



Guidelines for the ceramic sector development





















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Introduction

Ceramics, one of the oldest forms of art and crafts, is facing major challenges such as global competition of cheaper products, the risk of loss of knowledge about skills, the position on the job market, workers skilled only in one field of ceramics or, on the contrary, a lack of qualified employees for specific fields of the ceramic industry, etc. This is happening although new domestic and international committees and organizations are being founded and various projects for the support of crafts are being organized.

The goal of The Cerasmus+ Project is to reverse this process through promotion, development and improvement of practical training of students in IVET and CVET courses through projects such as networking among local/territorial and international partners, respecting traditions and innovating them, sharing experience etc. This should be done not only with regard to the needs of ceramic businesses and the industry but also with the aim to preserve traditional crafts as our cultural heritage.

Moreover, one of Cerasmus+ goals for future years is to become as well-known as Erasmus+ and to focus its activities on a sustainable development of the ceramic craft.

One step on the way to heritage engagement and increasing and updating technical skills, which are necessary for the ceramic craft and industry, is to formulate the policy of implementation, management and assessment of IVET and CVET pilot courses. This is the purpose for which the following methodology is designed. While using this handbook, it is vital to keep in mind the differences between individual countries and to see this document as a set of recommendations.





The methodology is divided into two parts.

- 1. The first part of the handbook includes a policy and operative suggestions about how to plan, manage and assess the work-based IVET and CVET pilot courses related to professional competences needed in the ceramic craft and industry, and how to enable the realisation of specific actions for networking, innovation and heritage engagement. This in order to assure that the new educational approaches and tools could be systematised in IVET and CVET, and that the networking platform could be exploited as a permanent tool for cooperation between VET and the world of work.
- 2. The second part of the document has a strategic nature, addressing political authorities in charge of VET at regional and national level, and is aimed at highlighting the main project outcomes to be kept in mind when new policies are planned for IVET/CVET in the field of ceramics, in order to support the development of high quality VET related to professional competences with a strong work-based learning component, involving strong partnership between business and education.





Starting points

The documents on which this handbook is based are:

1. Assessment of training needs in the ceramic sector

As the project's first step, the partners performed a preliminary field analysis to let ceramics key actors and stakeholders explore their needs for competences for assuring the sector development through networking, protection of immaterial heritage, innovation.

The field analysis has been carried out by realizing a survey among ceramics key actors and stakeholders.

2. Assessment of training needs in the ceramic sector

The Cerasmus+ training curricula have been conceived considering the necessary skills for a ceramic professional (see Cerasmus+ Needs assessment).

The curricula for IVET and CVET include three topics: Tradition and innovation, Urban environment and Business start-up, followed by 21 units which include important topics arising from the conducted survey.





First part

Education, networking, innovation and heritage engagement based on the curricula mentioned above can be applied either to the full or partially, depending on the conditions in individual countries.

The education plan may be as follows:

- 1. Training for instructors/teachers
- 2. Education at secondary schools





1. Training for instructors/teachers

This part is the most difficult one in terms of preparation and time needed for the training of instructors. As the topics covered are quite extensive, it would be beneficial to organise the instructors training according to fields. For example:

- History and art education, including design
 - Ceramic design methodology
 - History of design
 - o Ceramic design
 - Urban regeneration
- Specialized technology
 - Ceramic technology
- Practical training workshops
 - Ceramic bodies / dough laboratory
 - Glaze laboratory
 - Prototyping laboratory (shapes, models, moulds and 3D printer)
- Business management
 - Team working
 - Communication methodology
 - Trend watching and trend research
 - o Business organization and job management
 - Start up and business models
 - o Business and integrated communication (ceramic sector)
- IT and communication systems
 - Computer design (basic)
 - o Computer design for digital decoration
 - Computer design 3D for 3D printing and rendering
- Professional English
 - Technical English (ceramic sector)





History and art education, including design

An essential part of the training should be education about ceramic such as ceramic history, history of design (crafted and industrial) which would focus on the territorial culural situation. Another way for connecting tradition and i nnovation with a cultural approach is to work on the theme of Urban regeneration, compelling established and new technological and conceptual tools. Using new methodological instrument for design, like the Design Thinking Method, will help in order to learn contemporary, dynamic new methods useful to be fastly able to organize and manage a ceramic project.

Specialized technology

A link between theory and practice, which is based on acquiring fundamental knowledge and skills in the field of hand-made ceramics and is focused on mastering the theory of these technologies. Understanding how working procedures are interconnected, gaining an insight into historical, aesthetic and arts&crafts aspects of ceramics and meeting high standards for both products and performance in terms of their artistic value and craftsmanship. Mastering the basics of technical thinking in general develops skills which help to apply theoretical knowledge in practice.

