have increased and so have done rural housings on inner regions, though the demand of tourism in the rural way is smaller but also increasing.

These changes of specialization and the improvements of competitiveness of the companies make necessary that employee's hard skills are much more qualified and flexible, so the educational system has to be able of preparing students at this level and the companies of using this human resources on the best way and take advantage of this new skills.

Also in the tourist sector the competition has been intensified between destinations, because of the proliferation of low-cost carriers and the increasingly disappearance of intermediary companies. The incorporation of the new technologies and the development of innovations offer a great growth potential for this sector.

3.The scope of international cooperation in the catering industry

3.1. Catering industry professional education characteristics

The catering industry has greatly developed over the recent years. It is a result of the increase of nutritional awareness among Poles as well as the rise of consumer expectations about the quality of meals. Another reason is that the ingredients used in the catering industry, such as Asian spices, have become more available. Moreover, the use of new methods of cooking, which increase the standards, is also of great significance. Nowadays, clients constantly look for new flavours. Therefore, preparation of food has become "culinary art" which requires the workers in the catering industry to demonstrate knowledge, skills and professional qualifications.

The main objective of vocational education in the catering industry is to prepare a young person for active functioning in the contemporary reality and for being able to adapt to the changing labour market.

It is important for a student in the course of vocational education to gain theoretical knowledge concerning gastronomy and human nutrition as well as to master the ability to put it into practice while performing professional tasks.

According to official data there are 41 vocational education institutions in Lithuania provide labour market with professionals in the field of catering. Barman, waiter, waiter-barman, hospitality services administrator, cook, confectioner, hotel employee, conveyor of feeding and settlement service, kitchen's assistant worker – this is vocational education professions, which prepare specialists more or less working with food and drinks. In reality, 34 (not 41) institutions accept students for studies in catering sector.

Vocational education is very standardised in our country, studies of various professions are conducted on the basis of very strict standards (compulsory competences of each profession in all schools are the same). Optional (additional) studies/lessons are more flexible, creative and modern as well as non-formal education.

There is a new profession in Lithuanian vocational education – hospitality – related to accommodation and catering services, which suggests a more modern attitude towards the catering sector in our country.

3.2. The needs of the student, the school and the environment

On the Polish labour market the demand existing in the catering industry has not been adjusted to the supply for a long time. Education in the catering industry aims to reduce the discrepancies between the labour market and the educational offer of vocational schools. One of the tasks that needs to be undertaken by schools is performing a diagnosis of the requirements for the existing positions or creating new ones. The information about the educational needs gathered through observation of the local labour market is incorporated into schools' educational offer and into the programs of professional training for teachers. Schools engage in activities promoting the development of every student in accordance with their needs and abilities. Due to cooperation with local institutions, employers and partners of the schools it is possible to take into account individual education and career paths.

In order to improve the quality of vocational training and to assess the needs of the labour market, it is crucial for every school to cooperate with the local government and the institution running the school in the district and in the entire region. However, what is equally important is the school's cooperation with foreign partners as well as organization of internships and on-the-job trainings abroad. This gives students an opportunity to become professionally mobile and to learn new techniques and technologies. In the future, it will allow them to meet the increasing expectations of employers with regard to the employees' knowledge and skills.

A student deciding to enroll in a catering school expects to receive relevant theoretical knowledge and acquire competences necessary for a given position, i.e. skills specific to their job in a catering establishment or a hotel. Another indispensable skill is the ability to speak a foreign language. Equally significant are the so-called universal competences including being able to make and maintain contact with clients and assess their needs, ensuring safety as well as taking care of appearance and professional demeanor. Moreover, it is pivotal for a student to be motivated, identify with the needs of the establishment, be an effective team-player who

is highly skilled and able to organize their own work as well as to bear responsibility for themselves and others at work.

3.3. Searching for and choosing a foreign partner

Changes in education refer not only to the curriculum, but also to the methods and techniques of learning. Their aim is to increase both the students' and the teachers' competence.

Introducing modern teaching solutions into the classroom, i.e. interactive boards, activities on e-learning platforms or realisation of international projects, make it possible to learn quicker and more interesting.

The *InnoGastro* Project, realised within the Erasmus+ Programme, Key Action 2: Strategic Partnerships Vocational Education and Training Sector, gives such opportunities.

The Erasmus+ Programme is the EU programme for education, training, youth and sport for the years 2014-2020. It was created to support the efforts of the countries belonging to the programme for an effective use of Europe's human and social potential, simultaneously confirming the rule of lifelong learning.

The programme increases the possibilities of the partner countries' cooperation and mobility first of all in the field of higher education and youth. The programme supports the activities, cooperation and tools consistent with the aims of the "Europe 2020" strategy and its leading initiatives such as Mobile Youth and New Abilities and Employment Programme. The programme also contributes to the realisation of strategic aims of the European cooperation in the field of education and training and the EU strategy for youth through open methods of coordination.

Education and working with youth play a vital role in promoting common European values, supporting social integration, increasing intercultural understanding and strengthening the feeling of community membership.

Investing in knowledge, skills and competence brings benefits to individuals, institutions, organizations and the whole society, contributing to economic growth and providing equal access, prosperity and social inclusion in Europe and outside its borders.

The Erasmus+ promotes an open access to materials, documents and media, which are helpful in learning, teaching, training and working with youth.

The Erasmus+ has a strong international dimension (i.e. cooperation with partner countries) mainly in the field of higher education and youth.

