

## Erasmus+ - Project „BOQua digital”



### Quality standards for the vocational-field specific measures for vocational orientation (Heike Arold, Lars Windelband)

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The quality standards for the vocational field-specific vocational orientation measures (VO measures), which should also be generally transferrable to VO measures, were developed under the direction of the University of Education Schwäbisch Gmünd by Heike Aroid and Prof. Dr. Lars Windelband and developed, discussed and defined in cooperation with all project partners. Here should be mentioned the following partners:

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## Introduction

Against the background of the objective of the Erasmus+ project "Professional changes through digitisation - a European qualification for specialists in vocational orientation" (BOQua digital), not only to develop a qualification for the VO specialists themselves with focus on the changes in the working/professional world due to the increasing digitisation, but also five vocational-specific vocational orientation measures (VO measures) were developed to provide up-to-date support for young people in the career choice process. These not only focus on individual vocational fields (such as the vocational field of industrial-technical, commercial, craft, environment and care/health) and their training professions/apprenticeships, but they also take into accounts, the new vocational requirements and operational challenges that result from this.

The basis for the development of the five vocational field-specific measure concepts are the results of a vocational investigation carried out beforehand. In addition to a status quo investigation on measure concepts, also a needs analysis were carried out in the five partner countries of the project (Germany, Austria, Spain, Slovenia and UK) as well as an identification of possible contents and structures by means of case studies and expert discussions, which were carried out both with specialists who carry out the measures such as teachers, careers advisers, social pedagogues/workers, and with the direct beneficiaries such as young people in the career choice process.

The results obtained and the consideration of existing quality standards in the EU and the previous project "BOQua" are also the basis for the quality standards for VO measures presented and selected here. These were developed by the partners according to a defined structure and compared with each other in order to cover the largest possible interface of all countries. In addition, these were discussed in detail with experts from the VO or vocational training as well as in the project consortium and then finally defined. Country-specific circumstances due to different VET systems were not taken into account. However, the following quality standards can be supplemented by country-specific adjustments. A waiver of any of the quality standards specified below is not allowed especially against the background that the objectives of the VO measures can only be achieved if the quality standards are met and if the measures can be compared.

In the following, the quality standards that apply to all VO measures in general are named and described in more detail, followed by the specific quality standards for the five newly developed VO measures that must be taken into account in the individual concepts. The following quality standards describe 1. the necessary resources and framework conditions (input quality standards), 2. the didactic implementation of the measure concepts (process quality standards) and 3. the objectives, competencies, learning successes to be achieved (output quality standards).

## 1. Definition of „quality“ and „quality standards“

The terms "quality" and "quality standards" are defined differently against the background of the various Vocational Education and Training systems of the different EU countries. For this reason at first a brief limitation of the terms should be made.

The term quality (Latin *qualitas* = nature, state, condition) sums up all characteristics of an object, system or process and evaluates its quality. According to DIN EN ISO 9000:2015-11 (the quality management standard) quality is defined as „a degree, in which a set of inherent characteristics of an object meets requirements“. This definition was replaced by the definition of DIN EN ISO 8402:1995-08, the old quality management standard. Thus, quality is the „entirety of characteristics of a unit with regard to its suitability to meet defined requirements. “ In this case, units are described as products, services, concepts, drafts, software, work processes, procedures and processes.

In general, however, it should be noted that the term "quality" is not a rating. Nevertheless, the term "quality" is used on a daily basis judgmental because the term is used as a synonym for the value of a unit. The term "quality" includes mostly an evaluation in "good" or "bad". Meets e.g. a VO measure its objective and fulfills its purpose, in general people speak then of a "good" or "successful" VO measure. If it does not fulfill its purpose, it is evaluated as "bad". In general the quality of a unit such as e.g. a VO measure is difficult to measure. In order to be able to evaluate these, measurable quality criteria must be defined. To this belong beside the objectives of the VO measure and the desired success especially the framework of the measure.

The contents as well as the structure and processes are described in the measure concepts, but it is not specified what the minimum framework of the VO measure should be. This is done by using the "quality standards" specified below. With regard to the measurability of the quality of a VO measure, this cannot be attributed solely to the successful completion of this. A positive measure result is not necessarily to be equated with a "good quality" of this, because numerous individual requirements that the individual participants bring with them can influence the success.

In the implementation of the measure, one can generally speak of "good quality" when the specified requirements for the measure and its objectives are achieved. This means that the more (partial) objectives are achieved, the better the quality of the measure can be assessed. In order to be able to guarantee the measurability of quality, it is therefore necessary for the implementing institutions to comply with the defined quality standards. The following quality standards are only a recommendation that can and must be adapted in the context of future adjustments or further development of the VO measures or in relation to other VO measures.

## 2. Importance of quality standards with regard to measures for vocational orientation

In the future, vocational orientation measures in the EU should be eligible for consideration of the constant changes in the world of work and professions. New materials/substances, new technologies and processes as well as the increasing

digitisation of work processes across all vocational fields entail that professional profiles are changing significantly, professions are disappearing and new ones are arising. The changing professional landscape is also accompanied by new professional requirements for potential trainees and employees. And furthermore the operational challenges, which are closely linked to the requirements placed on the individual, are also changing with the increasing digitisation.

