Report

Q METHODOLOGY [ADAPTED]

L&A- [LEARN AND APPLY]
GO FOR VET EXCELLENCE AND QUALITY

ERASMUS KA210 PROJECT

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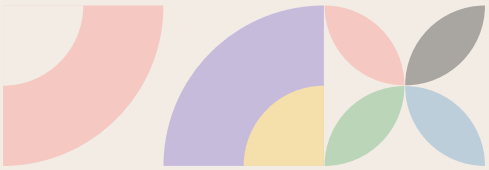

Title: Q Methodology [adapted] - [Technical Report]
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INTRODUCTION

As part of the L&A- [Learn and Apply] Go for VET Excellence and Quality project funded by ERAMUS+, an adapted version of the Q Methodology was applied.

The Q Methodology was developed in the 1930s by William Stephenson, an English physicist and psychologist interested in studying subjectivity in any everyday situation. It was later further developed by Steven Brown in the USA, combining the strengths of qualitative and quantitative methodologies. This methodology is based on a study of perception, i.e. according to the representations that are constructed of reality, and not according to reality itself (Boros, Visu-Petra & Cheie, 2007). The Q methodology therefore explores the processes of constructing individual representations of reality based on experience. As we are talking about analysing perception, the sample is usually small, between 20 and 40 participants.

For the study of perception in this project, an adaptation of the methodology was created. Five rounds were planned. Each round analysed an area of relevance to the study of quality and attractiveness in VET. For each of the rounds, 10 sentences were selected (Q-sample) containing, on the one hand, beliefs and stereotypes, and on the other, the reality experienced and the advantages of VET.

The P-set (research participants) was made up of around 40 people who remained throughout the 5 rounds. The selection of participants took the assumptions of the study into account. Thus, each partner could invite up to 7 experts, one from each group: student, alumni, teacher of Technological Training, teacher of Basic Training, representative of organisations receiving trainees, employers and/or university professors. The application of the Q methodology presupposes the presence of participants in a round table format. Given the specificities of the project and the geography of the participants, the various rounds were applied in a meeting via Teams.

The Q-grid (scale) selected was between -4 and + 4 and the Q-sort (instrument that will force the participant to classify the order of importance of the answers) was made available via Microsoft Teams. The procedure adopted involved making the sentences available and asking the participants to rank them in order of agreement. The 5 sentences with the most agreement were made available again. From these, the 3 sentences with the highest agreement were extracted. The rounds were repeated until only one sentence was found that was the most relevant to the group of participants. This strategy was used in all the rounds.

This document presents the main conclusions of the study.

1ST ROUND

VET importance

The first theme to be analyzed in the series of rounds of application of the Q methodology was 'VET importance'.

This round counted with 37 participants, distributed by countries, as follows:

Figure 1 - Country of the participants

Regarding the role of each expert, the following figure presents the distribution of respondents.

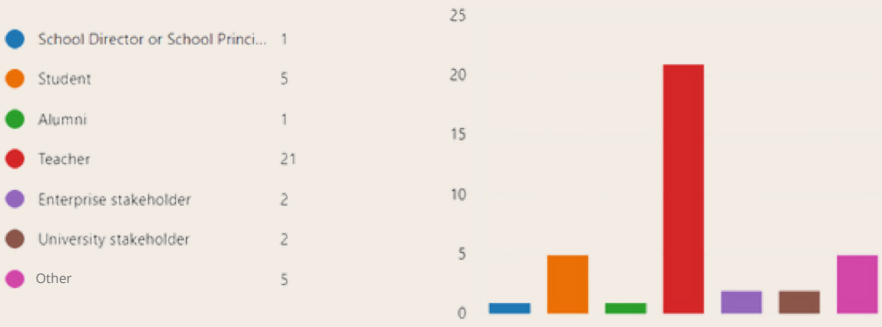

Figure 2- Role of the participants

APPLICATION

As already mentioned, in each round, according to the selected theme, 10 sentences were chosen. Those were the ones that we considered important to represent the object under study are presented:

1. Attending a VET facilitates integration into the labor market.
2. VET are aimed at students with cognitive difficulties, socialisation difficulties and behavioral problems.
3. VET provide a set of skills that come from updating and are a valuable contribution in the labor market.
4. VET by enabling the acquisition of more specific and work-oriented skills address the lack of useful and relevant skills for the labor market.
5. VET are an important instrument for the social and economic progress of a country.
6. VET offer an alternative educational pathway for young adults who want to grow professionally.
7. VET provide skilled labor needed in all sectors of the economy.
8. The quality of VET is questionable.
9. There is a huge mismatch between the content taught in vocational courses and the needs of the labor market.
10. Attending a VET facilitates equal opportunities (male/female).

