

## Erasmus+ - project “BOQua digital”



### **Guideline for the implementation of the EU-wide uniform qualification modules for further training of vocational orientation specialists in Germany** (Heike Arold and Lars Windelband)

**Developed by the German partner  
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## Introduction

In the context of the following implementation guideline for the five newly sector-specific and EU-wide uniform qualification modules with a focus on digitisation developed in the Erasmus+ project "BOQua digital", the need for a corresponding qualification for specialists for vocational orientation (VO) is first discussed. In addition to the need for a corresponding qualification, which contributes to updating the know-how of the VO specialists, the requirements for these or the prerequisites for a corresponding qualification are also described. Afterwards suggestions and options for implementing the qualification modules and the necessary financing are described.

### 1. Description of the need of specific qualifications concerning digitisation

As extensive studies have shown both in the previous project "BOQua" and in the Erasmus+ project "BOQua digital", the working and professional world has changed significantly due to new technologies and materials and the constantly increasing digitisation. More and more work processes, related to all vocational fields, have been and are being automated, are digitally linked, are digitally controlled and monitored and results are digitally documented and transmitted. This change is taking place worldwide and is not only changing work as such, but with it the operational challenges and in particular the requirements for the skilled workers who carry out the work. Thus increasing digitisation has contributed to the fact that numerous profession profiles have been reformulated and will be further adapted in the future and new professions have been also arose.

As a result of the fact that the professional profiles have changed and with the change the necessary skills, know-how and abilities of the skilled workers have to be adapted accordingly, the training has also changed. With regard to the training/apprenticeship in numerous professions, the requirements have also increased here. In the past, for example, it was sufficient for an industrial-technical or craft apprenticeship to have a good knowledge of mathematics and physics and an interest in technology as well as technical understanding, spatial imagination and logical thinking, to name just a few aspects. Today, potential trainees need more like theoretical IT-skills, dealing with the new media and digital networks which is as important as dealing with digital teaching/learning methods. Because of the numerous requirements young people are not only confronted with new challenges in their training/apprenticeship, but also in the run-up to their career choice.

Only if young people at the interface between school and work, or young adults who want to change their job, are informed in detail about the changes in the world of work and the profession profiles in the course of their vocational orientation, they are in a position to make a sustainable right career choice. Dropping out of training/apprenticeship, mainly due to the fact that young people are not up to the increased requirements because of the digitisation, can only be prevented if young people (or people in general) are informed about the new requirements due to digitisation during the career choice process.

For the career choice process it is elementary not only to have certain skills and interests for a profession, but also to inform the young people when, how and where digitisation will take place in the individual professions (e.g. do they work with digitally controlled work equipment, do they use digital working methods, do they have to use or even create programs themselves).

In order to obtain all this necessary knowledge in the run-up to choosing a career, especially all the VO specialists who advise and support young people in their career choice process are requested.

They should be able to convey this knowledge and information to the youth. As the above-mentioned investigation has shown, there is a lack of VO specialists such as teachers at general and vocational schools, social pedagogues and social workers in youth facilities, specialists in vocational preparation and careers advisers in the employment administration or chambers, etc., who have the necessary know-how and information. Their knowledge is often outdated or incomplete, because of the fact that there exist no specific further training on the changes in the working and professional world due to increasing digitisation. The investigation has made it clear that there is a great need for qualifications in all participating partner countries (Germany, Austria, United Kingdom / Scotland, Slovenia and Spain) as well as in other EU countries, which expert discussions have made clear. It has also been shown that the need for qualification on the subject of "digitisation" with a focus on advisory and supportive activities in the vocational orientation goes deeper than the knowledge of changes in the profession profiles and the world of work. And there is also a need to acquire knowledge about the digital transfer of know-how and information.