In relation to the youth the Erasmus+ supports the following main actions:

- the mobility of young people and people working with the youth, promoting the youth exchange, European volunteering and the mobility of people working with the youth in cooperation with the partner countries adjacent to the EU;
- projects for potential building in the field of youth.

The programme also supports IT platforms, such as:

- eTwinning,

The IT platform eTwinning enhances the scope of pedagogical opportunities offered to students and teachers, motivates to studying and opening to Europe.

The eTwinning projects help fulfill the curriculum through a direct contact with people from other countries, representing different cultures. They develop the skill to communicate in native and foreign languages, the skill to cooperate, use modern technology and the skill to operate in the present-day world in the times of globalization.

The realization of projects mainly supports upbringing the students in the spirit of tolerance and respect for other people and cultures, which easily helps achieve one of the most essential tasks school has to fulfill - preparing the students to live in a world without borders.

Cooperation with schools from different European countries gives an opportunity to exchange ideas and experiences with other teachers from Europe.

Students and teachers use the Internet to cooperate across borders - they cooperate and exchange information and materials for studying.

The participants of the programme are young people from the European Union countries and also from former Yugoslav Republic of Macedonia, Albania, Bosnia and Herzegovina, Island, Liechtenstein, Macedonia, Norway, Serbia and Turkey.

The programme also gives an opportunity to cooperate with partners participating in *eTwinning Plus* – these are institutions from the countries adjacent to the European Union - Armenia, Azerbaijan, Georgia, Moldavia, Tunisia and Ukraine.

The whole school may be engaged in the realization of the project: teachers of all subjects, students with their guardians, school headmasters, librarians, school counselor and other workers.

The most essential features of the eTwinning projects are:

- using computers, the Internet, various software, camera, students' leisure time tools, which makes the lessons much more interesting and engaging;

- foreign languages are used for direct communication with peers - project partners. A need for more efficient and fluent speaking encourages the students to learn the language;
- the subject of the project is very easy to be integrated with the curriculum of a few optional schools subjects and to be fulfilled within the mandatory classes, making the educational content far more attractive.

The eTwinning programme promotes school cooperation with the use of communication and information technologies (TIK) and realizes various forms of professional development for teachers. It provides the help and tools essential for establishing a safe online partnership and realization of international projects. Within these projects students cooperate with peers from partner schools in other countries, schedule tasks basing on modern technologies and learn together. Thanks to that, they develop key competence, mainly in the scope of using TIK, but also language and working in a multicultural group competence.

- the School Education Gateway Portal,
- Electronic Platform for Adult Learning in Europe (EPALE).

EPALE is a European multilingual Internet platform aiming at specialists in the field of adult teaching, i.e. trainers, educators, policy makers, andragogists, workers/volunteers of non-governmental organizations in the field of adult teaching. The platform's main aim is to create a space for the adult teaching personnel for discussion, sharing knowledge, cooperation, and through them developing their competence in the field of adult teaching.

The platform is a European Commission's initiative in the terms of the EU longterm obligation to promote a high quality of adult learning in Europe. The platform's subject covers not only the non-professional adult education, but also adult professional development/training.

The platform's aim is to increase the quality and improve the offer of adult learning in Europe, building a strong Pan European sector for adult learning and also enabling it for the professionals and multipliers for the case of adult learning to reach all adults. Moreover, the aim of EPALE is to build an online community around a wide range of educational resources, information, events and social media tools with an access to high-quality content elaborated by specialists and translated into key languages.

EPALE concentrates on five main subjects referring to adult education: supporting the learner, learning environment, life skills, quality, politics, strategies and financing.

- the European Youth Portal,

All these platforms offer a virtual cooperation space, data bases referring to opportunities, participating in practitioners' community and other online services for teachers, trainers, practitioners in the field of school education and adult education as well as for young people, volunteers and people working with the youth in Europe and outside its borders.

3.4. Recruitment rules and preparing the candidates for the trip.

The project will be entered by the second and third grade students, trained in the professions of: Hotel Technician and Nutrition and Catering Services Technician.

Students interested in the project will fill in the application forms which they will hand in to the project coordinator. In the due date the candidates will participate in an interview performed in a foreign language. In the recruitment process such aspects as behavior, school achievements, attendance, communicative level of the English language, students personal predispositions, e.g. communication skills, openness and respect for other partners representing different culture, religion or beliefs.

Basing on the information about students and the performed interviews, a list of people qualified for the internship and a list of substitutes will be made. Every person qualified for the trip will participate in a language course and cultural and pedagogical classes.

These classes will enable the participants to learn the methods of working in a group of people of various nationalities, cultures and religions as well as traditions and history of the partner's region. They will contribute to a better adaptation in enterprises as well as in a foreign country. They enrich the participants' English language with professional vocabulary.

The workshops on pedagogical preparation and social communication will serve a better self-knowledge, one's weaknesses and strengths, will help explore the methods of self-control and also acquire the methods of coping with stress, separation and new situation.

Also a thematic training prepared by a foreign partner will be held. During a study visit, the partner will make a presentation and prelecture. Its aim is to get the interested people acquainted with the project specificity and the methods of validation and certification. During these meetings, the students will get to know the hosting institutions, workplaces and practical education centers where they will take the internship.

Taking an internship abroad enables practical professional training, which will contribute to increasing the opportunities and competitiveness of the school graduates in the domestic and European labor market. As the precedent aims the project sets meeting the demand on creating a greater possibilities of employment, developing the spirit of

entrepreneurship among students, directing the students for further development, planning the career path and increasing professional qualifications.