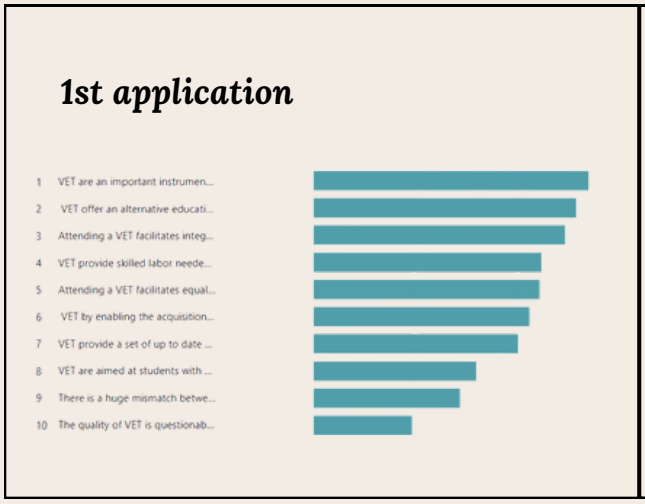

Figure 3 - #1st Round - 1st application

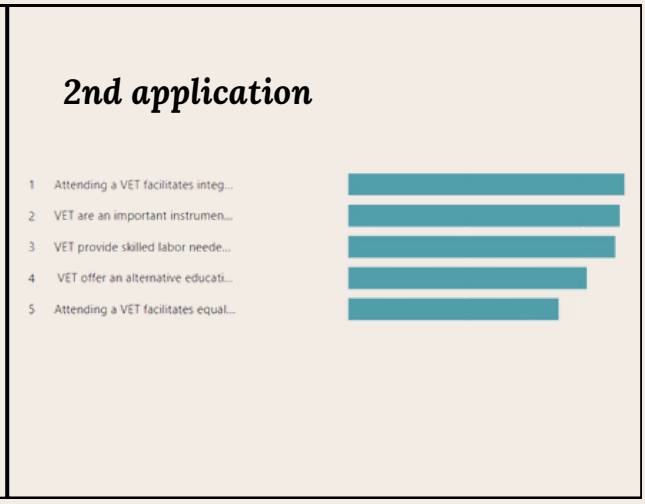

Figure 4 - #1st Round - 2nd application

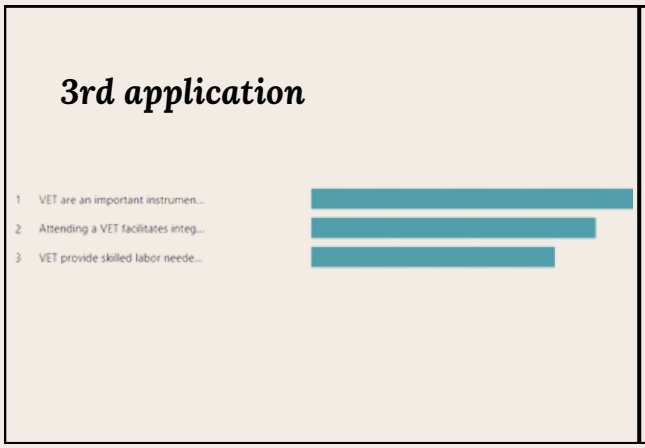

Figure 5- #1st Round - 3rd application

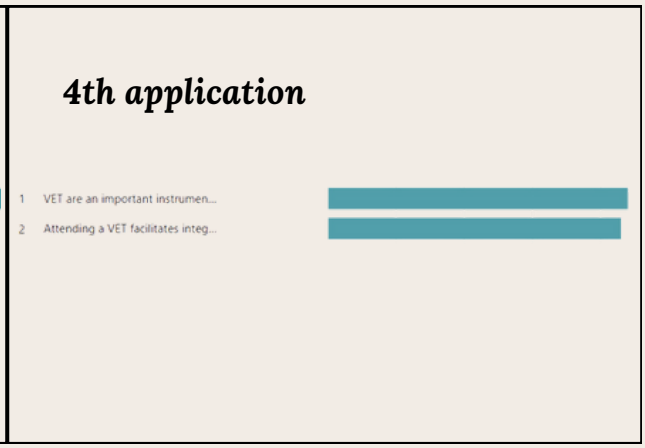

Figure 6- #1st Round - 4th application

The sentence that had the highest level of agreement within the sample is:

VET are an important instrument for the social and economic progress of a country.

2ND ROUND

Socio-cultural training

In the second round, with the presence of 29 experts, the perception of the sample on the socio-cultural area was analyzed, distributed by countries, as follows:

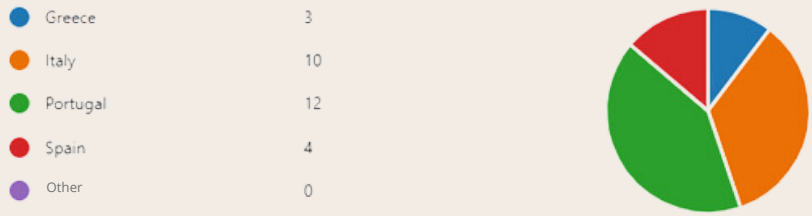

Figure 7 - #2nd Round - Country of the participants

Regarding the role of each expert, the following figure presents the distribution of respondents.

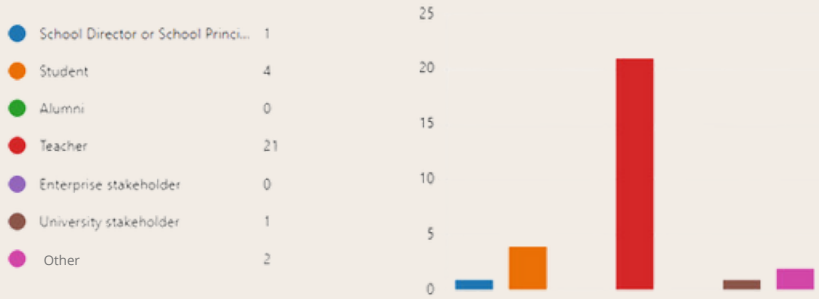

Figure 8 - #2nd Round - Role of the participants

APPLICATION

In this second round the selected sentences were:

1. Socio-cultural training promotes the necessary skills to entry into the University or labor market.
2. Socio-cultural training contributes to the construction of the students' personal, social, and cultural identity.
3. Socio-cultural training subjects are geared towards the needs of VET students.
4. In socio-cultural training, the time allocated to sociocultural subjects is too long.
5. Socio-cultural training promotes the development of the skills required by educational policies.
6. Socio-cultural training articulates with the other areas as a support for learning.
7. Socio-cultural training prepares the students to be critical thinkers and active citizens.
8. Socio-cultural training prepares students to be able to communicate clearly and persuasively for a variety of audiences.
9. Socio-cultural training is adequate to the aims and objectives of each VET course.
10. Socio-cultural training is fundamental for the integration of new students in VET courses.