Practical training – workshops

This is aimed at making a connection between theory and practice. The educational and formative goals also include enhancing students' experience gained during their work, understanding how working procedures are interconnected, gaining an insight into historical, aesthetic and art-and-craft aspects of ceramics, awareness of the importance of work discipline and meeting high standards for both products and performance in terms of their artistic value and craftsmanship. Mastering the basics of technical thinking in general develops skills which help to apply theoretical knowledge in practice and improve logical thinking. Ceramic artists should be able to draw inspiration from traditional ceramic techniques and, besides being able to create copies and thus preserve traditions for the future, be able to create new, innovative ceramics which accommodates current demands.





Business – management

Another important area covers procedures for setting up one's own ceramic workshop, its promotion and training in management skills.

IT and communication systems

Looking up information, creating a website (graphics, photos, etc.), using modern technologies for marketing, using 3D technologies for creation, contacting other potters in other parts of the world, communication with them and sharing experience.

Professional English

Extending the general knowledge of English, commonly covered at secondary schools, with professional English.

This concept of training for instructors/teachers makes it possible to implement the policies mentioned above (or their parts) in a more a flexible way.

As we presume that teachers already have a training in particular areas to be able to teach at secondary schools, this would provide an extension and would connect the areas into a coherent educational approach. Further, a change of secondary school curricula should be implemented.

The best solution for instructors would be to attend training and courses. See below.





2. Education at secondary schools

For good quality secondary education, it is important to learn how to study, to have an insight into the ceramic and business sphere, to be able to look up relevant information and to know how to work with them. A school should provide students with a basic insight into ceramic techniques. The goal is to prepare students professionally so that they would be able to become successful in the area of art, functional and decorative ceramics and they would have an overview (on processes and production) about contemporary ceramic production, in factories and manifactures. In order to become successful, today's ceramic artists must have comprehensive skills, be creative, provide a high standard of craftsmanship and be able to grow professionally. To succeed on the market, ceramic artists should be skilled in various ceramic techniques. They can combine these techniques creatively, adjust them to their needs and create their own ones.

Another goal is to increase, extend young peoples' aesthetic taste and thinking. They should be provided with a basic insight into the history and into the international actuality of art and crafts and into the general aesthetic rules, that change over time. They ought to learn to collect geographical and historical facts about art and gain information from material links to the past and from works of art. They should discover how they are interconnected and synthesize these findings. Further, it is necessary to encourage the development of key professional competences and prepare students to become qualified members of the ceramic profession. This includes the ability to work both in a small and big working team and acquiring team management skills. To achieve this, students must be able to organise their work also in connection to the tasks of other team members.

An active command of both spoken and written English is very important for "becoming glocal". Students can use English to communicate all over the world and also to search for information which encourages their personal development. Students can discuss a wide range of topics





(general and professional) in both written and spoken English and also explain their opinion on a particular topic.

These goals should be reached through a change or adaptation of the curriculum in each country. This topic is dealt with in the second part of the methodology.

Courses for adults, workshops – CVET

This part is the most flexible one because it does not require any change of the system within the education environment of each country. The courses can be run according to the requirements of CVET participants.

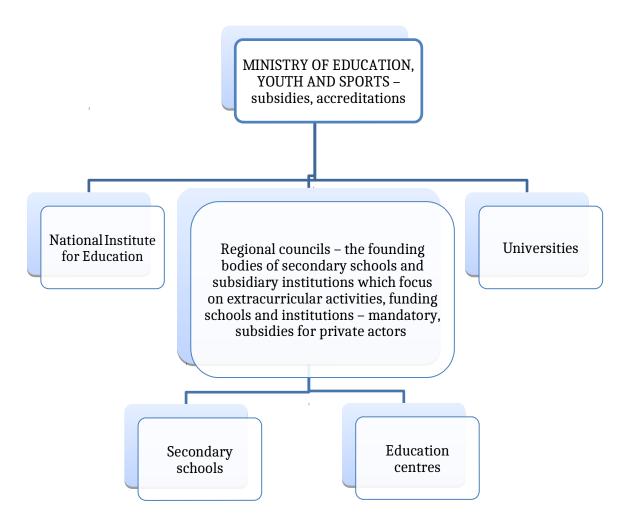




Second part

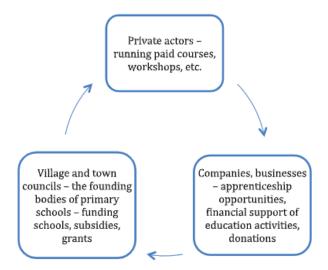
Education system and institutions

For a better orientation in the education system the following graph is included:









The education system is very closely linked to governing authorities with regard to founding schools and education institutions, their funding, accreditation of study programs and study programs curricula. They also fulfill the function of accreditation bodies for courses with an output in the form of a certificate of completion.