Taking part in an internship will allow the students to expand their knowledge and refine their professional qualifications. An internship abroad will prepare the students to work in a multicultural environment, and contact with modern technologies and solutions will enable to transfer the experiences and innovations to local craft workshops. The internships will also contribute to increasing the participants' social competence and raising their adaptive skills.

3.5. Expectations concerning the programme of the stay (consistency with the school's curriculum, extracurricular character of the internships and on-the-job trainings, staff – Erasmus + Key Action 1)

Actions conducted by the school ought to be aimed at equipping a student with transversal skills as well as general and specific vocational skills. A graduate of a secondary school should be active, mobile and open to continuous education in order to be able to develop and expand their professional skills. A dynamically evolving school curriculum, the creation of which ought to involve the entire school and local community, should prepare the students for effective transition onto the labor market.

A graduate should have professional competences, which will be a collection of the knowledge (I know what), skills (I know how and I can), attitudes (I want to and I am ready to use my knowledge and skills), talents and other personal characteristics. Therefore, the competences are supposed to be a collection of knowledge, skills, typical patterns of behavior and ways of thinking, which could be applied without the need of further learning. The core of the model of a modern school is complementarity of the three aspects of its functioning: working with a student, competences of the staff and the internal functioning of the school and its institutional environment. This can be achieved through trainings and internships funded under the Erasmus Plus programme - Key Action 1, designed to increase the qualifications and ensure professional development of students and educational staff. The teaching staff should also, or rather most importantly, get acquainted with modern and innovative methods of teaching and managing an educational institution, which will enable the school to improve the quality of its functioning in specified areas that require changes and to intensify international cooperation.

The future holds new challenges and it is surely difficult to predict, which can be confirmed by the unexpected development of technologies that change not only the science but also our everyday lives. It does not mean, however, that it is impossible to prepare for the

upcoming future in a way allowing us to make the most of the chances and to avoid the risks. What is most significant here is the economic globalization. Firms operate on international markets and their employees, customers and clients come from various countries and cultures and speak different languages. Managing diversity is the greatest challenge of the 20th century. Globalization requires new competences to be created and developed. Consequently, speaking foreign languages becomes an obvious necessity. Frequently it is not enough to speak, but one needs to be able to communicate. Without the awareness of mutual relations, maintaining good relationships and effective communication is difficult to achieve. Cultural adaptation is currently one of the most desired competences.

Globalization necessitates travelling to different parts of Europe and the world much more frequently than in the past, which creates the need to be adept at the latest information technology. A stay abroad or an internship in a foreign country should provide an opportunity to familiarize with a different culture and to establish the awareness that knowing a foreign language is indispensable. It also gives an opportunity to learn professional vocabulary, gain hands-on experience, acquire specialized vocational competences and knowledge about a foreign country, all of which should allow them to better plan their career. Learning about the work culture in a different country is going to increase students' mobility both on the domestic and on the European labor market. This in turn will enhance their employment prospects and help them avoid professional exclusion after graduating.

It is expected that during their stay, the students will:

- receive foreign language and cultural training,
- gain knowledge about new trends in the catering and hotel industry,
- gain professional experience in an international environment,
- be equipped with competences of pivotal importance for future employment,
- acquire new theoretical and practical knowledge,
- improve their ability to communicate in a foreign language,
- increase their self-esteem, which will enable them to function not only on the regional but also on the European market easily,
- expand their knowledge about the culture and customs of the partner country,
- be able to find and use information, be active, take initiative and make conscious decisions concerning their lives and development,
- become professionally mobile,
- improve their ability to conduct self-assessment,

- become independent, more self-confident, open and tolerant,
- increase their motivation to learn.

The objective of the stay is also to increase the competences of the teaching staff by:

- expanding the range of skills and tools they use,
- increasing their qualifications and linguistic competences,
- increasing the teaching and learning quality,
- developing social and cultural competences,
- expanding the range of competences related to ICT,
- providing them with practical knowledge about teaching with the use of CLIL method,
- comparing educational systems used in European schools,
- increasing the teachers' motivation to engage in activities of benefit to the school and their own personal development in the future,
- fostering innovations.

To sum up, Erasmus Plus Key Action 1 is expected to yield results in the following areas:

1. **providing professional information** – it is expected to specify what knowledge and information is needed so that students can effectively plan their career;
2. **professional competences** – it is expected to develop specific professional skills taught at school and prepare students to become employees and obtain their first employment;
3. **social skills** – it is expected to increase students' ability to communicate in an appropriate and creative manner in various situations, during work and study as well as to help the students gain the competence of managing in difficult situations.

3.6. Confirming the qualifications and competences (e.g. Europass, ECVET etc.) obtained as a result of international cooperation

After the completion of the internship, its participants should receive confirmation of the qualifications and skills they acquired as well as reference letters from their employers. These documents (e.g. Europass, ECVET) ought to be drawn up in two language versions: Polish and English.

Thanks to them the graduates will be able to present their professional qualifications and skills in a more fitting manner. The certificates should clearly and precisely describe the scope of activities and tasks for which a student doing an internship abroad was responsible.

The contents of such a document will be more significant if they are certified also by the school (the sending institution) as well as by the foreign receiving institution. This will enable potential employers to verify the information provided in the document or request more details in the future.

The aforementioned documents ought to specify such information as:

- a. the name of the country and the company in which the internship was done as well as the name of the entity which organized the internship,
- b. personal information about the intern,
- c. the date and place of the internship,
- d. the scope of the internship, including the curriculum,
- e. the number of hours of the internship,
- f. qualifications acquired in the course of the internship,
- g. internship assessment performed by the receiving party.

