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Exchange of Good Practices

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Comparing Vocational Training for Bakers

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The “Talents4Bakery Project” aims to improve the transparency and understanding of VET systems and in detail the quality and performance of VET in the bakery sector in the EU. The document has the aim to draw a framework for vocational training in the bakery sector based on a common understanding of quality and sustainability while respecting the diversity of vocational education and training systems in the project countries.

What is Vocational Education and Training?

The EU Council Recommendation defines ‘vocational education and training’ as ‘education and training which aims to equip young people and adults with knowledge, skills and competences required in particular occupations or more broadly on the labour market’. Such training may be provided in formal and non-formal settings, and at all levels of the European Qualifications Framework (EQF). VET is the sector of education and training closest to the labour market. This tailored form of education and training is hugely important and effective, as it provides skills that prepare workers for specific careers and occupations, while also providing valuable transferable skills and responding effectively to economic needs.

How does Vocational Education and Training (VET) work in Germany, Austria, Spain, Belgium and Turkey?

Some skills come from general education, but specific occupational skills are also needed. Typically initial vocational education and training systems have a big part to play in supplying these skills. Vocational Education and Training (VET) ensures skills development in a wide range of occupational fields, through school-based and work-based learning. It plays a key role in ensuring lower school dropout rates and facilitates the school-to-work transition. In a changing world of work, well-designed VET systems can play a crucial role in developing the right skills for the labour market.

The way VET is organised and delivered, and its importance in the overall education system, varies substantially between countries of the Erasmus+ Project “Talents4Bakery”.

Vocational Education and Training in Germany

In Germany, compulsory schooling starts at age 6 and lasts for 9-10 years (depending on the Land). After four years of primary school, students typically get tracked into three different education pathways (though structures vary across Länder): Gymnasium, with a demanding academic programme culminating in a university entrance qualification; Realschule, with a less demanding academic programme leading to a lower secondary diploma signifying solid academic skills; and Hauptschule, with a programme designed for those deemed to have limited academic ability or interests and culminating in a school-leaving certificate. Realschule and Hauptschule graduates typically enrol in a vocational pathway (including the transition system) at age 15 or 16. Dual VET programmes are currently offered more than 300 trades and can take between two and three and a half years. Apprentices typically spend 3-4 days a week in a training firm which provides practical training based on a training plan following guidelines set out in the ‘ordinances’ for each





qualification. The ordinances regulate the duration of the apprenticeship, describe the profile of the profession, and set out final exam requirements. The apprentice earns a salary which increases every year and is on average one third of the starting wage for a skilled worker.

There are two types of VET teachers, one for theoretical subjects, the other for practical training. Teachers of theoretical subjects need a university qualification or equivalent, including instruction in teaching practice. Teachers for practical training at VET schools do not need a diploma in higher education but typically have a background in the relevant occupation as a foreman, skilled worker or qualified craftsman. In addition to courses in teaching practice, the teachers need to take pedagogical seminars. Company-Trainers must have a qualification in the training occupation and knowledge of education theory. The requirements for in-company trainers are set out in the national VET Act and the Regulation on Trainer Aptitude (AEVO).

Strengths of the German VET system

- Vocational education and training is deeply embedded and widely respected in German society. The system offers qualifications in a broad spectrum of professions and flexibly adapts to the changing needs of the labour market.
- The dual system is especially well-developed in Germany, integrating work-based and school-based learning to prepare apprentices for a successful transition to full-time employment.
- A major strength of the dual system is the high degree of engagement and ownership on the part of employers and other social partners. But the system is also characterised by an intricate web of checks and balances at the national, state, municipal, and company levels that ensures that the short-term needs of employers do not distort broader educational and economic goals.
- Germany has a well-developed and institutionalised VET research capacity, including the Federal Institute for VET, (BIBB), and a national network of research centres that study different aspects of research centres that study different aspects of the system to support continuous innovation and improvement in the VET system.