Vocational orientation measures should address all of these aspects in terms of content, so that young people in the career choice process receive a correct picture of the professions that are possible for them and the requirements that they must be able to cope with. In particular, it is necessary that they not only get to know the current changes in the course of a VO measure, but also the trends to be expected and possible alternatives to the training professions that they have in the focus of their choice. Furthermore, VO measures should be designed in such a way that the young people in the process of career choice are able to acquire the necessary information and knowledge independently by using analog media as well as digital media after the end of the measure.

In order to ensure all these objectives, which should be pursued by all VO measures regardless of the type of measure, it is necessary to base the VO measures on certain quality standards. By means of this, not only the framework of the VO measures and a certain system are to be defined, but also in particular the processes and methods of how the objectives can be achieved up to the definition of basic content and objectives.

The investigations about the existing VO measures in the course of the previous project "BOQua" and the project "BOQua digital" have made it clear that there are currently no general quality standards for VO measures. Maximum individual standards are defined in the presentation of the identified VO measure concepts, which, however, relate exclusively to that specific measure. It is therefore not possible to compare measures. And that in turn also complicates the entire process of career choice and the associated vocational orientation, which mostly takes place over a longer period of time and includes several measures and activities that should build on one another. If the VO measures base on certain quality standards, the link to previous measures and activities is easier. In addition, the success of a V measure is easier to measure if it is subject to certain standards. Overall, the quality standards contribute to the improvement of the quality of VO measures.

### **3. Universal quality standards for VO measures**

The quality standards described and identified below were defined in such a way that they should generally be used as a basis for VO measures. This applies regardless of the type, structure and content of a VO measure and regardless of whether a measure is designed for the vocational orientation in a specific vocational field or only takes certain professions into account.

These are universal quality standards that should be taken into account both across measures and in VO measures across countries.

### 3.1 Input quality standards – resources and framework conditions

The input quality standards relate to the resources and framework conditions of VO measures. They cover all aspects of the framework of the VO measure - i.e. the so-called "hardware" of the measure - such as the requirements and prerequisites for the participants, the location of the measure, time frame, number of participants, cooperations, support from experts, required equipment, information materials, etc.

| No. | <b>Quality criterion</b> and its description   |
|-----|--|
| 1   | <p><b>Number of participants</b></p> <p>The number of participants per measure should be limited to an appropriate number (min. 5 - max. 15) against the background of the measure structure (procedure, elements, activities, scope) and possible special features of the target group</p> <p>If the participants have special support needs or other restrictions, the number of participants should be limited to a maximum of 10</p> <p>If the measure takes place as an integral part of vocational orientation at schools, then the number of participants can be unlimited if there is a corresponding number of supervising VO specialists</p> |
| 2   | <p><b>Participant diversity</b></p> <p>The measure should be accessible to all people who are in the career choice process, regardless of their gender, physical limitations, age, origin or religion</p>  |
| 3   | <p><b>Consideration of prior knowledge and experience</b></p> <p>The measure should take into account the prior knowledge of the professions and possible professional experience of the participants</p> <p>The measure should take into account the professional interests of the participants</p> <p>The measure should take into account the individual, personal status quo of the participants in relation to their career choice process</p>  |
| 4   | <p><b>Conditions for successful participation</b></p> <p>The participants should be in the process of career choice and be interested in vocational orientation</p> <p>The participants do not need any special prior knowledge of professions profiles and the associated information</p> <p>The participants do not need any special skills to take part in the measure</p>  |
| 5   | <p><b>Qualifications of the specialists carrying out the measure</b></p> <p>The measure must be carried out by specialists who have sufficient previous experience in the field of vocational orientation and/or the implementation of vocational orientation measures</p> <p>The professionals must have pedagogical experience and social skills with regard to advising and supporting young people in the career choice process</p>  |

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|    | <p>The specialists are to be selected by the institution implementing the measure the work through a special selection and allocation process, which is based on specific criteria</p>   |
| 6  | <p><b>Place of action</b></p> <p>The location for carrying out the measure and individual elements/activities within the measure must be chosen in such a way that it is easily accessible for the participants</p> <p>Possible training rooms must have an appropriate teaching and learning atmosphere</p> <p>The reachability of possible locations with regard to different vocational orientation activities within the measure must be guaranteed or secured by suitable means (transport options)</p>   |
| 7  | <p><b>Timeframe of the measure</b></p> <p>The timeframe of the measure should be appropriately chosen according to the target group and objective and depending on the type of measure</p>   |
| 8  | <p><b>Infrastructure/equipment</b></p> <p>The equipment should be adapted to the individual elements/activities of the measure as well as to the participants and their previous experience in vocational orientation</p> <p>The participants should be informed about the relevant equipment they need for the measure (e.g. PC, documents, safety clothing)</p> <p>It needs to be clarified if the participants are missing crucial equipment to ensure that it can be obtained otherwise</p> <p>The space (classroom, workplace) should be organized in such a way that participants can follow lectures as well as face each other to facilitate discussion among themselves</p> |
| 9  | <p><b>Cooperations and Networks</b></p> <p>In order to achieve an optimal combination of theory and practice within the framework of the measure, networking and cooperation with other relevant actors must be ensured</p> <p>Cooperation with external actors (e.g. training companies, vocational schools, chambers, professional associations, etc.) to support the VO specialists should be ensured and they should be included in the measure if necessary and depending on individual activities</p> <p>Networks to the relevant actors should exist or be established and sustainably maintained</p>   |
| 10 | <p><b>Sources and information material</b></p> <p>Appropriate and useful sources of information should be identified prior to the measure and disclosed to the participants</p>  |