Example of the proposed certificate template

CERTIFICATE OF INTERNSHIP

COMPLETED IN

(country name)

To Whom It May Concern:

It is hereby certified that Mr./Ms
born on and residing in
completed an internship in in
lasting from to
in accordance with the agreement no. -, dated
which was concluded between the Employer
and the Sending Institution

Mr./Ms was responsible for:

-
-
-
-

In the course of the internship, Mr./Ms acquired the following practical professional skills:

-
-

-

-

-

He/She performed their responsibilities

.....

(well, badly, exemplarily, conscientiously, etc.)

Signature and stamp of the Employer

....., date:

(Town/City)

Conclusions and description of prospects for future employment in the catering industry

Vocational education in Poland has been changing constantly. In September 2017 a reform is going to be introduced whose objective is to modify the structure of vocational education. A two-level trade school (szkoła branżowa) is going to be created. After a student completes the first level and passes an exam concerning one qualification, the graduate will receive a school certificate confirming their professional qualifications. Such a student is expected to be well-prepared to take up employment or continue their education at the second level of the trade school. After the completion of the second level of a trade school and passing the final exam concerning the second qualification, a graduate will receive a school certificate confirming the fact of completing secondary vocational education and will be awarded the title of a technician. A graduate of the second level of a trade school, who was awarded the title of a technician, may take secondary school final vocational examinations (matura zawodowa) and continue education at the university in the industry in which they received the title of a technician. At least 50% of classes conducted in a trade school will be devoted to vocational training.

The Ministry of Education proposes to introduce framework career advice programs including the issue of career advice in the core curriculum for every level of education.

Professional aptitude of the candidates will be also obligatorily assessed in the Psychological and Pedagogical Counselling Centre before they choose their educational path.

Another innovative approach to vocational education is the attempt to introduce a dual system. The model is based on the combination of theory and practice. According to this model, the on-the-job training is regulated by the terms and conditions stipulated in a contract of employment concluded by the employee and the employer, in the same way as in the case of education of minor employees in Poland. This dual system includes learning a specific profession or specialty. It involves vocational training conducted by an employer or a craftsman, while the theoretical part of the learning process is organized at schools or extramurally. Vocational education is completed when a student receives formal qualifications - the trade, which enables them to obtain additional certificates. By definition, the dual system should provide a student with theoretical knowledge, while at the same time ensuring that the student has direct contact with the labor market. It is recommended that the employers contribute to the creation of the core curriculum, review it and become examiners, which is supposed to improve the standards of vocational education and adapt it to the current labor market. Currently, the dual system is used in education of minor employees attending basic vocational schools. Last year, schools of higher education introduced this type of training in a few faculties.

Conclusions

- a. Polish vocational education system should be developed on the basis of the long-term experience and incorporate these elements of the dual systems existing in other countries, which can be expected to be appropriate in Polish economic, social and educational conditions;
- b. qualifications of employees should be adapted to the needs of employers and the quality of education ought to be improved by increasing the engagement of employers in cooperation with foreign partners;
- c. international internships done by students will enable them to improve their professional qualifications through practice, which will in turn increase their competitiveness and chances to take unemployment on the domestic and international labor market;
- d. participation in the internship will enable the students to expand their knowledge and polish their professional qualifications.

Internship in a foreign country will prepare the students for work in a multicultural environment, while familiarizing with new technologies and solutions will promote the transfer of experience and innovations into the craft workshops in the region. The internships will contribute to the increase of social competence of their participants and improve their ability to adapt.

From the Spanish point of view during these years, more than fifteen thousand foreign students of more than fifty seven countries of the whole world have studied gastronomy at our educational center in Valencia. Design and Development of European Programs such as Erasmus+, Leonardo Da Vinci, Medas, Program of Security Would Feed, etc. CSHM has been involved in more than hundred fifty European projects. CSHM bets for integrating programs as Erasmus +, to center in the formal and informal learning beyond the borders of the EU, with a clear vocation of internationalization being opened to diverse countries by the aim to improve the educational and formative capacities of the persons for the students' employability, teachers and staff.

CSHM bets for attracting a different pupil's profile and foreign students taking advantage of the summit and the world development of the Spanish and Mediterranean cuisine such as:

- Students from European institutions with diverse scholarships of study and exchanges such as Erasmus+ program, and before Leonardo, coming mainly for Spanish cuisine or catering courses, Mediterranean cuisine and Spanish language courses and to develop their internship in Spanish companies. These students stay from one week to three months.
- Students coming for a long stay (between three months and a year) mainly for specialization such as master or post degree.
- Teachers coming for a job-shadowing to discover and analyze differences between our school system and theirs.

To reach this goal our school collaborates with a wide list of companies hosting internships that also regularly offer employments for the pupils that have finished their studies. The aim of these programs is, on one hand, that partners obtain a network of collaborating companies beyond the national area. On the other hand the aim is to promote entrepreneurship among students, they will be constituted in potential entrepreneurs that would implement companies with competitive innovation and economic sustainable value.

Internship abroad in the frame of Erasmus+ projects have the aim to guarantee to the participants the acquisition of new technologies at high level and new linguistic skills to increase and to promote the persons' mobilities worldwide as well as:

- To promote mobility and learning abroad. Allowing to be able to move all around Europe with the appropriate professional and linguistic experience.
- To extend knowledge, improvement of technologies acquired before, discovery of different cultures, gastronomic and hotel offers.
- To contribute to the creation of a community of young and future well qualified professionals, with opened minds and international experience.
- To allow learning, linguistic and cultural profits for the students during their mobility abroad.