Situation of vocational training in the bakery sector:

The traditional craft trades suffer on the one hand from demographic change, i.e. the fact that fewer young people are moving up, and on the other from the so-called "Abitur mania". A large number of young people nowadays do their A-levels and later tend to go on to study. They are losing their eyes on craft trades, where there are now good earning opportunities after training, as well as career opportunities and potential for further development. For example, the difficulties of becoming a self-employed master baker are comparatively low. Many companies are looking for a follower and have to close down because no young baker can be found. Self-employment offers exactly what young people often want for their profession/job: self-determined work, good earning opportunities and a high degree of freedom.





In recent years there has been a clear trend towards a decrease in the number of apprenticeship places for bakers. This negative trend is now continuing at a slower pace. There are currently 5,587 apprentices at the bakery and 7,350 apprentices in the Bakery sales. In 2019, around 900 training places only for bakers remained unfilled. In order to strengthen the image of the baking profession, the German Bakers' Confederation launched a campaign for young people a few years ago. Under BACK DIR DEINE ZUKUNFT (www.bddz.de) and on all social channels, the wonderful bakery trade is being promoted. A total of 318 master bakers were successfully trained nationwide in 2019.

Vocational Training: Baker

Bakers produce baked goods, e.g. bread, rolls and pastries. They also make confectionery, e.g. cakes, sweets, desserts or ice cream. Bakers work in craft trades food production companies and in the food industry, such as in large bakeries. They also find employment in specialist and specialist dietary bakeries as well as working in the hotel and restaurant trade and in catering.

Profile of skills and competences: Baker

- Produce bread and biscuits from a range of cereal products also using sour dough
- Produce fine pastries from genoise, sponge, Madeira, choux, marzipan and praline dough and from puff, short crust, yeast and gingerbread pastry
- Produce bakery snacks from a range of ingredients and pastries
- Produce party, savoury, cheese-based and plain biscuits and special dietary bakery products
- Prepare small meals using fresh ingredients
- Display competence in planning and implementing working and baking processes and apply quality assurance methods
- Apply regulations regarding food hygiene, food legislation and health and safety at work
- Accord due consideration to nutritional physiology, economic and environmental aspects
- Possess basic business calculation skills
- Develop product proposals for special occasions.

Vocational Education and Training in Austria:

Around 80% of each cohort enters a VET pathway after finishing compulsory education. About 40% take up an apprenticeship, 15% attend school-based VET (Berufsbildende mittlere Schule) and another 27% enrol in a VET college (Berufsbildende höhere Schule) where after five years they can acquire a double qualification, a VET diploma and the Reifeprüfung to enter university. VET also takes place at tertiary level in the universities of applied science (Fachhochschulen), post-secondary VET colleges (Akademien) and in the form of post-secondary VET courses (Kollegs). The single largest part of the VET system is the dual apprenticeship system. An apprenticeship can take between two and four years, but most last for three years. Approximately 75% of the time is spent in a training firm, the remaining 25% in a part-time VET school (this can vary across trades). Apprentices sign a contract





and earn a salary that increases each year reaching roughly 80% of a starting wage in the final year.

There are three types of VET teaching personnel: practical trainers for in-company training or in school workshops, teachers of theoretical aspects of vocational subjects in VET schools and colleges and teachers of general education in VET schools

Strengths of the Austrian VET system:

- The dual system has many commendable features, with well-structured apprenticeships that integrate learning in schools and workplace training.
- Youth unemployment rates are low and the transition from education to first employment is smooth by international standards.
- Social partner involvement at all levels, in VET policy design and delivery, is strong, with effective co-operation between different stakeholders.
- The VET system offers different progress routes at various levels, avoiding dead-ends and linking VET to general tertiary education through the Berufsreifeprüfung (professional baccalaureate).

Vocational Training: Baker

The apprenticeship bakery is set up with an apprenticeship period of three years.

Vocational training (= dual training) is mostly carried out in a company (training company). Trainees spend about 20 % of the training time at the vocational school. In the training company, the baker apprentice learns by doing practical work. At the vocational school, general knowledge is deepened and theoretical background knowledge for the profession of baker is taught.