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| 11 | <p><b>Process and objective awareness</b></p> <p>The VO specialist carrying out the measure as well as the participants should be well-acquainted with the contents, the timeframe, the processes and the objectives as to ensure efficient and prompt execution of the measure</p>                           |
| 12 | <p><b>Responsibilities of the executing institutions</b></p> <p>The institutions implementing the measure are responsible for ensuring that the participants are provided with all the necessary means and that the framework conditions are created in order to be able to achieve the measure objective</p> |

### 3.2 Process quality standards – didactic implementation

The process quality standards relate to the didactic implementation of the VO measures, i.e. the structure of individual activities and the choice of implementation method. It includes all aspects that determine the structure and implementation of the VO measure, such as basic elements, methods for gathering information, teaching methods, use of practical parts, feedback and discussion rooms, use of assessment instruments and quality checks, etc.

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <p><b>Objective agreement</b></p> <p>A clear objective should be formulated for the measure, against which the success at the end of the measure can be measured</p> <p>A personal target agreement should be made for each individual participant at the beginning of the measure</p>  |
| 2   | <p><b>Basic contents of the measure</b></p> <p>The measure should include basic content for vocational orientation as well as in-depth knowledge of different profession profiles, entry requirements, requirements for trainees and possible operational challenges</p> <p>The above named knowledge should be acquired through appropriate activities or it should be the basis for other possible activities</p> |
| 3   | <p><b>Vocational orientation activities</b></p> <p>The vocational orientation activities within the measure and their objectives should be formulated clearly and understandably</p> <p>If the measure includes several vocational orientation activities, these should build on each other in a meaningful way in order to achieve the greatest possible effect</p>  |
| 4   | <p><b>Implementation methods</b></p> <p>The choice of methods for implementing the measure activities is to be chosen individually and should be adapted to the needs</p>   |

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|    | <p>The chosen methods for the implementation of the measure should be selected according to the know-how and skills of the participants and the objective (or sub-objectives) of the measure</p> <p>The selected methods should be up to date</p>  |
| 5  | <p><b><i>Theory and practice parts</i></b></p> <p>The proportion between theory and practice should be clearly defined and communicated at the beginning of the measure</p> <p>The measure should have theoretical components as well as practical elements/activities in order to consolidate or supplement the obtained information and the theoretical knowledge of professions profiles with practical activities</p> <p>Practical examples should be clear and causally related to the goals of the measure, illustrating evident and precise results</p> <p>Practical examples should stem directly from employers or the job market and their results should translate back to the job market/employer in an equal or comparable manner</p> |
| 6  | <p><b><i>Preparation activities</i></b></p> <p>The process of the measure as well as the implementation methods and the objectives should be clearly defined in the preparation and communicated to the participants</p> <p>The time scope of the preparatory activities should be kept as short as possible depending on the activities of the measures</p>   |
| 7  | <p><b><i>Follow-up activities</i></b></p> <p>The measure should generally include follow-up activities to identify deficits, check target achievements and analyze the results</p>   |
| 8  | <p><b><i>Basic structure</i></b></p> <p>The measure should follow a rough structure with successive steps for different activities (e.g. work in smaller/larger groups)</p>  |
| 9  | <p><b><i>Guidance and support</i></b></p> <p>Guidance and support should be provided by the instructors of the measure during all steps of activities</p>  |
| 10 | <p><b><i>Communication</i></b></p> <p>The possibilities, channels and types of communication (for example feedback) should be clear for the participants</p>   |
| 11 | <p><b><i>Performance criteria and knowledge</i></b></p> <p>It should be given a feedback on own performance in specified skills to identify action points for improvement of own performance taking account of review and feedback and to evaluate the career choice against own skills</p>  |

### 3.3 Output quality standards – objectives, competencies, learning success

The output quality standards refer to the measure objectives and successes as well as competencies to be acquired, which can be achieved by the participants at the end of the VO measure. However, they also include aspects such as adjustment options and the possibility of supplementing the measure after the end of the measure as well as certificates of participation.