4. The objective, expected results, methodology, methods of evaluation of the course

4.1. The general aim of the InnoGastro project

The general aim of the InnoGastro project is gaining new abilities by catering industry teachers and developing acquired ones. Furthermore it is essential to form partnership relationship between entities operating in catering industry around the world.

The accomplishment of established aim will enable to broaden the horizons and exchange experiences between teachers and foreign entrepreneurs of catering industry. Acquired and extended knowledge will let teachers be more motivated and self-confident which will affect the growth of students' education effectiveness in catering schools of Podlasie voivodship.

Accomplishment of the project will give the opportunity to acquire new skills and making comparisons between cuisines of different countries. They will be comparisons on the country level – between schools and entrepreneurs – and international ones. Accomplished teachers' trainings within InnoGastro program will allow to improve education process by improving the qualification of human resources of schools in Podlasie region. It will be used for adjusting them to changing economic conditions, continual technological progress and globalisation.

Furthermore, collected information and contacts will enable practical actions for schools in terms of planning and organizing vocational training of their employees and students.

From point of view of Partner from Spain is that CSHM's signs of identity and, therefore, the commitment that acquire with companies and students, are summarized in the mission:

- To qualify professionally to the student body in the catering sector and tourism and to accredit units of competition associated with the different degrees of our professional family.
- Using environments and real situations as a way to achieve these aims, orientating academically and professionally, to favor a labor insertion adapted to the professional acquired qualification.
- Being a center of European reference in the sector of the Hotel and catering business and Tourism, in the frame of the vocational training, working on European mobility programs (Erasmus+, Leonardo), ICT, e-Learning and Investigation.

The aim of this course is to provide participants new skills regarding cooking, focused on molecular cuisine in the frame of Mediterranean cuisine, including activities of preproduction, preparation, conservation, completion / presentation and service of all kinds of culinary elaborations, following the quality protocols established and acting according to procedure of hygiene, prevention of labor risks and environmental protection.

4.2. Expected effects

After accomplishment of the training within InnoGastro project at the beneficiaries and institutions they work for, achievement of the following aims is planned:

- increasing attractiveness and effectiveness in education of catering industry professions at school and in a region
- motivating teachers and students to continuous self-education and broadening their horizons and as a consequence increasing occupational mobility
- getting confirmation of acquiring new skills and permissions – Europass Certificate
- gaining abilities of preparing dishes of Lithuanian and Spanish regional cuisine and ways of serving them
- gaining abilities of preparing dishes of typical “fuzjon” types especially composed of combining citrus fruit with seafood and meat
- gaining knowledge of preparation techniques of local dishes i.e. monkfish in lemon juice and white wine – rape al limon, chicken breast in orange – pechuga de pollo a la naranja/pato a la naranja, paella in various forms.
- using spices and oriental herbs in Spanish cuisine for producing aliola sauce and other

characteristic Spanish cuisine additives

- getting to know techniques and ways of seafood dressing especially - lobster, crawfish, shellfish, shrimp
- getting to know the application of untypical, unique and original ingredients: various types of rice, citrus fruit, squid ink
- getting to know local desserts and sweets e.g. figs bread, turrón (popular in different countries nougat)
- getting to know the character of working with ingredients used in Mediterranean and Lithuanian cuisine
- obtaining the certificate Spanish or Lithuanian cuisine knowledge (selected issues)
- getting to know eating habits of the Spanish and the Lithuanian, especially meals schedule during the day, their size, the way of serving dishes, the serving order, table decoration
- various dishes of vegetarian cuisine: salads, vegetable and fruit drinks, cocktails,
- getting to know the characteristic of Spanish wine production and their application in production of sauces, soups and marinade
- getting to know of machinery park – appliances, special equipment, unique dishes
- improving the quality of foreign language communication skills
- getting to know of foreign cultures and habits
- the growth of interpersonal skills, breaking the distance and cultural barriers among the project participants
- establishing cooperation between Polish schools and vocational training centers with foreign partners which will affect the improvement of education quality.

It is important to analyze the difference between results expected from this course for both groups of participants who will take part in it. For all of them, both teachers and entrepreneurs, it will be an intense experience of cultural exchange for the mere fact of coexisting with other persons in a foreign country with a very different social and culinary culture. Therefore, one of the main goals is to improve soft skills of participants, make them more open-minded in many in many ways by pulling them out of their comfort zone.

Regarding professionals of cooking teaching, they will live this experience in an equivalent school to theirs, framed as we said before in such a different culture, which will open them a new range of possibilities to incorporate into his classes. This course will offer them a new

vision of the kitchen, bringing them over to more innovative technologies, as molecular cuisine, by hand of the most traditional recipes, so that they will be able to learn and / or to improve from the most basic technologies up to the forefront cuisine. This way they could bring it over to their pupils in an easy way.

On the other hand, for entrepreneurs, it will be a great opportunity to approach Mediterranean cuisine, awarded as Immaterial Heritage of the Humanity by UNESCO, and the most advanced culinary technologies as molecular cuisine. It is expected therefore that these professionals extend his vision of cooking, getting to know new raw materials and methods of preparation, experiencing on their own in Valencia, cradle of the Mediterranean cuisine valued worldwide thanks to its elaborations of rice, vegetables, fish and seafood mainly. In addition they will discover the molecular cuisine and, more important, how to incorporate it into his menus in a really easy accessible way, by the hand of their most traditional recipes. Therefore expected results for entrepreneurs are the improvement of their practical skills, the discovery of new raw materials and elaborations, and the integration of molecular cuisine in their own recipes and, finally, enrich the gastronomic offer at their establishments as an added value.

