The future is in our hands
Recognising emerging skills needs in the craft sector in the EU Neighbourhood and Central Asia
As part of the initiative on the Future of Skills, the European Training Foundation (ETF) has designed a methodology to gather evidence on how skills in the crafts and design sector are changing following technological and non-technological innovations.

The ETF methodology adopts a mix of techniques, including human-based and data/algorithm-based tools. The research framework relies on three key elements: 1) desk research to identify drivers of change 2) a data science-based approach that uses text mining techniques to identify technologies relevant to the sector and the skills associated with those technologies 3) field-work interviews in the selected countries, including surveys of innovative companies/organisations/artisans and focus groups.

The craft sector combines tradition, heritage, culture, skills and design. The term ‘craft’ encompass a wide range of disciplines that reflect a country’s cultural identity, individual artistic and creative abilities. When seeking a definition of craft, many different interpretations emerged in the countries analysed. From a legal context: some define craft as ‘creative and productive activities, the purpose of which is to create artistic products for decorative and consumer purposes’², while others refer to ‘economic activity(ies), through which goods and/or craft services are produced by handicrafts or serially and, in some cases, using creative skills’³, or they refer to a process of creation of an original or imitative product obtained with traditional techniques⁴.

There are many sub-categories of craft practices, some examples include: handmade carpets, jewellery, woodwork, pottery/ceramics, painting, and clothing design. Crafts are important not only for the cultural heritage that preserves community values and supports intergenerational dialogue, but also for other related sectors such as tourism and cultural creative Industries (CCIs)⁵. Moreover, crafts have an added value for social inclusion and the empowerment of communities.

The European Union (EU) is supporting crafts in several ways, including through the Creative Europe programme⁶ which puts, among other things, a major emphasis on transnational creation, innovation, mobility schemes for artists and professionals, as well as actions that target the needs of specific creative sectors (such as music, architecture, and cultural heritage). In addition, the EU’s Horizon Europe Framework Programme (HORIZON)⁷ funds research projects which support and foster traditional craft techniques and reinforce vocational training in these domains as a means to foster job creation and revive enterprises.

From an economic perspective, the complexity of the craft sector, and the lack of specific definitions makes the analysis of its employment structure or its economic value a complex task. Overall, the craft sector is characterised by small businesses that provide viable and sustainable employment in cities, towns, villages and remote rural areas. These businesses show above-average growth and

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¹ Craftsman and Skills for the Future | Open Space (europa.eu)
² Ukraine Law on folk arts and crafts, 2001 Про народні художні промисли | від 21.06.2001 № 2547-III (rada.gov.ua)
³ Albania Law on Craftsmanship No 70, dated 30.6.2016
⁵ Activities based on cultural values, or other artistic individual or collective creative expressions Cultural and creative sectors | Culture and Creativity (europa.eu)
⁶ The Creative Europe programme 2021-2027 has a budget of EUR 2.44 billion and it invests in actions that reinforce cultural diversity and respond to the needs and challenges of the cultural and creative sectors. About the Creative Europe programme | Culture and Creativity (europa.eu)
⁷ Horizon Europe is the EU’s key funding programme for research and innovation with a budget of EUR 95.5 billion Horizon Europe | European Commission (europa.eu) and Funding & tenders (europa.eu)
create jobs - particularly for young people and women - while strengthening social cohesion. Nonetheless, according to a recent ETF study (2022), the job employment potential for women in the sector is hampered by lower earnings and a need to support female entrepreneurship and specific skills for business development and marketing.