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <p><b>Knowledge on professions, the world of work and digitisation</b></p> <p>The participants should acquire knowledge on specific professions and related tasks, the world of work, digitisation, training opportunities, labour market and career possibilities</p>  |
| 2   | <p><b>Soft skills and transversal competences</b></p> <p>The participants should acquire task related soft skills and personal competences like communication skills, presentation skills, teamwork and other social skills and train their ability to work independently as well as their (self-)reflection</p>  |
| 3   | <p><b>Awareness of digital transformation in specific professions</b></p> <p>The participants are aware of the digital transformation in specific professions and the impact the digitisation has on related tasks and tools</p>  |
| 4   | <p><b>Measure adjustments</b></p> <p>The objective of the measure - vocational orientation and support in the career choice process - must not be changed insofar as adjustments of any kind are made</p> <p>Possible adjustments may be made to the content and structure of individual measures as long as it is ensured that these take national regulations and laws into account</p> |
| 5   | <p><b>Process flow of the measure</b></p> <p>The process flow of the measure should be clearly defined and communicated to the participants</p>   |
| 6   | <p><b>Review of the objective</b></p> <p>Partial and overall objective reviews should be carried out by using appropriate methods and appropriate the prerequisites and abilities of the respective participants</p> <p>Sub-objectives should be reviewed against the background of possible adaptations and during the measure implementation and should be documented</p>               |
| 7   | <p><b>Measure evaluation</b></p> <p>In order to check the achievement of objectives and to optimize the measure, it should be evaluated at the end by those who are involved in the measure</p> <p>In the case of longer-term measures, an interim evaluation should take place at appropriate times in order to correct mistakes and compensate for deficits</p>                         |

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| 8 | <p><b>Output orientation</b></p> <p>The measure should always be objective and result-oriented</p> <p>The planning, management and controlling should be based on previously defined objectives</p> <p>The measure should conclude with comparable, applicative results for the group – stemming from discussions, examinations or questionnaires</p> |
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#### 4. Specific quality standards for vocational field-related VO measures

The quality standards described and identified below relate exclusively to the five vocational field-specific VO measures that were developed as part of the "BOQua digital" project. Because in addition to the different vocational fields, these also differ greatly in their type and therefore there are different specific requirements for them, the measures are subject to specific quality standards. These specific quality standards are additional standards to the in Chapter 3 described quality standards.

in addition to the quality standards named in Chapter 3. If these measures are transferred to another country or adapted to other vocational fields, the quality standards presented below as well as the described quality standards of Chapter 3 must be met in order to ensure the implementation and target achievement of the respective VO measure. In addition, a certain degree of comparability remains.

It should be noted at this point that the following quality standards were defined by the respective project partners who developed the corresponding VO measure. The measure concepts to which the specific quality standards refer can be found on the project website at [www.boqua.eu](http://www.boqua.eu) and downloaded.

##### 4.1 Quality standards for the measure concept „industrial-technical field”

The following quality standards relate to vocational field-specific measure concept for vocational orientation with a focus on the industrial-technical vocational field, which was developed by the German partner. The quality standards were also defined by the German partner.

##### a) Input quality standards

| No. | <b>Quality criterion</b> and its description   |
|-----|--|
| 1   | <p><b>Individuality of the participants</b></p> <p>The measure should be based on the individual status quo of the career choice process of the respective participants and their individual professional interests</p> <p>Individual deficits, problems and previous knowledge should be taken into account</p>     |
| 2   | <p><b>Inclusion</b></p> <p>The measure should be accessible to everyone regardless of personal characteristics (e.g. disabilities, origin, gender) and all participants should be treated with respect</p> <p>The choice of means and methods should correspond to the personal requirements of the participants</p> |

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| 3 | <p><b>Measure support</b></p> <p>The specialists implementing the measure should have knowledge of the industrial and technical vocational field and the associated professions, of digital trends, the influence of digitisation on the professions and the requirements</p> <p>They should have knowledge of digital information sources and their application as well as teaching methods</p> <p>They should be familiar with the five different activities of the measure</p>                                      |
| 4 | <p><b>Infrastructure of the measure</b></p> <p>The implementation places of the individual parts / activities of the measure should be spatially accessible for every participant</p> <p>The necessary equipment and materials should be exists for the measure (e.g. computers, tablets, literature, cameras, etc.)</p>   |
| 5 | <p><b>Cooperations and networks</b></p> <p>Necessary cooperation and networks with relevant actors for the implementation of the individual activities (e.g. chambers, employment administration, vocational schools, training companies) should exist or be established and maintained</p>  |
| 6 | <p><b>Pedagogical support</b></p> <p>The pedagogical support should be provided by trained (social) pedagogues who have experience in the field of vocational orientation, vocational preparation, training in a specific vocational field (in this case the industrial-technical field) and working with young people</p> <p>They should have good contacts to companies, trainers and training centers with a focus on industrial-technical professions and be able to support young people with practical tasks</p> |

## b) Process quality standards

| No. | <b>Quality criterion</b> and its description   |
|-----|--|
| 1   | <p><b>Flexibility</b></p> <p>The activities of the measure must be carried out in a fixed order in order to achieve the desired effect</p> <p>The time frame of the individual activities can be arranged flexibly and the measure should also be applicable to other vocational fields</p>                  |
| 2   | <p><b>Activity linking/interfaces</b></p> <p>The activities are to be closely linked according to the respective results of the individual activities and should build on one another</p> <p>The link is intended to contribute to the acquisition of knowledge and experience in individual professions</p> |

