

REPORT ON SKILLS AND COMPETENCE

NEEDS: EUROPEAN LEVEL

COMPETENCE AND SKILLS ENTITY –

DEFINITION AND STANDARD,

BACKGROUND RESEARCH

Survey Analysis

The CORE project aims to explore the future dynamics of culinary education across Europe. The project is co-funded by the Erasmus+ Programme of the European Union and includes a project team with members from Finland, Estonia, Spain and Ireland.

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CORE - COOKING FOR THE FUTURE

Report on skills and competence needs:

European level competence and skills entity – Definition and standard, Background research

Survey Analysis

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INTRODUCTION

The CORE project aims to explore the future dynamics of culinary education across Europe. The project is co-funded by the Erasmus+ Programme of the European Union and includes a project team with members from Finland, Estonia, Spain and Ireland.

An integral part of the project is to gain insights from senior chefs across Europe and their vision of future skills.

A multi-method approach was used to inform the project. The combination of semistructured interviews and online surveys informs the future development of the project along with a literature review across culinary education in each country.

The survey results are presented in this paper using word cloud technique for qualitative data, which highlights the most common responses while the quantitative data is presented through a range of graphics.

SURVEY RESPONDENTS - PROFILE

The online survey was distributed to networks of each respective partner with 156 respondents completing the survey.

The survey included closed questions and open questions allowing for 'free' comments from respondents.

The majority of the respondents were from Ireland (80 surveys) with 48 from Finland, 18 from Spain, nine from Estonia and one from England.

It is important to note that these participants are of varying nationalities themselves and the response indicates the country they currently live and work in, as indicated in the figure 1.

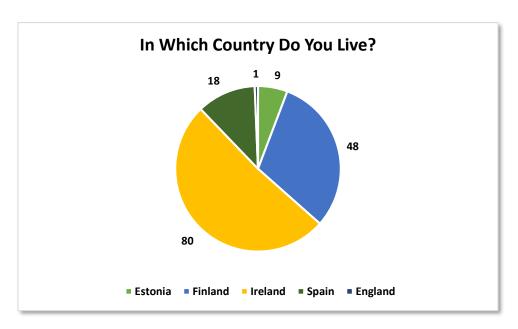


Figure 1: Distribution of respondents according to the place of residence

It was important to have access to professionals who were best placed to give insights into the future skills requirements of their profession.

The survey respondents were from a range of professional careers including, Owner, Chef, Catering Manager, Quality Leader, Head Chef, Shift Manager, Director, Kitchen Process Expert, Production Manager, Teacher, Executive Chef, Sous Chef, Pastry Chef, Commis Chef, Development Manager, HR Manager and Chef De Partie. See figure 2 below for the most common careers of respondents.

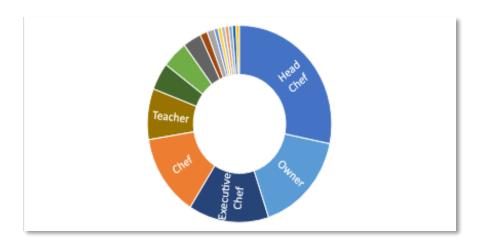


Figure 2: Distribution of respondents according to their profession.

COOK'S JOB IN THE FUTURE

When asked to describe the **cook's job in the future**, words such as demanding, challenging, independent, versatile, creative and expert all featured strongly however 'Technology' appeared the most frequently used word. Staying on top of trends and managing special diets were also highlighted. Commentary included that the job would basically stay the same but it would become more challenging 'a technician who knows how to use a knife but also the latest technology', 'a multi-disciplinary specialist with traditional chef skills but also much more', 'a business head, but be an artist with food from all over the world'. For most commonly mentioned words, see figure 3.



Figure 3: How would you describe a cook's job in the future?

However, when reviewing the comments by country, each had a different noticeable theme emerging; Ireland identified the job of the future as being de-skilled and driven by technology and trends. While Finland identified the future as being challenging and the need for the cook to be versatile. Estonia identified foraging as featuring in the future but also the job remaining very much the same with sustainability featuring most in the cook's job in the future in Spain.

