



**Benchmarking for Quality Assurance
in Apprenticeships and Work-based Learning**

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Output 1:

Benchmarking Methodology (A4)

IDEC

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1 Overview of the benchmarking tool

The benchmarking tool consists of

- a benchmarking questionnaire with statements
- a database with the filled questionnaires,
- an algorithm for calculation of averages and ratings,

2 Main elements of benchmarking methodology

2.1 General

The benchmarking methodology of BEQUAL.app aims to support European educational institutions and companies in their attempt to develop quality assurance in work-based learning. BEQUAL.app will provide a benchmarking tool, in which educational institutions and companies will compare their performance to core quality criteria, against their peers in same country or in other countries.

BEQUAL.app targets educational institutions and companies that hosts students, such as trainees, interns and apprentices. The users of the tool will be quality managers, general managers, training managers, etc. of their organizations that have a thorough knowledge of own quality processes.

The benchmarks will be derived from the comparison of performance of the users, thus a quantitative rating system is required.

The benchmarking questionnaire will be a quick one that is to ensure that we will get a critical mass of users to fill it in and have credible and reliable benchmarking data. The results of the questionnaire will be stored, but not used for benchmark purposes, unless a critical mass of responses have been gathered to allow comparisons.

2.2 Structure and content of benchmarking questionnaire

The benchmarking questionnaires for educational institutions and companies are based on the quality assurance frameworks for educational institutions and companies respectively. The frameworks have been developed, in the framework of Bequal.app project and are based on (see A2 & A3):

- EQAVET framework (Council of the European Union, 2009) and WBL Building Blocks
- Recommendation of the Council of the European Union (2018) on a European Framework for Quality and Effective Apprenticeships
- Quality Standards – ETUC Quality Framework for Apprenticeships and Work-based Learning (2013)
- European Quality Charter on Internships and Apprenticeships (Youth Forum)
- Other sources

The partners analysed the policy recommendations and quality standards developed by social partners and developed two different frameworks: one addressing educational institutions and one addressing companies.



The benchmarking questionnaires are based on the quality assurance frameworks. The quality criteria have been phrased as statements that the users have to review and assess, on a 4-point Likert scale.

2.3 Further considerations

Language

The online benchmarking tool should be available at least in the languages of the partners countries, to facilitate access to the target group. The different language versions should not be just translations of the original English version of the tool, but instead adaptations of the tool in the national context. The language versions will have the same questions for reasons of comparability, but translated in such a way that they correspond to particular national situations. The language used should be kept simple as possible and avoid jargon.

Privacy

The tool will be filled anonymously. Each user should register first and with this account can access only his/her questionnaire. All users and visitors can access aggregate and statistic results.

3 Usage scenario

The benchmarking tool is accessible only to registered users. A first time visitor needs first to register and then to login using his/her login name and password.

The user fills in the questionnaire and then gets the individual report, showing the performance of the educational institutions and its position compared to the other institutions.

The system saves the user replies to the questionnaire and the user can fill in again the questionnaire and get a new report. The user may also get a new report, without filling the questionnaire, just because the system has more benchmark data and the rating may change.

The benchmarking tool needs a critical mass of responses, in order to be launched and provide reliable benchmarking data. The critical mass has been set to at least 20 in each country.

4 Reports

The system generates a number of reports after the usage of the benchmarking tool.

- Benchmarking report

It provides the Statistics from all users. It is accessible to everybody, including visitors. For each quality criteria, the report presents in a bar chart the users' responses in the Likert scale.

- Individual report

It provides the overall score of the user (educational institutions or company), it gives position of the user among overall users and position among its own country. It is accessible only to the registered user.

The individual report presents also the three strong points and the three week points of the user, when compared to other users in the same country or in all countries. The algorithm for the calculation of strong and week points is presented below.



4.1 Calculation of strong and weak points

For each criterion we calculate the distribution of the replies of all users (educational institutions or companies)

Question i ($i=1$ to N : total number of questions)

Reply	Percentage
Not at all true	$a(i)$
Somewhat true	$b(i)$
Mostly true	$c(i)$
Completely true	$d(i)$
Total	100

The user j ($j=1$ to M : total number of providers) that replied ‘Not at all true’ in question i is at the bottom $a\%$ of all centres, while the one that replied ‘Completely true’ is at the top $d\%$.

For a specific user (j), the three strong points are those that have the minimum $d(i)$ and the three weak points have the minimum $a(i)$ of all questions.

If there are less than 3 d , strong points are the minimum $c(i)$. Weak points are $b(i)$ if there are less than 3 a .

Questions	Training centres						Distribution of replies			
	1	2	...	j	...	M	a	b	C	d
1	d	a		b			$a(1)$	$b(1)$	$c(1)$	$d(1)$
2	c	b		c						
3	d	b		c						
...										
i	c	b		b			$a(i)$	$b(i)$	$c(i)$	$d(i)$
N	c	B		b						

Results of strong and weak points of a centre are calculated each time the user asks for a report.