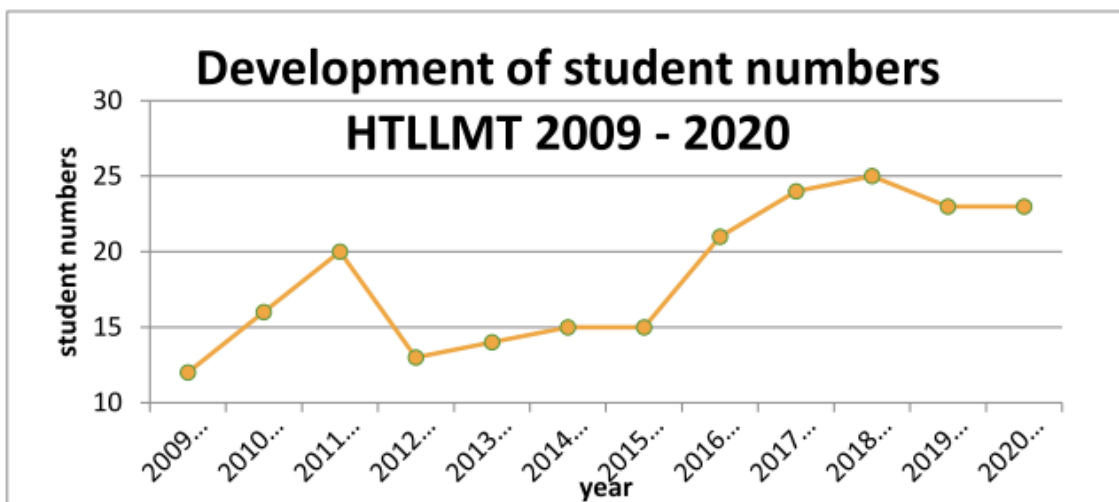


Abb.: Development of student numbers, HTLLMT Wels





Profile of skills and competences: Baker

Through the vocational training in the training company and in the vocational school, the apprentice trained in the apprenticeship of bakery is to be qualified to be able to carry out the following activities professionally, independently and on his or her own responsibility:

- Performing orders of raw and additional materials for the production of bread, pastries and fine bakery products (pastry),
- Choosing, accepting and checking the usability and storage of raw and additive materials,
- Measuring and weighing raw materials and additives according to recipes,
- Cleaning, maintaining and preparing the equipment, machines and apparatus used in the bakery, e.g. scales, kneading machines, stirring machines, grinding machines, baking ovens, baking equipment, steam chambers, proofing cabinet systems, bread and roll systems, refrigeration and deep-freeze systems,
- Making and preparing (e.g. pressing, grinding, contracting, kneading) doughs for mechanical shaping and for hand shaping,
- Managing and monitoring the fermentation process, dough leavening and dough resting,
- Forming bread, pastry and confectionery by hand or machine (pastry and confectionery),

- Making and preparing coatings and fillings, as well as filling, spreading, glazing and sugaring pastry products (pastry),
- Baking of bread, pastry and confectionery,
- Storage, cooling and freezing of bakery products,
- Carrying out work in compliance with the relevant safety regulations, hygiene regulations, norms and environmental standards.

Vocational Education and Training in Spain

The Spanish initial vocational education and training system is organised at “intermediate” (upper secondary) and “higher” (tertiary) levels. In addition, there are some programmes at lower secondary level. The arrangements for intermediate and higher level VET are very similar in many respects, other than being different in level, and often take place in the same institutions. Compulsory education in Spain is comprehensive, and finishes at around the age of 16 with the compulsory secondary education certificate, signifying the successful completion of compulsory education. In the final year of compulsory education the students choose between:

(a) two general programmes (either science and technology, or humanities and social science) leading towards upper secondary academic education and the Bachillerato; or

(b) pre-vocational studies, leading to an upper secondary vocational programme.