4.3. Methodology

The accomplishment of the project will consist of three stages:

Stage1: It will be carried out in Poland, where three meetings with project partners, trainers and organizers will take place. They will be aimed at preparing for the educational trip to Spain. There will be theoretical training in e-learning system. During the training the participants will acquire theoretical knowledge of characteristic features of Mediterranean cuisine, applied ingredients, standard dishes and culinary techniques. They will gain knowledge of typical dishes of Valency i.e. monkfish in lemon juice and white wine – rape al limon, chicken breast in orange – pechuga de pollo a la naranja/pato a la naranja, paella in various forms. Appropriate techniques of lying the table of this region, the size of portions, dinnerware, décor of consumers' room will be presented. Technical equipment of cold and hot dishes will be taught as well. The ways of storing and keeping feedstock and processed products will be shown as well. The participants will learn about customs and culture of Spain which will be visited during the second stage.

Stage 2: training trip to one of foreign partners in order to familiarize the participants with nuances of catering industry in practice and comparing them to Polish conditions. We would

like to analyze the possibilities of good practice assimilation. The methods of training should include seminars allowing teachers, organizers and foreign partners to exchange the knowledge and experience. There should be study visit in foreign partner country in local restaurants, cafes and bodegas. While doing the traineeship and practical activities in partner's country students will have a closer look at technology and technical equipment.

Stage 3: summarizing the project. This stage will be devoted to evaluation, collecting data and summarizing the gained knowledge and abilities.

The general methodological principles as a VET school are the following:

- To provide pupils an education of integration quality and completes both in the theoretical knowledge and in the development of the practical activities.
- To develop the contents of the different modules in a practical environment and in a real working area.
- To promote participation of the different sectors of the educational community in the development of the school activity, inside the area of his responsibilities facilitating the necessary climate of conviviality and study.
- To promote the capacity of pupils to trust in his own aptitudes and knowledge, developing the values and basic principle of creativity, personal initiative and entrepreneurship.
- To promote the aptitude of self-learning and team working.
- To consider responsibility and personal effort as essential elements of the educational process.
- To admit that they need to learn in an effective and fast way.

Before the course starts, participants will receive a dossier with some information about molecular cuisine, so that they all get minimal knowledge about it. Then the course in Valencia will be 100% practical lessons in our kitchens. Every lesson will be divided in two parts: at the beginning the teacher explain students what day are doing during the day, he shows them all materials and food they will need to use and the recipes they are preparing. He provides them practical information and they can ask as many questions as they have to be ready to cook. After that every student go to his work place where he will work on his own, or in team depending on the recipe, always with the help and support of the teacher.

Starting with health and safety rules, detailed information about ingredients and methodologies, observation and self-working are the bases of every lesson that will finish on tasting preparations.

4.4. Evaluation of InnoGastro project

As a practical course, it will follow a day by day evaluation. Teacher will take into consideration the following aspects:

- Attitude: punctuality, respect to each other, keen to learn about new cultures, ingredients, people, etc.
- Health and safety rules: rules that they already know but will be reminded and have to be
- Theoretical skills
- Practical skills
- Team working: although they are working mainly on their own, they are part of a group and it's really important to emphasize the sense of group
- Progress: it is not so important the final level achieved by each student as the difference between the starting and final level.

As the evaluation will be used an entrance and exit survey and required skills after completing the course.

5. Skills acquired after completing the course

5.1. Theoretical skills

- knowledge of culture and customs of visited country, especially its inhabitants' dietary habit
- acquiring knowledge of characteristics of Mediterranean cuisine, techniques of feedstock processing
- Knowledge of a new culture and Mediterranean cuisine
- To determine the needs for the production in kitchen from the received documentation
- To receive, to store and to distribute raw materials, in suitable conditions of maintenance and conservation, up to the moment of his utilization
- To design the place of work, preparing spaces, machinery, useful and tools

- To apply protocols of environmental safety, hygiene and quality during the whole productive process, to avoid hurts to persons and the environment
- To solve problems and to take individual decisions following the established procedures

5.2. Practical skills

- Abilities of preparing selected Mediterranean dishes, especially Spanish cuisine
- Gaining knowledge of the kitchen facilities operation
- Improving the quality of foreign language communication
- To execute pre-preparation processes and/or regeneration needed to apply to different raw materials, depending on his characteristics and the adequacy to his possible applications.
- To execute culinary elaborations, taking into consideration the processes of presentation and conservation.
- To achieve the aims of production, working responsibly and supporting professional relationships between members of the team.

5.3. Soft skills

- To support the spirit of innovation, improvement, production and updating of knowledge.
- To detect and to analyze opportunities of employment and auto employment.
- Team working.
- Living together.
- To improve foreign language.

Conclusions

1. The training will allow to establish international cooperation of entities working in catering industry
2. The teachers coming back from training will relay required knowledge to their students, which will result in improving the quality of teaching
3. The prestige of schools in Podlasie region will increase. Consequently they will gain international dimension.

6. The nature of internship programs which take into account the experimental cuisine

6.1. Curriculum for cook profession

The aim of vocational training is to prepare learners for living in the conditions of the modern world, to work professionally and to work actively in the changing labor market.