Um dem Bedarf nach berufsbezogenen Kenntnissen zu Veränderungen aufgrund der zunehmenden Digitalisierung sowie nach allgemeinen Kenntnissen zu den Herausforderungen der Digitalisierung in Bezug auf Ausbildung gerecht zu werden, wurden fünf spezifische Qualifizierungsmodule entwickelt. Hier sind zu nennen:

Five specific qualification modules were developed to meet the need for vocational-related knowledge about the changes due to the increasing digitisation and for general knowledge about the challenges of digitisation in relation to training. Here are to name:

1. Qualification module "Digitisation in the craft"
2. Qualification module "Digitised production professions"
3. 3. Qualification module "Commercial professions in the course of digitisation"
4. Qualification module "Digitisation in nursing and health professions"
5. Qualification module "The challenge of digitisation for training and work"

The modules all deal with the professional changes due to the increasing digitisation or new technologies as well as all aspects necessary for the implementation of the vocational orientation. The need for knowledge is covered insofar as the qualification modules deal with the content of the professional changes due to digitisation in relation to their focus (see title of the modules) and with the acquisition of the necessary information on this as well as the digital transfer of knowledge and much more.

For example, following topics can be mentioned here:

- Digital information procurement
- New media and their use
- Effects of digitisation on professions and vocational orientation
- Changes in the labour market due to digitisation
- Changed and new profession descriptions (profiles)
- Challenges and requirements
- Increasing the attractiveness of professions
- Access to professions for e.g. women
- Implementation of different vocational orientation measures/activities/tools with a focus on digitisation and the resulting changes
- Necessary new social/methodical skills to impart the knowledge

- Update knowledge independently
- Internships, practical parts

Finally, it should be noted that the individual qualification modules have different, complex focal points and look at individual vocational fields or the topic of digitisation in general, but complement each other and can therefore cover the needs of the target group as a whole or close individual knowledge gaps.

## 2. Proposals for implementation of the specific qualifications in Germany

Due to the special VET system, there are various options in Germany for implementing the specific qualification modules as further training for vocational orientation specialists. In addition to the implementation of individual qualification modules at different levels of education, the implementation of all five qualification modules as an overall training should also be considered. Especially if you add the five qualification modules developed in the previous project "BOQua", in which digitisation is rarely taken into account and which contain basic know-how for VO specialists. If you look at the ten modules in their entirety, they have so much potential in terms of content that they could be used as a complete package to be established as further training to become a VO specialist. This total training could be offered after legal recognition for further training, e.g. by chambers or correspondingly certified training providers with the result that the participants can call themselves "vocational orientation specialists" after a successful completion.

If you look at the current VO specialists in Germany, they are primarily specialists with different qualifications such as teachers, social pedagogues, social workers, trainers or master craftsmen, careers advisers, etc., who, in addition to their advisory and supportive activities, mostly take on vocational orientation as an additional task. For this target group, all modules are available as further training, which can be completed as a whole or individually as required. Thus, there is the possibility of a specialization within the vocational orientation on the focus "Professional changes due to the increasing digitisation".

The five newly developed qualification modules can be implemented in Germany at different levels and in relation to different target groups, as shown below.

### Implementation at the academic level

In Germany, the majority of vocational orientation measures and activities take place at lower secondary schools (secondary level I) and partly also at vocational schools, where a general school leaving certificate can be obtained, and partly and depending on the federal state at grammar schools (gymnasium). At secondary level I and II, vocational orientation is even an integral part of the curriculum in many federal states. Accordingly, the responsibility for carrying out the vocational orientation lies with the teachers.

Due to their teaching activity, which focuses on a specific subject, these often show gaps in knowledge about the current regional and national training market, professional profiles and the work requirements (necessary skills and abilities) and operational challenges hidden behind them. This also applies accordingly to the changes in the working and professional world due to increasing digitisation. The investigation as part of the Erasmus+ project "BOQua digital" has shown that there are gaps in knowledge about this, as well as knowledge about how and where to acquire the know-how and information and how it can be passed on to young people.

In order to prepare in future generally teachers for tasks related to vocational orientation and in particular the change in the working and professional world due to digitisation, it is recommended that the qualification modules are fixed as a main part of teacher training or at least integrated into the compulsory elective area of the studies. In, for example, the Schwäbisch Gmünd University of Education, the integration of vocational orientation, into which the modules could be included, is already being implemented. Since 2015/2016, a profile field “vocational orientation” has been firmly integrated into the curriculum as a compulsory elective field. In the profile field, students are given the opportunity to acquire certain skills for vocational orientation in addition to studying subjects, educational sciences and school practice. And so in the 2017/2018 academic year, parts of the modules developed in the previous project "BOQua" were integrated into the curricula of teacher training and could now be supplemented with the new modules for digitisation. Based on the example, the implementation is also recommended for other teacher training colleges and universities.