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| 3 | <p><b>Transfer</b></p> <p>The measure should also be easily transferrable to other countries when possible adjustments to different professional fields are done and be implementable by different institutions</p>   |
| 4 | <p><b>Formulation and review of partial results</b></p> <p>After each completed activity, the sub-objectives of this are to be checked and the subsequent activities are to be planned according to the results</p>   |
| 5 | <p><b>Theoretical and practical parts</b></p> <p>The defined proportion of theory and practice should be kept in relation to each other, i.e. the practical part should predominate</p> <p>If necessary, the individual theoretical activities and practical activities can be extended in time. This should be at least proportional to each other</p> |
| 6 | <p><b>Adaptability of the measure</b></p> <p>When adapting the measure to other vocational fields, the structure should not be changed. Only the content and content-related objectives should be adapted in order to retain the desired effect of the measure</p>  |

### c) Output quality standards

| No. | <b>Quality criterion</b> and its description   |
|-----|--|
| 1   | <p><b>Self-determination and organization</b></p> <p>The participants should be able to act independently and should take part in the organisation of the activities</p>   |
| 2   | <p><b>Vocational decision-making ability</b></p> <p>The participants should be able to make a vocational decision at the end of the measure or be aware of the direction in which they want to orient themselves vocationally</p>  |
| 3   | <p><b>Use of digital media</b></p> <p>Digital media and the use of these should be made accessible by the participants and they know relevant digital sources of information</p>   |
| 4   | <p><b>Sustainable acquisition of skills</b></p> <p>The skills acquired and the information and know-how gained should make a lasting contribution to the decision for a profession and should be useful for further vocational orientation activities</p>  |
| 5   | <p><b>Target achievement</b></p> <p>The participants should get to know the objective of the measure, industrial-technical professions and the influence of digitisation on them and be able to decide for or against an profession or to recognize that further VO measures are necessary for a final career choice</p> |

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| 6 | <p><b>Personal objective</b></p> <p>The respective personal objectives of the participants are to be reflected upon at the end of the measure and, if necessary, further VO measures are to be defined accordingly</p> |
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## 4.2 Quality standards for the measure concept „craft field”

The following quality standards relate to vocational field-specific measure concept for vocational orientation with a focus on the craft vocational field, which was developed by the Austrian partner. The quality standards were also defined by the Austrian partner.

### a) Input quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <p><b>Number of Participants/target group</b></p> <p>The core target group of the measure are especially students on the transition to the profession life in the age of 12 to 15 years</p> <p>In a wider concept the measure is directed to students/youth in the age of 12 to 19 years on the transition to their first or next choice of profession or training</p> <p>he measure is provided for a school class, and per working group 3 to 4 students are suggested</p> <p>But the number of participants can be reduced to a minimum of 4 participants and only one small group. This reduction entails a downsizing of the presentation event and the adaptations of other steps</p> |
| 2   | <p><b>Qualification of the specialists carrying out the measure</b></p> <p>The measure should be implemented by teachers in secondary schools (esp. lower secondary schools) with focus on career information, craft professions and digitisation</p> <p>It can also be implemented by trainers, youth coaches and professionals in relevant youth-related extracurricular institutions that provide the same requirements on knowledge and competencies</p>  |
| 3   | <p><b>IT-infrastructure</b></p> <p>The measure requires efficient IT-infrastructure: Depending on the number of participants, a proper number of computers and internet access should be available for each group during the research task</p> <p>The presentation requires also equipment for the visualisation of the results, e.g. a projector or a smartboard</p>   |
| 4   | <p><b>Location of the measure</b></p> <p>The measure requires rooms with tables and chairs for the introduction, group work and especially large rooms like halls or ballrooms for the presentation of the results for the group work and ideally separate rooms for group work.</p>  |

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| 5 | <p><b>Time frame</b></p> <p>The implementation of the measure extends as a project order over a period of 2 to 3 months. However, the timing is very flexible</p> <p>The work assignment can also be reduced to a minimum variant of 2 mornings. One morning for the research and preparation of the presentation and another morning for the final presentations. In this case, however, the amount of research must be considerably reduced</p> |
| 6 | <p><b>Materials</b></p> <p>Different required introduction and information materials related to the content of the measure must be made available that necessary content can be developed and edited</p> <p>Presentation material like a projector with a laptop, smartboards, blackboards, or flipcharts, posters, pin boards, a screen with DVD player, CD player, bluetooth-capable receivers, loudspeakers etc. must be made available</p>    |

## b) Process quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <p><b>Basic structure</b></p> <p>The measure have to follow a rough structure with successive steps for different activities: An instruction of the tasks, the group work with intermediate feedback, the final presentation of the results and the debriefing</p> <p>The scope of the steps may vary</p>                 |
| 2   | <p><b>Puzzle pieces – material for first part of group work</b></p> <p>In the first phase of group work the participants must be given puzzle pieces on professions with which they start their research: Professional titles for 10 crafts, short descriptions of the professions and 2-3 photos for each profession</p> |
| 3   | <p><b>Guidance/ Support</b></p> <p>For the main task of the measure – the group work – instructors have to provide guidance for the participants during the process of their research and support if questions arise</p>  |
| 4   | <p><b>Process monitoring</b></p> <p>Instructors should monitor and document the steps and tasks, especially the group work and the presentation of the results</p>  |
| 5   | <p><b>Communication</b></p> <p>The participants are shown the possibilities, channels and ways of communicating with the instructors and the other participants during present sessions and distance learning and know, in which way feedback can be given</p>  |