Key drivers of change in the craft sector

Skills anticipation is a powerful tool for decision-making as it identifies and envisages possible aspects of future balances between skills supply and demand (training and deployment), with its emphasis on upcoming requirements in any specific country, sector or region, as well as on changing skills requirements. Global trends and drivers affect the way in which skills are developed, and transform the skills required by the labour market as well as individual preferences. The work conducted by the ETF in eight countries provides an overview of specific trends in the craft sector that impact the skills demand, such as the following:

- **Cultural context**: there is a rising interest and awareness in preserving cultural heritage through crafts.
- **Tourism**: prior to Covid-19, tourism increased and accelerated the demand for crafts.
- **Globalisation/internationalisation of the craft sector**: allowing businesses and markets to connect to any country in the world through international fairs and exhibitions. This increases the opportunities to reach new markets, but it has also the effect of weakening traditional bonds and increasing competition on the domestic market.
- **Attractiveness of the sector**: traditional craft professions seem to be less attractive to young people, as they tend to associate craft work with traditional heritage and low income possibilities. Young people are however interested in creative professions, which opens new opportunities for crafts associated with creative industries and modern professions.
- **Increased migration to urban areas in all countries**: there is a migration trend in all countries of people moving from rural to urban areas that offer better employment possibilities; whereas crafts are often linked to cultural heritage and traditions that are particularly important in small communities, whose existence and heritage are being endangered by this increasing urbanisation trend.
- **Technological innovation and the impact of COVID-19**: the rise of innovation is modifying production processes, and allowing wider markets to be reached (via social media, etc). Following the impact of COVID-19, we witnessed an acceleration of technological innovation, calling for changes in work patterns and the skills demand in most of the sectors, including the craft sector.
- **The environment**: customers are increasingly concerned about environmental issues and therefore more interested in knowing the origin of materials, and the environmental impacts of production models and techniques. This is linked to newly emerging sustainable materials but also to the opportunity offered by certain new software.

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88 Namely Albania, Armenia, Azerbaijan, Georgia, Kyrgyzstan, Turkey, Ukraine and Uzbekistan
Emerging skills needs in crafts

The trends listed above are common across the countries in the ETF study, and the identified skills needs have been broadly the same as well.

Whether the craft sector can benefit from the ongoing changes depends on the availability of skills to facilitate the introduction, use, and maintenance of new technologies and to build on the opportunities offered by new trends.

Therefore, the identified key drivers and trends can be beneficial if the following skills are supported:

- **Entrepreneurial skills**: business basics such as how to register as self-employed or pay taxes, create marketing plans, business projects, and cooperate with non-governmental and non-profit organisations. This is relevant especially for individual artisans or very small firms, for which the main pattern over the last years has been the transition of crafts from an ad-hoc or supplementary income source to an established business practice.

- **Technology-related skills**: the ability to work with different technological tools and new machines, and the incorporation of cutting-edge digital technology. While the students and employees graduating from craft education facilities (both VET and higher education) in general are satisfied with their crafts' and arts' skills and knowledge, they would like to have more opportunities to implement real-life projects (internships, apprenticeships, etc). This opportunity would allow them to experience real work and to practice using machines that are not available in schools. For instance, expensive machines such as 3D printing or IT programmes in design, etc.

- **Computer literacy skills**: the ability to perform tasks on the computer, including navigating a browser, operating software systems, as well as using media tools, etc. It is very important for reaching wider audiences (via social media, etc.) to operate fully on digital markets.

- **Creativity & design skills**: the ability to use imagination to generate new ideas or to implement tasks; as well as to transform products, including artistic contributions, or ideas. Due to the internationalisation of the craft market, increasing competition leads to new ideas or revised versions of existing products.

- **Interpersonal/soft skills**: communication, adaptability, creative thinking, sales skills (including online sales), knowledge of a foreign language (e.g. English). The introduction of innovation and the enhanced role of exports in crafts, requires the transformation of the skill sets of those working in crafts from purely technical skills to a combination of technical skills complemented by interpersonal skills.

- **Knowledge of materials**: an in-depth knowledge of materials used for production, including their environmental sustainability related to their component and production lifecycle.
Good practices for supporting the development of new skills in the craft sector

1. Work-based learning to boost entrepreneurship, technology-based training and interpersonal skills development

As in all sectors worldwide, many of the needed skills are developed in the workplace, given the facility of acquiring certain skills directly in companies and workshops rather than in school or training centres.