In all cases the compulsory secondary education certificate provides them with the right of entry into the upper secondary programmes. Students apply for places in the intermediate programmes and schools indicating first and second preferences for both programme and school. When a school is oversubscribed, a selection typically





takes place on the basis of academic performance. There are some particularly attractive specialisations where there is often excess demand. The number of places available in different specialities is determined by the autonomous communities on the basis of labour market information. The vocational programmes include a mix of theoretical education in the chosen vocational field, and practical training using school equipment and workshops. Possession of the technical diploma gives graduates the right to enter higher vocational programmes, subject to an entrance examination. Technical diploma graduates may also pursue a baccalaureate. All vocational diplomas, at both intermediate and higher levels are grouped in 26 professional families, including families such as “agriculture”, “computing and communications”, and “health”. In both intermediate and higher vocational programmes, workplace training takes place through a compulsory three-month module right at the end of the programmes (except for those who can accredit previous work experience and may therefore be exempt). The firms receive a payment per day per student for their expenses from the education authorities.

From the firm’s point of view the trainees are attractive for two reasons:

Firstly because they represent almost free labour provided by fully trained students (as they are at the end of their programmes);

secondly because they offer a recruitment device: many trainees are offered jobs by the training firm at the end of the training period (when their programmes are completed and they are therefore immediately available for work).

Curricula for intermediate and higher vocational programmes are nationally determined, with a small element of discretion for the autonomous communities to make local additions.

The vast majority of teachers and trainers of vocational programmes at both intermediate and higher levels are required to have a university degree in an appropriate subject and pedagogical training. Teachers and trainers have to pass a test in their field of speciality but there is no requirement that they should have worked as practitioners in their field of speciality.

The Spanish VET system at intermediate (upper secondary) level is similar to that found in a number of European countries, with separate vocational schools, and a separate vocational track at upper secondary level. The Spanish VET system differs from dual system vocational training as in Germany or Austria, where the vocational track involves apprenticeship with part-time vocational school occupying no more than one or two days per week.

Strengths of the Spanish VET system

- The social partners are well engaged in the VET system. Nationally, this takes place through the National Commission on VET, which aims to build consensus among the national and autonomous community governments, and employers and unions, on VET policy. Locally, employers are engaged in the system particularly through the provision of workplace training.





- The VET system as a whole, and the pathways through it, are generally clear and comprehensible to participants.
- A recent reform has aligned the VET diplomas with the individual competences, so that typically completion of any diploma will include the acquisition of certain certified competences.

Vocational Training: Baker

Activities related to the production sector of artisanal bakery are in the process of transformation, mainly due to changes in the lifestyles of consumers who demand less processed, healthier, more nutritious and digestible artisan bakery products. Artisan bakeries tend to be mainly family businesses and SMEs, in which many manual operations are carried out that require specialized personnel, re-emerging the artisan baker trade with the use of specialized equipment and machinery and new technologies that are adjusted to the needs of the service, to respond to current demand. The profession of baker is increasingly linked to a concern for a healthy diet and artisan production, including special nutritional needs for different groups (celiac, allergic and hypertensive, among others), which requires continuous training and specialized at all levels of organizations. The production system in the artisan bakery is discontinuous; the elaborations are carried out and sold generally on the same day or in a short period, preserving the organoleptic characteristics of the products.

The products that are made in the artisan bakery are characterized by:

- Trend towards products made with whole grains.
- There is a recovery of traditions with products made with long fermentations and quality raw materials.
- Presentation of large-format and longer-lasting bakery products.
- Products free of food additives.
- Authentic products with personalized flavors.
- Traditional products with innovative raw materials.

Prepare and present bakery, pastry and confectionery products in bakeries and catering establishments.

Profile of skills and competences: Baker

- Preparation of bakery-pastries.
- Basic processes for bakery and pastry-making.
- Preparation of confectionery and other specialties.
- Desserts in catering.
- Workshop products.
- Warehouse operations and control in the food industry.
- Safety and hygiene in food handling.
- Presentation and sale of bakery and pastry products.
- Training and career counseling.
- Business and Entrepreneurship.
- Formation in work centers.
- Raw materials and processes in bakery, pastry and confectionery.