SKILLS FOR THE FUTURE

When asked to identify the **skills needed and responsibilities of a cook in the future**, basic skills were prominently identified with communication, passion, creativity, taking responsibility, social skills, and computer skills also featuring. Respondents were very vocal about the need to instill the basic knowledge and skills including 'sources of food, process and technique, taste, taste, taste...create a memory chip of ingredients and flavours'. For words mostly mentioned in the replies, see figure 4.

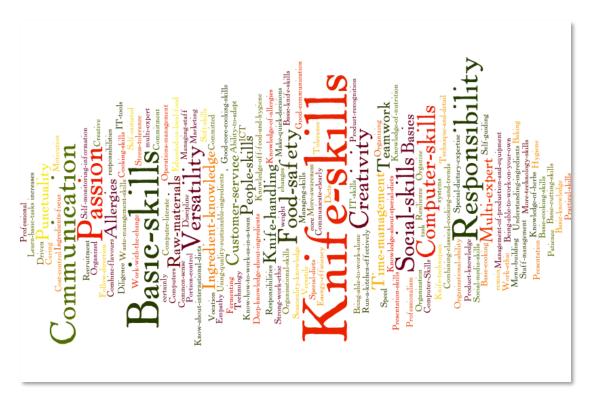


Figure 4: Skills for the future.

In terms of differentiation between the participating countries, creativity was the most commented on skill in Estonia, while social skills presented highly in Spain. In Ireland, knife skills were most important with basic skills, communication and time management all featuring strongly. The most common responses from Finland included customer service, raw materials, versatility, knife handling and allergies as being important skills for the future.

SKILLS REQUIRED AFTER 2030

When asked to identify **skills after 2030**, Technology appeared most prominently: 'programming equipment to do time consuming jobs', 'management of robots', 'understanding technology and robotics'. For most commonly used words, see figure 5.



Figure 5: Skills required after 2030.

Technical skills still featured strongly by 2030 with ICT, sustainability, waste management and creativity coming to the fore as opposed to the individual's interpersonal skills which appeared more in the previous question. Respondents commented again and again on the 'simplicity and technique of cooking skills' and 'environmental awareness, minimization of loss, multiple use of products, innovation, professionalism and pride' continuing to be relevant by 2030.

In reviewing the responses from each individual country, technology and sustainability featured strongly in all four countries as skills for 2030, while technical skills also featuring clearly.

CHANGES IN THE NEXT TEN YEARS

Participants were asked to mention the **three most important ways** how **the work** of the restaurant industry will **change in the next 10 years**, and again technology featured highly but also new themes emerged, such as work-life balance and vegetarian food as well as raw materials, organic food all coming to the fore. Social media and a focus on customer service and personalized service also emerged. See figure 6.



Figure 6: Changes in the next ten years.

A range of changes were identified a long a spectrum from 'the triumph of organic food' and restaurants that really work hard every day and respect raw materials' at one end of the spectrum and the development of 'larger restaurant complexes and 24 hour openings and fast eating' at the other end of the spectrum.

On reviewing the data in more detail, the top three changes in work in the next ten years by country are presented below in table 1.

Table 1. Top three envisaged changes in work in the next ten years by country.

Top 3	Estonia	Finland	Ireland	Spain
1	Organic Food	Raw materials	Work-life Balance	Technology
2	Meat Free	Vegetarian Food	Dietary Requirements	Environmental Awareness
3	Fast Service	Special Diets	Waste Management	Working Conditions

EXPERTISE FOR NEW ENTRANTS

When asked to identify the **expertise that new workforce entrants** would need, the basics – knife skills, knowledge of raw materials along with passion and enthusiasm and a willingness to work featured, *'First you learn how to do food, then you can fool around'*. This highlights the true basics of being a professional cook, see figure 7.

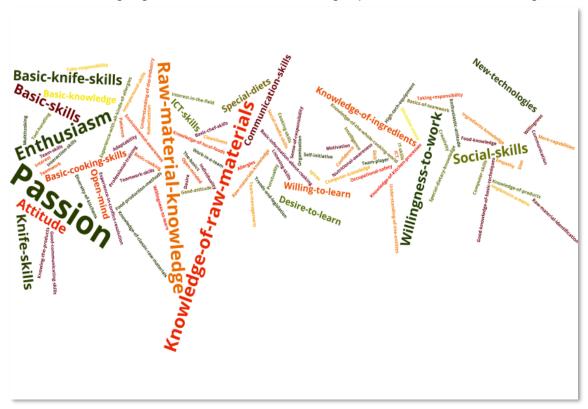


Figure 7: Expertise needed from new workforce.