This is due to a number of factors:

1. The high costs of new technologies and machines which make it difficult for schools and laboratories to have them in-house, for example in the case of 3D printing machines or design software. This is particularly true for traditional crafts and design, considering that the craft industry is characterised by small businesses and it is challenging for them to immediately face the financial effort of having the latest technologies at their disposal. This holds true even if handwork remains an important part of traditional crafts.

2. New techniques and technologies require updating and up-to-date knowledge by teachers and trainers.

3. Artisan shops or companies often face limitations in terms of human resources. It is difficult to follow up on work while looking after the normal work in companies with between 2 to 20 employees on average. On top of that, another challenge is linked to the assumption, of some artisans, that after all the effort of training a student, this student may open his/her own shop and therefore increase the competition.

Therefore, a key aspect to be promoted in the sector is training in real working environments, as this enables meeting the short-term demand of individual enterprises as well as supporting small companies and the economy overall to face the future challenges. In line with the kinesthetic/tactile learning style, which requires the manipulation and tactile use of materials to learn, kinesthetic/tactile techniques are used in combination with visual and/or auditory study techniques, producing multi-sensory learning. The examples in the boxes below show two successful practices already in place, and one in the pipeline, tapping on real work learning experiences in the field.

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BOX 1 – Ikaalinen College of Crafts & Taidosto co-operative (Finland)

Taidosto was founded in 2004. It functions in close co-operation with the Ikaalinen College of Crafts and Design. It is owned by more than 400 artisans of different fields, some more active than others (the number of active members is yearly around 60). The turnover in 2020-2021 was around 134 000 euros. This model is about an option different from bringing the student to the working place, as the working place itself become the school, meaning a co-operative (legal entity) created through students of the school. Due to the lack of practical opportunity to learn in the private sector, the Ikaalinen College of Crafts offers to its students the opportunity to start the so called TOY model (entrepreneurial on-the-job learning) through which they can produce their own products, sell them and benefit from all the school machineries while accountancy is organized centrally for the whole co-operative.

During the TOY model, there are several team coaching days, during which the students learn about e.g. how to develop their business ideas, about marketing, pricing, how to run the business etc. They also make their own products independently, go to fairs to sell them and make commissioned work for real customers. They have to find their customers themselves, define the prices for their products, etc.

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9 VARK Model: The acronym VARK stands for Visual, Aural, Read/write, and Kinesthetic sensory modalities that are used for learning information. Fleming and Mills (1992)

10 When a student wants to start the TOY model (entrepreneurial on-the-job learning), they have to join Taidosto co-operative (by buying a share equal to 20 euros).
Yet, this all is integrated in their studies: they get a study module of entrepreneurship for participating in the TOY model. The students work in the school’s facilities, using the school’s machinery they also have to buy the materials they use.

After the TOY model is completed, the students stay as members of Taidosto and keep working as entrepreneurs alongside their studies. Even after graduation, the students can stay as members of Taidosto so as to develop their ideas a little further before founding a company of their own.

Source: https://sasky.fi/English-site/

**BOX 2 - City and guilds art school of London (United Kingdom)**

The City & Guilds of London Art School was established in 1854 as a small, specialist college, dedicated to teaching the techniques of the specialist crafts and focused on developing skills required in the artisan manufacturing industries.

Since then, it has evolved and expanded its educational programmes and it has played a vital role in passing on specialist craft skills and inspiring new generations of artists and makers to create new works, and to restore and conserve precious built and cultural heritage of the past, for all to see and enjoy.

There are two strong points in this educational path, related to each other: 1) The Art School’s **extensive links and partnerships with institutions** as a history of providing opportunities for placements and projects that are meaningful for both the student and the project itself 2) A real-working experiences, as **students are encouraged to undertake live projects and commissions as a part of their course work**, during their third and final academic year. Those opportunities, enable students to experience the process of designing and creating new works for heritage contexts, and to develop the project management expertise required for professional practice. Those initiatives include the design and carving of new grotesques at St. George’s Chapel, Windsor Castle, creating Coats of Arms for the Fishmongers’ Company, etc.