Vocational Education and Training in Belgium

In Flanders part-time education is compulsory until the age of 18, requiring students to spend at least 28 hours per week in education and training or education and training combined with work. Full-time education is compulsory until the age of 16, except that those who have completed the first stage of secondary education may opt for part-time education at the age of 15. Primary education enrolls students typically from age 6 to 12. Secondary education includes three stages, each two years long. In the first stage of secondary education there are two streams, A and B. In principle, education is comprehensive in the A stream, although students are already in secondary schools, which provide one or several of the tracks of secondary education. The first year of the B stream aims to give students enhanced support with the aim of entering the A stream, but in practice most students continue in the second, pre-vocational year and very few progress into the second year of the A stream. Those who completed the first stage in the A stream can progress to all second stage options, while those who complete the B stream are only eligible for vocational education (BSO) or part-time VET. After the first stage of secondary education students may choose between, or are directed into, four full-time and two part-time tracks. The full-time tracks are offered by secondary schools and include general education (ASO), technical education (TSO), artistic education (KSO) and vocational education (BSO). The part-time options include part-time vocational secondary education (DBSO) offered by part-time secondary schools, and apprenticeships (leertijd) offered by Syntra training centres. Post-secondary VET includes associate degree programmes offered by adult education centres and university colleges and professional bachelor programmes offered by university colleges.

The constitution of Belgium guarantees the freedom of education in the sense of freedom of publicly funded schools to organise themselves as they wish within some broad parameters. This includes the right of establishment, the right of orientation (e.g. religion) and the right of organisation of schools. Secondary schools are organised under education “networks” (koepel) - representative associations of the school governing bodies.

Strengths of the Belgium (Flemish) VET system

- There is a good range of vocational options at different levels. Initial secondary education offers full-time and part-time programmes, while continuing VET provides further learning and second chance opportunities in centres for adult education, VDAB and Syntra Vlaanderen training centres.
- The average performance of 15-year-olds in reading, mathematics and science is very strong by international standards, as indicated by PISA assessments, in which Flanders has been consistently among the best performing countries.
- A commitment to universal upper secondary education is embedded in compulsory education up to age 18, with the possibility of part-time education from age 16.
- The Flemish VET system gives commendable attention to entrepreneurial training through the Flemish Agency for Entrepreneurial Training (Syntra Vlaanderen), which offers flexible routes to acquire entrepreneurial competences
- The Flemish VET system offers a wide range of vocational options, including second chance opportunities.





Vocational Training: Baker

The training on bakery skills is, at this moment, divided over different levels and is accessible from different backgrounds of students. First of all, there are secondary schools. Secondary schools are state supported schools where students between 12 and 18 follow their schooling up to the level of a skilled baker with the official diploma of baker. As from their 18th, students can voluntarily go for one or more specialization years.

The secondary schools (bakery and other schools for manual professions) are on their parts further split up in 3 different levels. There is the TSO level, where students are trained starting from theoretical knowledge and using that to understand the processes and ingredients behind and in the products, they learn to manufacture. Students graduating have the possibility to grow towards a high school or even university level, however in a wide food industry subject.

Next to that there is the BSO level. This focusses on students that are really starting from the product and the technics of making products and handling dough and bakery products, where the theoretical knowledge is reduced to the minimum needed. These students will most likely start working after graduating. The third level is the Buso level. Mostly students with difficulties from their background and mental health, however students that are being trained towards assistants for bakers in the fresh bakeries and industry. In the secondary level, there is the possibility to go full time to school or to step into a “dual” program, where part of the school is finding place in bakeries itself. Next to the secondary level, there is the adult education, where adults over 18 can restart an education towards a baker, coming from a totally different background or initial school.

In the years 1990- 2000 there has been a booming in the number of trainees in food schools. For us, we have had around 2.200 students on our maximum. These were divided over bakery, butchery and restaurant/catering/hotel. About 45% of the students were bakery students.