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| 6 | <p><b>Methods</b></p> <p>In the measure concept can be used by a broad mix of methods. They are not strictly prescribed but essentially results from the group processes.</p> <p>During the measure can be used e.g. lectures, group work, individual work, brainstorming, internet research, interviews, real encounters, company visits, career exploration/work experience days, internships (depending on the age of the young people), written reports and so on.</p> <p>Possible methods for presenting the results can be slide presentations, poster presentations, exhibitions or show of work, role plays or a quiz (digital, analogue).</p> |
|---|--|

### c) Output quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <p><b>Knowledge on craft professions, the world of work and digital transformation</b></p> <p>The participants should acquire knowledge on specific craft professions and related tasks, digital aspects of the professions, realistic images of these professions, the world of work and digital transformation, training opportunities, labour market and career possibilities</p> <p>The participants should develop a broad spectrum of descriptive characteristics for occupations that participants can use individually as a checklist or structuring aid in their orientation towards other occupations they are interested in</p>  |
| 2   | <p><b>Measure objectives</b></p> <p>The participants should prepare the results and present them. The presentation of the results depending on the approach each group can decide in which way they present their results, for example with posters, power point or video. Required is a written handout for the other groups</p> <p>It should be developed a catalogue of comprehensive and multi-layered job descriptions for several crafts (depending on the number of groups involved), which will be available in the class/school or for others</p> <p>It should be developed a structure developed by the participants for describing characteristics of professions, which is available to all participants as a checklist for their further occupational research</p> |
| 3   | <p><b>Soft Skills and transversal competencies</b></p> <p>The participants improve their competencies on independent work and teamwork, the competence to contribute own ideas, organisational skills for the implementation of the research and presentation in the group work and skills on the ability to present the results</p> <p>In the course of the measure the participants should also strengthen their competencies on reflection of their work</p>   |

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| 4 | <p><b><i>Awareness of digital transformation in specific professions</i></b></p> <p>The participants are aware of the digital transformation of specific craft professions, the impact on related tasks, tools and the related digital requirements</p> <p>The participants improve their knowledge on the digital changes in the world of work, on the labour market, on training and career possibilities especially in the field of craft professions</p>  |
| 5 | <p><b><i>Evaluation of the measure</i></b></p> <p>To evaluate the success of the measure, it oral feedback (discussion) and a short questionnaire should be used</p> <p>In addition to provide feedback for possible further development and optimisation of the measures, the evaluation should also serve to make the young people reflect on their personal learning success</p> <p>In combination with the evaluation should be taken place a group discussion because that enables a further learning effect and the young people learn from the experiences and assessments of their colleagues</p> |

### 4.3 Quality standards for the measure concept „commercial field”

The following quality standards relate to vocational field-specific measure concept for vocational orientation with a focus on the commercial vocational field, which was developed by the Slovenian partner. The quality standards were also defined by the Slovenian partner.

#### a) Input quality standards

| No. | <b><i>Quality criterion</i></b> and its description   |
|-----|---|
| 1   | <p><b><i>Commercial sectors-specific know-how on digitisation</i></b></p> <p>The trainers should have in-depth knowledge about the effects as well as the trends of digitisation in the commercial sector</p> |
| 2   | <p><b><i>Practical commercial experience</i></b></p> <p>The trainers should have invaluable first-hand practical experience in the field of commerce</p>  |
| 3   | <p><b><i>Communication with employers in the commercial sector</i></b></p> <p>To ensure the most applicative practical experience, trainers should be in contact with employers in the commercial sector</p>  |
| 4   | <p><b><i>Participants know-how</i></b></p> <p>Participants should have at least a general knowledge about the commercial sector, its demands and options (job market, profiles)</p>                           |

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| 5 | <p><b><i>Familiarity with the digitized commercial job market</i></b></p> <p>The participants should have some experience with the commercial job market – knowing about search platforms, experience with digital interviews, profiling, digital headhunting etc.</p> |
|---|--|

## b) Process quality standards

| No. | <b><i>Quality criterion</i></b> and its description  |
|-----|--|
| 1   | <p><b><i>Involvement of actual employers in the commercial sector</i></b></p> <p>The measure should involve actual employers, active in the commercial job market, whose activity would increase the probability of achieving applicable, relevant results</p>   |
| 2   | <p><b><i>Actual examples from the commercial sector</i></b></p> <p>Trainers shall include up-to-date, contemporary know-how and inform participants using current examples from the field of commerce (including trends and future opportunities)</p>  |
| 3   | <p><b><i>Countering commercial market volatility</i></b></p> <p>The trainers should inform the participants about a wide variety of options, how to assess and manage the related risks with regard to commercial professions 7 the commercial job market because of the unpredictability of the commercial job market</p> |
| 4   | <p><b><i>Participant activity</i></b></p> <p>The measure has to be structured in such a way that the distinction between participants' activity and inactivity as they relate to the work process can be revealed</p>  |