In addition, the five new qualification modules can also be used for teacher further education and advanced training. In this respect, the qualification modules would have to be anchored at the appropriate teacher institutes for further training (state and private providers) and could be offered there as individual seminars, but also as a seminar block. Insofar the teacher participation of such a further training needs a leave of absence of the regular work, the offered further training must be recognized by the Ministry of Education. However, the qualification could also be offered to the target group by independent training providers. In this case the training offer should be scheduled outside of the teaching hours to enable the participation. In addition to holiday and weekend offers, online training is also an option, which enables participation from home. With regard to further training, it should also be noted that the stately seminars of the 2nd phase of teacher training do not yet have questions about changes in vocational orientation due to digital transformation on the agenda at all. Here, however, initial talks took place with the implementing institutions in Stuttgart and Karlsruhe.

Because career counseling and vocational orientation does not only take place in schools, but is carried out by various institutions such as independent educational institutions or independent youth work agencies, chambers and business associations as well as the employment administration, the qualification modules should be made accessible to employees in these institutions as a further education offer.

This can be done via free educational offers from different educational institutions. However, also an implementation in the elective fields within the framework of relevant studies such as social pedagogy or social work, sociology, pedagogy, psychology, etc. is conceivable and makes sense. Thus the topic would become to an integral part of these studies or it can be used as an additional qualification. Among other things, parts of the module will be used in the pedagogical courses at the University of Karlsruhe in the 2022/23 winter semester.

And also the Federal Employment Agency, which trains its careers advisors at the University of the Federal Employment Agency (HdBA), is recommended to include the qualification modules in their interdisciplinary bachelor's degree or to offer the qualification as further training (for specialisation). This means that the counseling specialists are up to date when they have completed their studies or after a successful further training and are able to advise young people in the best possible way.

### **Further education and advanced training at (free) educational institutions**

Measures for in-depth vocational orientation are now an integral part of the career choice process in Germany. Many independent providers of vocational youth welfare carry out measures and activities for in-depth vocational orientation as part of various measures such as vocational preparation, measures to obtain a school leaving certificate etc.

On one hand the teachers and educators carry out vocational orientation measures themselves and advise, or on the other hand employees of external providers of measures carry them by order of them.

For these skilled workers, the implementation of the qualification modules at independent training providers could result in open seminar formats that are freely accessible to anyone interested, in which the "change in the working and professional world due to the increasing digitisation", "acquisition of digital skills" and "digitisation and vocational orientation" be in focus. For the example of "digitisation and its consequences for the world of work and vocational training" already exist regular offers from the Schwäbisch Gmünd University of Education (e.g. specialist day for technical education in Baden-Württemberg). The offers could be offered both as face-to-face events or online seminars individually or as a whole block.

### **3. Proposals for financing the specific qualifications in Germany**

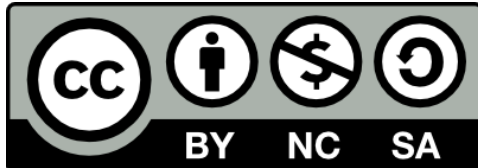
There exist various financing options in relation to the different implementation options presented for the newly developed qualification modules. Thus an implementation in the academic sector would have to be supported by the public sector. The financing of degree programs through tuition fees is currently only available in some federal states for long-term students (Bremen, Lower Saxony, Saxony, Saxony-Anhalt and Thuringia), for a second degree (Baden-Württemberg and Rhineland-Palatinate), as well as for foreign students from non-EU countries (Baden-Württemberg). In private universities, higher fees for (further) educational offers could be charged. This is at the discretion of the private universities to set the amount of the tuition/course fees.

On the other hand, seminars and courses offers that are used by VO specialists independently of their employers as a (further) education should be financially supported by their employers. On the whole, however, they are to be financed privately. Participation fees could also be reimbursed as funding for training and further education. There are different funding programs from the federal states, the federal government and the European Union that could possibly be considered. This can be done through grants, loans or participations. Ultimately, however, there is always the possibility of free offers that need to be financed privately.

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