Over the years, there has been a thrive for students to postpone their choice of a specific profession to a later stage in their young life. Next to that, students are more and more required to “aim high” in their school carrier. Everyone is pushed to become an engineer, lawyer, etc. The choice for a profession where manual work is required has become a second choice, where it used to be a first choice for a lot of youngsters. This results in a decreasing number of students, enrolling also bakery training, where today our total of students is less than half compared with 20-30 years ago. We are now with just under 1.000 students, a trend we see in all food schools in Flanders and in Belgium. Recent years the number of students does seem to stabilize, bringing us hope that we have reached a platform as from where we can re-establish a growing trend.

Challenges on the bakery training today and in the near future

In Flanders, they are in a huge reform of the educational field now. All schools, also practical schools, will work year after year with new “training programs”. The training programs have to be seen as the minimal theoretical and practical knowledge and skills that students have to handle after they graduate. The general trend in this is that the focus on theoretical and general knowledge is being increased, however this means that the time for educating the practical skills is decreasing.





As many of students of the Ter Groene Poorte are choosing the school especially for this practical side of the training, this means a new pressure and challenge on convincing future students to make the positive choice for the training towards a baker. A second challenge is that up to last year, owning the certificate of schooled baker was a mandatory to start a bakery. Since last year, under impulse of the European union this obligation has been removed, meaning everyone with or without schooling is allowed to start a bakery. This challenges again the inflow of students, but also challenges the quality of bakeries in the future and therefor also the future reputation of the bakery sector in general.

Last but not least, the reason of not choosing for a training to baker, is not in the least the fear of working in night- and weekend shifts and therefor losing precious family and friend's time. This is especially for young people today much more important than 20-30 years ago.

Profile of skills and competences: baker

- Produce bread and biscuits from a range of cereal products also using sour dough
- Produce fine pastries from genoise, sponge, Madeira, choux, marzipan and praline dough and from puff, short crust, yeast and gingerbread pastry
- Produce bakery snacks from a range of ingredients and pastries
- Produce party, savoury, cheese-based and plain biscuits and special dietary bakery products
- Display competence in planning and implementing working and baking processes and apply quality assurance methods
- Apply regulations regarding food hygiene, food legislation and health and safety at work
- Accord due consideration to nutritional physiology, economic and environmental aspects
- Possess basic business calculation skills
- Develop product proposals for special occasions.

Vocational Education and Training in Turkey

The number of students receiving vocational and technical education in Turkey has a significant numerical size. The data in the "Report on the Outlook of Vocational and Technical Education in Turkey" published by the Ministry of National Education in 2018 reveal this situation. The rate of students in vocational education in Turkey is 46.4% (in OECD statistics, Muslim theological high school students are also included in the vocational education category). As can be seen, the share of vocational education in most OECD countries is below Turkey's.

When the higher education figures related to vocational and technical education are examined, the number of students in Turkey draws attention. According to the statistics published by the Higher Education Institution (2019-2020), there are 1.019 vocational schools in Turkey. Of these, 907 are affiliated to state universities and 107 are affiliated to foundation universities. 5 of them are directly foundation vocational schools. The total number of students in 1.019 vocational schools is 3.002.964. Considering that 4.538.926 students were enrolled in the undergraduate programs of the faculties in the same period, the total number of students exceeding 3 million in





the two-year vocational schools providing vocational and technical education shows that there is a serious demand for vocational and technical education in Turkey.

Global trends in the field of vocational education can be explained as follows:

- Students begin vocational and technical education at an earlier age.
- The perception of "secondary education" attributed to vocational education by the state and society is changing.
- The framework of cooperation between vocational education institutions and sectors is expanding.
- On-the-job training experiences of vocational education students are increased.
- The sharp distinction between general education and vocational education is diminishing over time.

Vocational Training Law No. 3308 reorganizes basic vocational education in a systematic manner to include "formal", "apprenticeship" and "non-formal" trainings. The law with 3308 number also provides important roles to social parties in the planning, implementation and evaluation of formal, apprenticeship and non-formal vocational training. In this direction, the Vocational Education Board and the Provincial Vocational Education Boards serving at the provincial level were established within the Ministry of National Education.

With the Decree Law No. 652 on the Organization and Duties of the Ministry of National Education published in 2011, the six units responsible for the conduct of vocational and technical education in the Ministry of National Education were united under the name of General Directorate of Vocational and Technical Education (MTEGM).