The role of teachers and tutors is a crucial aspect: all tutors are well-established professional specialists who work on some of the country’s most prestigious projects alongside teaching in the department. This ensures that the course is both critical and recognizes current industry standards. The tutors provide a network of professional contacts that frequently support future employment and placements. The department has an emphasis on contact time with specialist tutors, ensuring that each student has the regular support that studying conservation demands.

Source: cityandguildsartschool.ac.uk

**BOX 3 – Georgian Heritage Crafts Association (Georgia)**

Georgian Heritage Craft Association (GHCA) is a membership-based organization NGO established in 2015, which works towards creating a sustainable framework for sector’s development in Georgia, through the creation of a networking platform for individuals, craftspeople, organizations and guilds. GHCA unites more than 300 members.

Since its establishment, GHCA has developed an informal educational program for the makers to overcome the existing gaps in **entrepreneurial skills**, which are necessary for the self-employment on the crafts market. Through series of trainings, workshops and individual consultations, GHCA enhance the transmission of crafts skills to future generation.

Recently, GHCA also started to work in close cooperation with formal education system and particularly with the newly established Vocational Skills Agency. This Cooperation aims at creating a new institutional entity called “Craft Duo”, which will work in filling the gap between craft-related vocational modules and the qualifications required from the employment market. The process has been recently launched and is still ongoing, however this independent entity will work through a governing board of representatives from sectoral and sub sectoral craft associations. The overall objective is to contribute to the craft vocational education strategy and qualifications as well as to better integrate private sector
stakeholders in vocational education, by promoting a work-based learning approach. Moreover, it will act as a watchdog organization by monitoring the educational processes and provide feedback on emerging needs and opportunities.
Source: Home (crafts.ge)

2. Collaboration between craft students and designers, to support creativity and interpersonal skills

In order to educate students in new artwork and to support cross-fertilization of design and “savoir-faire”, it is important to provide them challenging opportunities. For example, offering the opportunity to work side-by-side with another professional figure, such as a designer, helps students to develop the abilities to interpret and create products conceived by others, to realize them, and to inspire each other. It also helps working within a team, or with a client, and it improves flexibility and adaptability at work. It is a challenge that improves not only technical skills but also interpersonal skills (social, behavioural, etc.) that are increasingly needed to perform this job.

BOX 4 – École Boulle, Paris (France)

The school “Ecole Boulle” was founded in 1886, in the French capital, as a furniture making school and has become a leading institution in fine craftsmanship training in many more fields, with 13 workshops in house. The school’s fields includes jewelry making, woodturning, woodcarving, engraving, tapestry, cabinetmaking, chair making and marquetry, spatial, interior, industrial and furniture design, and visual communication. Ranging from baccalaureate level up to postgraduate, courses are led by master craftsmen in small groups of 2-12 students with particular emphasis on savoir-faire and balancing design practices with craftsmanship at the highest level. In this sense, a specific educational path has been developed, the DNMADE (Diplôme National des Métiers d’Art et du Design): it aims at acquiring solid knowledge and professional skills in the various specialties of crafts and design. It promotes the links between “design/creation” and production/ manufacture/implementation”.

It is aimed at high school graduates from technological, general or professional training, students of craft certificates and holders of the “Diplôme de Fin d’Etude Secondaire des Métiers d’Art”. The bachelor’s cycle is implemented in three years of study, broken down into 6 semesters: semesters 1 and 2 focus on discovery and acquisition of fundamentals, semesters 3 and 4 on deepening and specialization, semesters 5 and 6 focus on professional development.

Therefore in the last two semesters students are requested to develop a project together with a designer and to produce a new artwork with another professional figure. The project offer different paths with different focus, including interior architecture and furniture design, habitats and territories of social innovation, objects design, etc. They address areas such as housing, commercial spaces, workplaces, cultural and institutional places, museum spaces.

This specific experience allow holders of the DNMADE to access functions and jobs in the economic sectors of crafts and design that include creative activities, design, realization, production and conservation-restoration. Afterall, students can also decide to continue studies at university level.