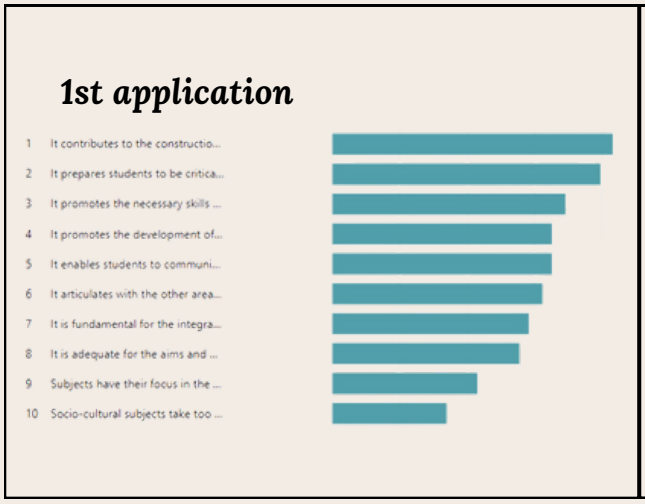

Figure 9 - #2nd Round - 1st application

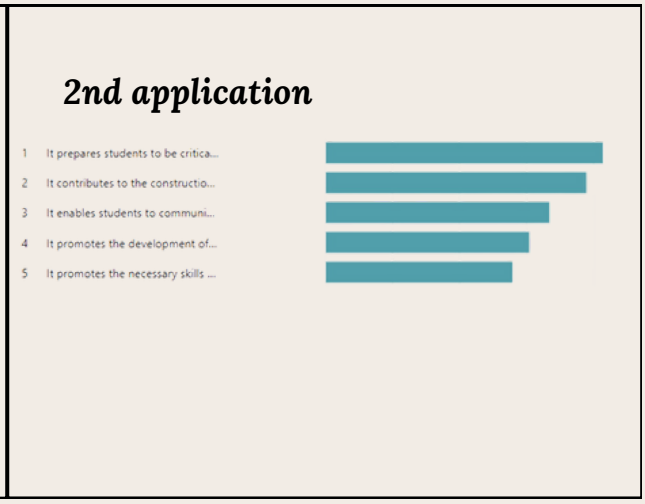

Figure 10 - #2nd Round - 2nd application

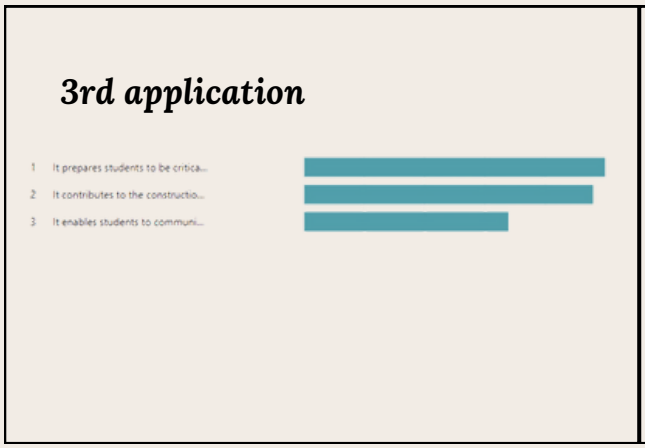

Figure 11- #2nd Round - 3rd application

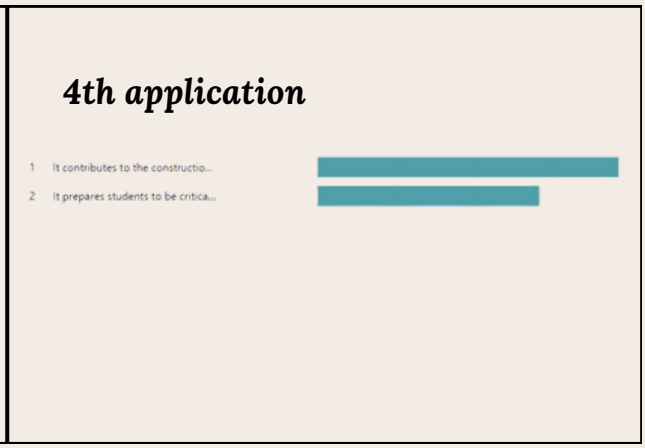

Figure 12 - #2nd Round - 4th application

The sentence that had the highest level of agreement within the sample is:

Socio-cultural training contributes to the construction of the students' personal, social, and cultural identity.