The tasks of the school and other bodies engaged in vocational training and the way they are implemented are conditioned by changes in the socio-economic environment influenced by: the idea of economic development, the globalization of economic and social processes, the growing share of international trade, geographic and occupational mobility, new technologies, as well as Increase in employers' expectations regarding employee knowledge and skills.

The vocational training system's response to the needs of the labor market, its openness to lifelong learning and the learning and professional mobility of graduates is to serve to distinguish qualifications within particular occupations included in the classification of occupational education.

A graduate of a vocational training school, the cook should be prepared to perform the following professional tasks: food storage, food and drink preparation, food and drink expedition. In order to perform the above-mentioned professional tasks, it is necessary to achieve the assumed learning outcomes, which consist of the effects of education common to all professions and the profession of chef.

A chef's education school should have a gastronomy lab and a school workshop where all the necessary job stations should be organized.

Practical training may take place in: laboratories and school workshops, lifelong learning centers, practical training institutions or potential places of employment for graduates of vocational schools.

To achieve the effects of training for the profession, the chef's curriculum provides a minimum of 700 hours.

6.2. Specificity of practical activities

An extremely important element in implementing the core curriculum for the cook profession is the practical classes that are carried out in the studios and workshops. In order for the pupil to master as much as possible the ability to organize and perform the work, most of them are individual hands-on activities where students individually or in small 2-3 groups,

under the guidance of a teacher or vocational instructor, organize and perform the necessary work to achieve the required degree of efficiency.

During practical activities, students have the opportunity to master work and activities, to develop the skills and habits necessary for the efficient use of equipment used in the preparation and expedition of food and beverages. Continuous control over the work (activities, movements) performed by the student, ensures that they are able to master them properly, and in the future - to perform the exercises correctly. During practical training, you learn not only how to "do" but also "why" as well as whether the work can be improved and what conditions must be met.

Learning outcomes are provided by the teaching methods used in the practice. The teacher or instructor uses the demonstration, the exercise, the initial instruction, and the current instruction while the student is performing the task. The learner's performance is achieved through imitation and restoration of the teacher's activities at the guidance given by him.

Practical classes are of great educational importance. They teach responsibility for the work given, the equipment entrusted. They offer students autonomy in solving problems and allow teachers to understand their pupils better, implement the technical culture and conscientiousness at work. This form allows for the most complete confrontation of theory with practice. It allows you to fully involve the student in the course of work and a better understanding of work organization. Practical classes should be organized in cooperation with local employers so that pupils can adapt their skills to the needs of the local labor market.

6.3. Implementation of apprenticeship - present status

Students of all vocational schools and technicians are obliged to serve apprenticeship. Their number and duration are determined by the curricula of different fields of study. Time and dates are determined by schools, depending on the number and size of catering establishments to which the students are sent.

The basic goals of apprenticeship are:

- familiarity with the organization of work in the catering establishment;
- mastering the ability to perform work resulting from the production cycle and technology used;
- accustom students to work for a long time, giving students a more professional picture of work.

It is of vital importance to prepare apprenticeship well if you expect good results. It consists of proper preparation of the schedule of work that students will perform, the precise definition of program tasks and the ways of their implementation. During apprenticeship, pupils have the opportunity to get acquainted with these issues and to develop skills they cannot acquire during practical training. The benefits of the apprenticeship are greater, the better the students are prepared for them. Theoretical knowledge and skills acquired at school (additional courses and training, e.g. experimental cuisine) are absolutely necessary.

In the profession of cook, students serve 160 hours of apprenticeship in the education cycle. Each school develops a program of apprenticeship based on the core curriculum, which is received by the employer accepting the student.

Unfortunately, catering establishments do not use modern methods of preparing dishes, especially experimental cuisine. It happens due to the lack of demand for such services in the local market.

6.4. Experimental cuisine - character, advantages, conditions and forms of realization

Experimental cuisine is a new look at food preparation. It uses scientific knowledge about cooking. The goal is to get certain tastes of non-typical ways and sometimes in very surprising combinations. Modern cuisine is more a laboratory than traditional kitchen.

The experimental cuisine includes a molecular cuisine and a fusion cuisine. Molecular cuisine is very modern, advanced and visually sophisticated. Moreover, it uses only fresh, natural products ranging from meats, vegetables or herbs to plant origin products such as agar-agar, soya lecithin, or maltodextrin. Molecular cooking allows to control the food we prepare, and modern techniques such as sous-vide help to retain most of vitamins, minerals or nutrients in our diets. It is estimated that the use of fat when preparing molecular cuisine does not exceed 5%. Modern techniques help us to balance our diet much better than the old and to control the amount of calories we put into our bodies. Molecular cuisine introduces order in the kitchen and allows to eliminate smells from the refrigerator. Thanks to modern packaging methods, the storage time of products is considerably extended.

Experimental cuisine is not included in the core curriculum and therefore not included in the curriculum. Unfortunately, the equipment used in the molecular cuisine is quite expensive and, not necessary according to curriculum, its purchase by schools seems unsuitable. In addition, few teachers and vocational trainers are trained in this area, and such knowledge and skills are essential if we want to teach students.

6.5. Implementation of experimental cuisine for theoretical, practical and apprenticeship programs

The content of experimental cuisine is not included in the curriculum for the cook profession. Therefore, a pilot program implementing the experimental kitchen for vocational education at the school level should be established.

They should be found in learning outcomes T.6.2 (4), T.6.2 (5) and T.6.2 (6) on methods and techniques for preparing food and beverages, the selection of products and the preparation of ingredients, dishes and beverages. Essential equipment and devices used in the experimental cuisine should be implemented with the effects of T.6.2 (9) and T.6.2 (10) on the distinction and use of equipment and appliances for the food and beverages preparation and serving.