When examining this by country, common themes are important across all countries, Professional training, communication skills and passion/enthusiasm. See table 2.

Table 2. Top three aspects of expertise needed from new workforce by country.

Top 3	Estonia	Finland	Ireland	Spain
1	Professional Training	Knowledge of raw materials	Passion	New Technology
2	Knowledge of raw materials	Enthusiasm	Communication Skills	Social Skills
3	Communication skills	Social Skills	Knife Skills	Team Work

SKILLS DEFICITS

Participants were asked what specific skills sets are **currently lacking** from chef training, specifically those which are relevant to the future. Communication skills was the most cited skill currently lacking, followed by special diets and then team-working skills. Social media skills, robotization and use of ICT were all similarly mentioned. See figure 8.

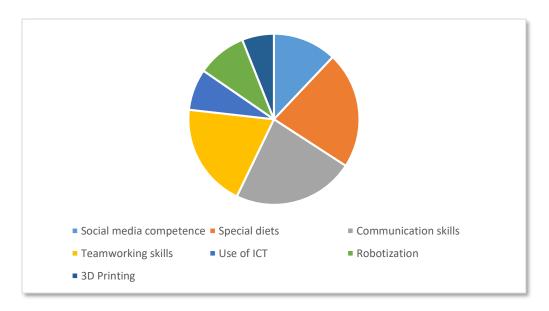


Figure 8: Skills currently lacking in Cooks' training which are relevant to the future.

The skills and competences that are needed in an uncertain and changing operating environment were also explored and the figure 9 below records the number of responses for each skills set. Greater flexibility rated the highest followed by multitasking. While language skills and entrepreneurial attitude were similarly cited.

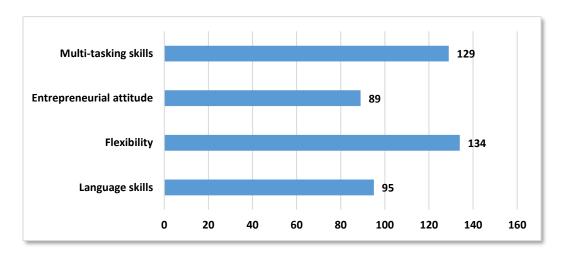


Figure 9: Skills/competences that are needed in uncertain, changing operating environments.

WORK PROCESS CHANGES

The lack of skilled cooks overwhelming featured as one of the most important things that will affect the **change in work processes** with technology, self-service and raw materials being the other top features. Self-service did not feature as high in Ireland where the lack of skilled chefs was clearly the most common theme. New technology was foremost in Spain. 'Technology is constantly evolving, there is no doubt that new and exciting ways to prepare food are emerging' and 'The lack of staff is now a given, the introduction of robotics is a reality, coming to terms with this will be difficult for many'. 'As the kitchen of the future will be smaller, using CPUs and delivery to satellite kitchens'. See figure 9.



Figure 10: Most important things affecting the change in work processes.

The impact of technology was recognized by all countries as affecting work processes, while the lack of skilled chefs in Ireland and Spain was seen as most relevant. Top three mentions by country in table 3.

Table 3. Top three changes in work processes by country.

Top 3	Estonia	Finland	Ireland	Spain
1	Self Service	Raw materials	Lack of skilled Chefs	Technology
2	Technology	Self Service	Technology	Lack of trained Chefs
3	Raw materials	Technology	Social Media	Home Delivery

USE OF AUTOMATION

When asked to identify at what stage of work procedures could you use automation/technology, preparation, customer service and ordering were the top three responses.



Figure 11: Stages of work procedures most suitable for automation/technology.

As the shortage of cooks is identified as affecting processes, ordering food, food preparation and customer services can all be enhanced by the use of automation.

'Our desire would be to automate our production more and more in our company. This would reduce the workforce needed, but increase the need for a highly skilled workforce, the biggest measure in the food industry is the man who can evaluate the suitability of the raw material and the consistent taste of the product'.

'I have invested in whatever technology is available to reduce labour and will invest more as suitable technology emerges'.

This material was produced by **CORE – Cooking for the future** project











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