## c) Output quality standards

| No. | <b><i>Quality criterion</i></b> and its description  |
|-----|--|
| 1   | <p><b><i>First step in the commercial job market</i></b></p> <p>The measure should connect participants with active employers in the commercial sector and creates points of entry</p>           |
| 2   | <p><b><i>Commercial work process insight</i></b></p> <p>Participants should gain invaluable insight into the commercial work processes and their related professional profiles</p>               |
| 3   | <p><b><i>Digitisation in the commercial field</i></b></p> <p>Participants should acquire in-depth knowledge about the past, present and future digitisation effects on the commercial sector</p> |
| 4   | <p><b><i>Digital literacy as it relates to commerce</i></b></p> <p>Participants have improved on their digital literacy as it relates to the commercial job market and work processes</p>        |

#### 4.4 Quality standards for the measure concept „health and nursing field”

The following quality standards relate to vocational field-specific measure concept for vocational orientation with a focus on the health and nursing vocational field, which was developed by the Spanish partner. The quality standards were also defined by the Spanish partner.

##### a) Input quality standards

| No. | <i>Quality criterion</i> and its description   |
|-----|--|
| 1   | <p><b><i>Number of participants</i></b></p> <p>The number of participants, who attend the fair is relevant when individual attention is requested</p> <p>The number should be limited per visiting group to max. 25 persons</p>  |
| 2   | <p><b><i>Requirements to the participants</i></b></p> <p>The participants who attend the fair do not need to have any knowledge about digitisation or any kind of training in digital skills</p>   |
| 3   | <p><b><i>Format of the measure</i></b></p> <p>The new nursing and health professions should be advertised in an appropriate manner</p> <p>The format of the measure should be created in such a way that the participants get to know the main aspects about health and care professions and digital aspects that come into play</p> |
| 4   | <p><b><i>Digital knowledge of the measure implementing specialists</i></b></p> <p>The specialists who implement the measure and support the participants must have knowledge of the digital changes in nursing and health professions</p>  |
| 5   | <p><b><i>Time frame</i></b></p> <p>The measure should be not longer than 3 days</p> <p>The time frame can be extended depending on the size of the fair</p>  |
| 6   | <p><b><i>Participants in the virtual fair</i></b></p> <p>The virtual fair should be open to everyone to participate and designed to be accessible to careers advisers, VO specialists and business people as well as students of different ages</p>  |
| 8   | <p><b><i>Access to the fair</i></b></p> <p>The access to the fair should be easy and created attractive for everyone</p>   |

## b) Process quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <b>Information on professions</b><br><br>The information on professions have to be adapted to the demand of those attending the virtual fair  |
| 2   | <b>Digitisation in the professions</b><br><br>The fair/measure should focus on health and care professions that have been influenced by digitization  |
| 3   | <b>Access to training companies</b><br><br>Access to companies should be made easier for the participants and the contact with entrepreneurs should be encouraged   |
| 4   | <b>Devison in different spaces</b><br><br>The nursing and health professions should be presented in different spaces to cover the vocational orientation  |
| 5   | <b>Information sources</b><br><br>The information sources should give at the fair respond to advice on the digitisation in nursing and health professions.  |
| 6   | <b>Workshops</b><br><br>The workshops should offer information and training in digital skills in nursing and health professions   |
| 7   | <b>Participating companies</b><br><br>The companies selected to participate in the virtual fair must offer nursing and health professions that have been affected by digital changes<br><br>It focuses on health and care professions that have been influenced by digitisation |

## c) Output quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <b>Objective of the measure</b><br><br>The objective should focus on changes in the digitisation of professions in nursing and health professions |
| 2   | <b>Companies</b><br><br>The companies in nursing and health professions have been the right ones to report on the digital changes in that sector  |
| 3   | <b>Information on digital changes</b>   |

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|   | The participating companies must be able to report on digital changes in professions in nursing and health professions                     |
| 5 | <b>Format</b><br><br>The virtual format should be created in such a way that it suitable for carrying out an orientation in a virtual fair |
| 6 | <b>Monitoring</b><br><br>Appropriate means should be used to monitor the measure / virtual fair  |
| 7 | <b>Adaptation</b><br><br>The measure should be adaptable to changes in the world of professions  |

#### 4.5 Quality standards for the measure concept „environmental field“

The following quality standards relate to vocational field-specific measure concept for vocational orientation with a focus on the environmental vocational field, which was developed by the partner of UK. The quality standards were also defined by the partner of UK.