Source: ecole-boulle.org
3. The use of design to promote a sustainable environmental approach

To raise awareness on the ongoing green transition, it would be useful to promote the concept of sustainability, for example by offering a “second life” to materials that might otherwise be difficult to process for disposal, and recycling waste material from products (marble, fabric, etc). Offering training on producing handmade new products from waste would be a good option to support the green transition. In addition, promoting this concept by organising exhibitions to present the results of sustainable work can be a powerful tool of inspiration.

BOX 5 – Fashion & Design Chamber (Armenia)

The Fashion and Design Chamber of Armenia (FDC) was established in 2017 with the mission to support the Armenian fashion industry and to create a joint platform for the creative industry. It is a non-governmental organization uniting individual designers and brands, startups and operating entrepreneurs from fashion and other related sectors in Armenia.

The FDC regularly organized trainings for those people interested in the field. They are mainly financed by donors and they address different target of people. For example, the “Trash To Treasure of Armenia” is a training organized for jewelry designers and students. The objective is to realize an handmade plastic jewelry collection created of recycled paper and plastic. The ability to conceive a new use of those materials, together with the creativity of designers, offers a new life to paper and plastic waste.

The products created during this training, inspired by Armenian medieval art, are then all collected and exposed to the public. (Fashion and Design Chamber of Armenia | Facebook) to raise awareness on the topic and to offer feasible options to replicate.

Source: Fashion & Design Chamber (fdc.am)

Conclusions

Identifying potential opportunities

Understanding new trends and their impact on skills and jobs raises the awareness of stakeholders (practitioners, policy-makers, etc.) on the changing skill needs. Fostering a culture of anticipation and innovation of skills can help countries – and people spot opportunities emerging in the craft sector.

The following policy pointers serve as a quick roadmap to embrace opportunities and prepare workers for tomorrow’s demands:

- Discover the potential of traditional sectors and craft specialities for supporting cultural heritage, community empowerment, entrepreneurship, tourism and growth of creative industries.
- Create collective organisations (if they do not exist) or boost existing ones to bring together the largest number of small companies and artisans: this would support them in adopting and sharing new technologies (and machine) to become competitive and survive in the markets.
  - Facilitate and coordinate the integration of students into their work.
  - Setting certified standards for “unique” methodologies.
  - Support equal payment for both women and men, in the sector.
  - Promote quality standards for in-company learning experiences (with the support of collective organisations or chambers of commerce). For example, by organising specific workshops, to compensate for outdated equipment and technical bases of
some artisan workplaces, which affects the quality of education for apprentices.

- Promote public incentives for artisans and companies that accept students into their artisan workplaces, offering them real-work experience. For instance, the reduction of taxes or financial support for buying specific machines, or to replace outdated equipment.

- Enhance the curricula in VET schools to improve the need for identified rising skills along all the phases of the craft production cycle: design, production, marketing and selling. This would improve the relevance and quality of the curricula, and align them with the findings listed above (entrepreneurial, technology-based, interpersonal skills, etc.).

- Focus on continuing training and reskilling and upskilling as a way to ensure that workers can acquire new skills and adapt to new production methods, while guaranteeing protection for the heritage.

- Revise educational programmes to adapt them to new emerging trends such as those related to the use of environmentally-friendly materials, and digital markets.

- Provide incentives for the sector through ad-hoc policies in order to raise consumer awareness about the unicity of craft products and their role in protecting the heritage and traditions.

**Key References**

Georgian Arts and Culture Center (2012). The Heritage crafts in Georgia, Comprehensive Research and Development Strategy of the Sector

**Useful Links**

- Craftsmanship and Skills for the Future | Open Space (europa.eu)
- Cultural and creative sectors | Culture and Creativity (europa.eu)
- Ikaalinen College of Crafts & Taidosto co-operative (Finland)
- City and guilds art school of London (United Kingdom)
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- École Boulle, Paris (France)
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