6.6. Practical use of experimental cuisine and dissemination

Implementation of the issues of experimental cuisine in the curriculum allows the students for the use of modern culinary techniques - sous vide, molecular and vegan cuisine, and experimental cooking techniques.

The student will have knowledge about:

- new cooking techniques,
- appliances used for cooking in new culinary techniques,
- new ways of marinating and preparing for smoking,
- cooking in cold temperatures,
- cooking in fat.

We will be able to train students in experimental cuisine by organizing training and workshops for other courses' students, graduates, teachers and local employers. The target group of the training will be students and adults who want to acquire the knowledge and skills of applying modern culinary techniques in the gastronomy.

We will base the recruitment mostly on interviews with those who are interested (not only young people but also employers). We will send surveys and questionnaires to people in order to meet their expectations in the field of experimental cuisine.

An important element is the dissemination of opportunities, advantages and use of molecular cuisine in practice. The knowledge gained through this will be disseminated:

- on the school website,
- Electronic Platform for Adult Learning in Europe,

- on the Regional Competence Center website, which co-operates with other schools therefore gives the opportunity to disseminate,
- sharing knowledge with the National Teacher Education Center in Brwinowie,
- dissemination among students and teachers of schools of the Ministry of Agriculture and Rural Development,
- posting information on the website of the Ministry of Agriculture and Rural Development,
- exchanging of experience among employers who offer apprenticeship training.

When performing this small study, PE “Education, research and consultancy center” surveyed 7 successful café and culinary studio owners. Respondents represent catering companies in resorts (Nida), gradually more popular culinary studios and traditional cafés, which have long-term conservative clientele and specializing in various banquet organization. Three out of four respondents are interested in and practice molecular cuisine for special occasions. One café owner works in a resort and is focused towards healthy dishes.

Many PE “Education, research and consultancy center” cafés surveyed have a long-term work experience in catering and customer service areas. Some café owners have owned their businesses for 15-18 years. These usually employ older cooks (about 50 years old), who are tested by time and various circumstances. Older cooks are categorically afraid of change. According to the cooks, the internet has nothing new to offer, so it is not worth it to search, inquire. During meetings, the cooks do not bring forth any new recipes. The café owner wants to bring in a new ingredient, but the cooks are against it. The café owner still tries something new, and if client responses are good, the cooks relent. For example, one cook is against wine and its use in dishes. Older cooks do not follow newer trends. Cooks who learned cooking during the Soviet regime were taught according to strict standards, which the cooks adhere to while cooking. However, older cook conservatism is not a common tendency; it would be false to say that all cooks who graduated 30 years ago are against changes. Some cafés claimed that they regularly organize new dish preparations and tastings to decide whether to add a certain dish to the menu.

Café owners claim that their clientele forms over many years. The café menu depends on the client. Every café has a different face.

Chefs from a younger generation are more likely to experiment, follow food preparation trends in Europe and the world. Among young chefs, dishes from certain countries are the most popular: Italian, French, Mexican or foreign client favourites: steaks, bruschetta, rolls,

hamburgers, etc. Younger chefs are fearlessly starting up extravagant or themed cafés, including the ever more popular culinary studios-lofts, dessert studios, culinary schools, health food cafés, fish restaurants and others.

Cafés operating in seaside resorts work in full force from the middle of May to the middle of September. Their clientele is varied – from Lithuanians to foreigners. However, even they look for a specific clientele and orient towards a certain consumer. For example, the café “Gardumelis”, settled in Nida, is oriented towards healthy desserts without yeast, flour or eggs, sell health-boosting medicinal herb teas. This café is popular among German tourists. During the fall, winter, early spring, 3-4 cooks are employed in the café, and 7-10, once the season gets going.

All surveyed café and culinary studio owners claim that for lunch, experimental cuisine does not work. It can be offered only for banquets, weddings, i.e. special occasions.

After surveying café, culinary studio owners in Klaipeda and Neringa, it was discovered that all wanted professionals and cooks both willing to work and with a love for what they do. If cooking was a boring or a disgusting activity, you cannot become a good cook because you will lack motivation. Every employer’s dream is for the cook to consider food preparation as not only work, but a hobby, passion. Not the least bit important is the person’s talent to cook food deliciously, match flavours.

Professionalism is understood as the ability to cook basic dishes deliciously, openness to new methods, ability to match and create flavours, solid theoretical food preparation basics. Also, café owners highlighted that cooks should take initiative, offer new dishes, be willing to try them out and offer them to clients, and seek their own professional goals.

Café owners agree that even though theoretical and technical basics, familiarity with classical culinary basics are needed for every cook, imagination is also a must, as is the want to experiment, improvise.

Other personal qualities:

- Speed, ability to do everything fast, without loss in quality, good reaction and coordination
- Honesty
- Ability to work in a team, i.e. employees should be able to work alongside one another
- Hard work
- Responsibility

- Tidiness
- Ability to finish work started
- Organization
- Time management
- Creativity

Experienced café owners claim that banquets are a specific activity; not everyone can immediately contribute to preparing for banquets. For that, you need experience and the qualities mentioned above as a whole. When you need to prepare a meal for 20-50 people, the cook has to know exactly what has to be done and when, otherwise, hot dishes will cool down, and there won't be enough time left to prepare the desserts.

Cooks have to be quite fit and enduring because you have to be on your toes for the entire day and work in a hot room.