There are two authorities that play a pivotal role in running secondary schools and these are The Regional Council and The National Institute for Education.

The second part of this methodology focuses on these two entities.

The situation concerning companies, businesses, committees and private actors is less complex.





Education planning and management

The education plan is included in the curriculum itself, which sets education goals and describes the ways to reach them. It defines how teaching should be organised, carried out, monitored and checked.

It is best if the plan includes four basic questions, which are important for education and its management:

- Why? For what reasons is the education provided? What kind of problem or issue should it solve? Why is it necessary to invest funds and efforts to provide it?
- What? What is the goal and output of the education? What are the main products or outputs of the education?
- Who? Who is going to contribute to providing the education? What duties are individual
 participants going to have within the education process? How are the participants going
 to be managed?
- When? What does the education schedule look like? What important milestones of the education process are there? What does the time line of the process look like and when do the important moments (milestones) come? Is it complete?

The questions "Why" and "What" have already been answered in the points mentioned above. The question "Who is going to contribute to the education" depends on the conditions for the education process in each country and on the IVET or CVET requirements. This is described in the second part in more detail. The question "When" or the education schedule is partially determined by the curriculum mentioned above and it also should be adapted to the conditions in individual countries.





The plan should also include funding, probably as the most important part, at least for initial training of instructors/teachers. There are two possibilities:

- In the form of paid courses
- Through education subsidies

Further, also according to the conditions in each country.

There are two forms of success assessment with regard to the goals of The Cerasmus+ Project:

- Short-term testing acquired knowledge and skills, for example:
 - o Creating a ceramic item and presenting it in the native and English language
 - Creating a presentation/website and presenting it in the native and English language
 - Others, according to the curriculum
- Long-term assessing the impact of the curriculum change and of its implementation into the education in the participating countries, for example:
 - o Through a questionnaire filled in by the same people after five years.





The vision and objectives

This project aims to protect the EU traditional heritage and to modernize the ceramic sector through three main objectives:

- 1. Creating a European network of ceramics stakeholders (VET providers, craft businesses, public authorities, cultural institutions, research centres) for analysing the sector needs for competences with reference to improvement of "value chain", the development of the urban environment and business start-up.
- 2. Combining ceramic tradition with innovative methodologies and techniques for design and production.
- 3. Revising and innovating vocational education in the ceramic sector through work-based learning models in order to strengthen the sector value at cultural, social and economic level.





Outputs

Field analysis to explore the needs for competences for assuring the sector development through networking, protection of immaterial heritage and innovation.

The field analysis will be carried out by realizing interviews and questionnaires with ceramics key actors.

Design and implementation of an on-line virtual environment addressed to ceramics key actors and stakeholders to discuss the main issues emerging from the assessment stage and to open a permanent forum for assuring closer cooperation.

Planning and testing of specific curricula for initial and continuous vocational training, focused on work-based learning, aimed at gaining transferable and professional competences for the improvement of the sector "value chain".





Overview of the current situation

See the introduction

SWOT analysis

Strengths	Weaknesses	
A strong ceramic community	Clinging to the customary techniques and	
The association of ceramic towns and cities	materials	
The Cerasmus+ Project	Limited knowledge of professional English	
Activities – workshops encouraging the	No knowledge of marketing procedures –	
development of the craft	self-presentation	
Art schools	No knowledge of team and production	
Interest in traditional ways of ceramics	management	
making		
Opportunities	Threats	
Revival of the ceramic craft through	Little interest in crafts among young people	
networking – sharing experience	Deterioration of craft skills	
Attracting young people's interest through	Low demand among potential buyers	
a change in the way of teaching – combining	Lack of awareness of the ceramic craft	
traditional and modern techniques	among the public	
	Strong competition of cheap factory	
	produced goods	





Implementation

The analysis of the needs concerning the ceramic sector shows that a revision and innovation of the curriculum could have the expected impact on the ceramic industry.

It is therefore one of the important ways to reach the project goals.

The implementation of these changes in vocational education needs to be carried out on two levels. One concerns school founding bodies and the other includes businesses, small ceramic workshops and ceramic studies, all of which focus on or provide education.

Cooperation between these areas would be appropriate.

It would be beneficial if the founding bodies supported the implementation of the new curriculum and provided funding.

This can be reached through a revision of the current curriculum.

Curricula for all levels of education, and not only for ceramic study programmes, should undergo changes according to the demands of current times, just as they are implemented in the Czech Republic.