Non-formal vocational education and open education institutions were also gathered within the body of the General Directorate of Lifelong Learning (HBÖGM).

Istanbul Metropolitan Municipality Institute Istanbul İSMEK, which is the free-of-charge adult and vocational education & training provider in Istanbul, delivers adult and vocational training services on 22 main programmes and 676 sub programmes in 141 training centres in 36 districts of Istanbul.

Vocational Training: Baker

Competition in the sector is increasing with the development of production technologies in the bakery and bakery products sector, the increase in the types of bread and bakery products demanded, the interest in traditional and healthy bread varieties, the production of various products produced abroad in our country and the importance given to quality. For this reason, when factors such as the follow-up of technological developments, food safety and preservation, product quality, hygiene in enterprises are taken into consideration, participation and encouragement in field-oriented trainings are very important in order to survive in an increasingly competitive environment.





Training of trainers:

Bakery training in Turkey in secondary and higher education institutions are given under the following fields:

- Gastronomy,
- Gastronomy and culinary arts,
- Culinary Arts and Management,
- Food and Beverage Management,
- Food and Beverage Services

The module times allocated to bakery in these trainings are insufficient for the field of bread making, which is the most basic and important food item of humanity and constantly improves itself. At the same time, the inadequacy of equipment and tools and current recipes in the fields of training makes it difficult to receive basic education.

At the bottom of the pyramid, starting to provide bakery training in a correct, comprehensive, and complete manner is important both for the development of the sector and for the development of individuals in bakery training.

At the Institute Istanbul İSMEK there have been 23 programmes the duration of which varies between 32 -750 hours.

Trainings that are provided at Institute Istanbul İSMEK in the field of bakery:

- Basic Bakery Trainings / Bread Production (440 Hours)
- Professional Bakery Trainings / Professional Boutique Artisan Bakery (144 Hours)
- Professional Bakery Trainings / Special Bread Types for Breakfast (96 Hours)
- Professional Bakery Trainings / Pizza Making (82 Hours)
- Professional Bakery Trainings / Making Sour Yeast Bread from Probiotic Natural Yeast Culture (224 Hours)
- Professional Bakery Trainings / Decor Bread Making (64 Hours)
- Workshop Trainings / Croissant - Danish Varieties (48 Hours)
- Workshop Trainings / Sourdough Bread Making (96 Hours)
- Workshop Trainings / Making Focaccia and Ciabatta (32 Hours)
- Workshop Trainings / Local Bagel Varieties (48 Hours)
- Workshop Trainings / Healthy and Organic Breads (64 Hours)
- Workshop Trainings / Home Baking Techniques (52 Hours)

Profile of skills and competences: Baker

- Determines the needs for nutrients and food groups.
- Provides sanitation in the working environment according to hygiene rules.
- Bakery performs basic processes and applications hygienically.
- Prepares and packages breads and bagel varieties for special use according to the technique.
- Performs bakery practices in accordance with the relevant laws and regulations.





A common understanding of the concepts of quality and effectiveness of vocational education and training can only be achieved throughout the European Union at European level. Considering the diversity of national structures and systems, the publication offers a number of good examples to ensure the quality and effectiveness of VET, with each project partner taking into account the specificity and particular requirements of the national VET programmes. Each project partner may give priority to different aspects. Due to the great differences between the systems and the many different approaches at national level, this flexibility is essential.

Facing Challenges

In the future it will not only be necessary for the baker's sector to represent the craft and trade and to produce high quality products, but also to qualitatively and economically optimize the processes. Since there is a shortage of professionals and skilled employees, the production of high-quality bakery products will pose a great challenge in the future. In addition to that shortage, there is also to face the rising competition concerning industrially produced bakery products. On the one hand, process management means to apply refrigeration processes to increase and augment batches; on the other hand, it is the documentation of manufacturing processes for economical and qualitative control mechanisms. A further aspect is the commercial education, with a special focus on marketing. Corporate identities, the company's assortment and philosophy should be recorded in drafts and concepts.