##### a) Input quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <b>Trainer skills and expertise</b><br><br>The trainer should have suitable knowledge of environmental awareness, environmental expertise and basic skills of Digital Transformation within the sector  |
| 2   | <b>Participants</b><br><br>The measure can be delivered to young people looking to enter into the environment sector as well as those within the sector in need of re-training  |
| 3   | <b>Time frame</b><br><br>Timeframe for the delivery of the measure should be about 140 hours and may be delivered through different modes of input, this will include blended learning of Face-To-Face (Academic and Practical), industrial visits and On-The-Job-Training (where suitable) |
| 4   | <b>Environmental training provision</b><br><br>A Training to provide suitable environmental sector training that address current and future skills necessary to secure sustainable employment in the sector should be included in the measure   |
| 5   | <b>Environmental trainers qualification and expertise</b>   |

|   |   |
|---|---|
|   | The measure should be provided by qualified Teachers/Trainers with a suitable expertise within the Environmental sector with a basic knowledge of digitisation within the sector  |
| 6 | <b>Digital training provision</b><br><br>Trainers should have a broad understanding of the Digital Technology and aspects of digitisation within the Environmental sector and provide practical examples within the training content, use of videos and industrial visits |

## b) Process quality standards

| No. | <b>Quality criterion</b> and its description  |
|-----|---|
| 1   | <b>Objective of the measure concept</b><br><br>The general objective of measure concept is to get to know the sector by development of skills to meet the digital challenges across the environmental sector within various employment pathways   |
| 2   | <b>Content of the measure</b><br><br>The following key areas should be covered: an introduction to sustainability; food; water; energy and waste management   |
| 3   | <b>Structure of the measure concept</b><br><br>The measure concept should offer room for flexibility with regard to the environmental qualifications and it allows an individual approach of individual measures for each young person and experienced operators<br><br>The measure concept can be supplemented by further qualifications   |
| 4   | <b>Environmental training objectives</b><br><br>To reach the environmental training objectives two learning outcomes have to be developed 1: Review and evaluate own performance in specified environmental issues. Outcome 2: Investigate digital challenge within careers within the environment/recycling sector according to a given brief  |
| 5   | <b>Environmental performance criteria and knowledge</b><br><br>In the framework of the measure should be identified and reviewed own strengths and weaknesses in relation to specified environmental skills<br><br>Digital development evidence from a variety of sources on specified careers within the environment sector should be gathered<br><br>The gathered information should be used to evaluate digital challenge on a selected career in relation to environmental/recycling skills |
| 6   | <b>Sector specific content</b>  |

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| <p>Practical transfer/development of professional environmental/sustainability skills and abilities, theoretical and digital skills should be acquired in order to work in the general context of the environmental profession. In addition, core and META skills should compliment environmental specific training</p> |
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### c) Output quality standards

| No. | <b>Quality criterion</b> and its description   |
|-----|--|
| 1   | <p><b>Measure concept content and conditions</b></p> <p>The main content of the measure that was developed to suit vocational orientation for specific environmental, recycling type professions should be observed/respected</p>  |
| 2   | <p><b>Measure performance criteria</b></p> <p>The activities (teaching) should be planned and delivered in such a way that they reflect and ensure the delivery and outputs of the performance criteria</p>  |
| 3   | <p><b>Full measure training content</b></p> <p>To achieve the full measure and certification all aspects of delivered content should be completed: specific training, core skills and META skills training</p>   |
| 4   | <p><b>Partial qualification</b></p> <p>Individual modules within the environmental measure may be delivered as stand-alone units to suit specific participants. Single parts should be recognised through a single or partial unit certification</p>   |
| 5   | <p><b>Milestones</b></p> <p>It is a requirement for training providers to maintain records and provide reports about the learners/trainees on the training programme. Requirement relates to records that must be retained for compliance with certification and qualification regulations dependent upon funding and local educational authority requirements</p> |
| 6   | <p><b>Increasing digitisation within the environmental sector</b></p> <p>Participants should have a solid training and understand of the influences and the impact throughout the environmental sector of digitisation</p>   |



## Outlook

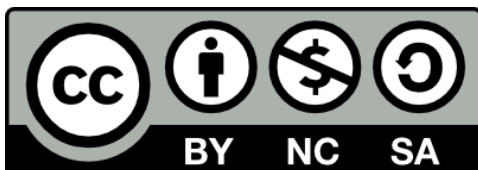
The five vocational field-specific measure concepts for vocational orientation are different kind of concepts, but they were all designed in such a way that they can be adapted to other vocational fields. In this case the structures should be retained, while the content or contacts would have to be adapted according to the vocational fields. The concepts also offer enough leeway to adapt them to the framework conditions of different implementing institutions. However, in order not to change the basis of the concepts and the fundamental structures and objectives, the above-mentioned quality standards for each concept as well as the general quality standards formulated in Chapter 3 must be observed.

If there are possible overlaps between the general quality standards and the specific quality standards, the priority should be given to the specific standards in relation to the five newly developed VO measures. However, the general quality standards can also be applied to other VO measures and should apply to them in order to make them more comparable in the future. This also ensures that the VO measures are qualitatively better. In this way, vocational orientation can be implemented even more professionally in the future and the VO specialists can be supported in the implementation of VO measures, since they have an orientation through the underlying quality standards for the implementation of VO measures. The quality standards provide them a framework for the implementation of VO measures and, in addition to other criteria, they can also be used as a benchmark for the controlling of the success.

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