3RD ROUND

Scientific training

The third application of the Q Methodology was in Granada, with the physical and online presence of 31 experts, distributed as follows:

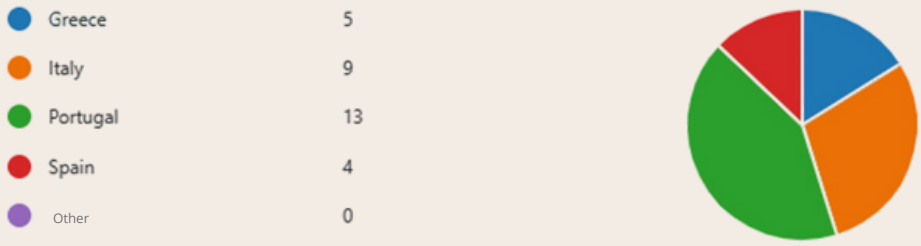

Figure 13 - #3rd Round - Country of the participants

Regarding the role of each expert, the following figure presents the distribution of respondents.

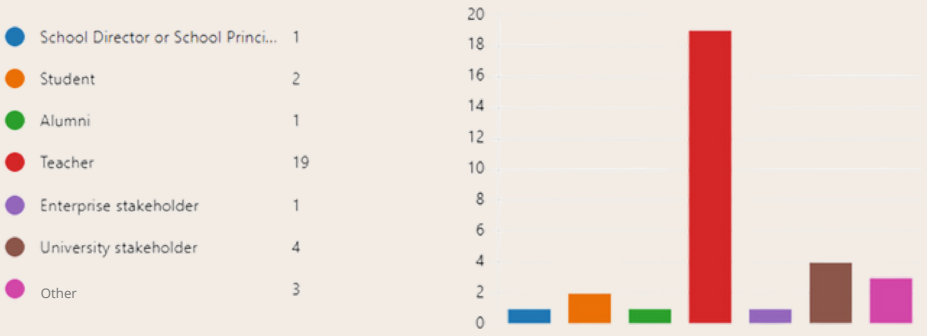

Figure 14 - #3rd Round - Role of the participants

APPLICATION

In this third round the selected sentences were:

1. Scientific training helps to develop critical thinking skills necessary to analyze and solve complex problems.
2. Scientific training works on the needed skills to understand and keep up with rapid technological advances for different sectors (enterprises, universities, e.g.)
3. The teachers of the scientific training have appropriate pedagogical training for the target group.
4. Scientific training promotes evidence-based decision-making, enabling individuals to make informed choices and avoid misconceptions or biases.
5. Scientific training helps individuals develop strong research and analytical skills, which are crucial for conducting experiments and gathering reliable data.
6. Scientific training encourages curiosity and a thirst for knowledge, driving individuals to explore and discover new areas of interest within their vocational fields.
7. Scientific training provides students with a solid foundation in scientific principles, enabling them to understand the underlying mechanisms and processes within their chosen industries.
8. Scientific training instills a sense of intellectual rigor and attention to detail, ensuring accuracy and precision in vocational tasks and projects.
9. Scientific training promotes a culture of continuous learning and professional development, as individuals recognize the need to stay updated with the latest scientific advancements in their fields.
10. Scientific training enhances individuals' problem-solving abilities, enabling them to develop innovative solutions to challenges within their vocational domains.

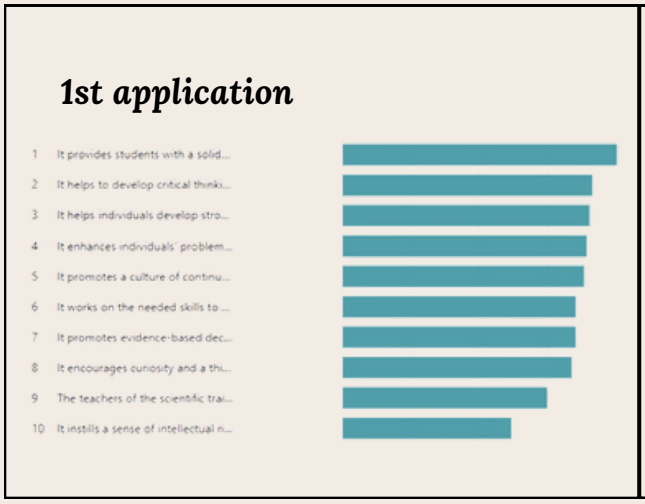

Figure 15 - #3rd Round - 1st application

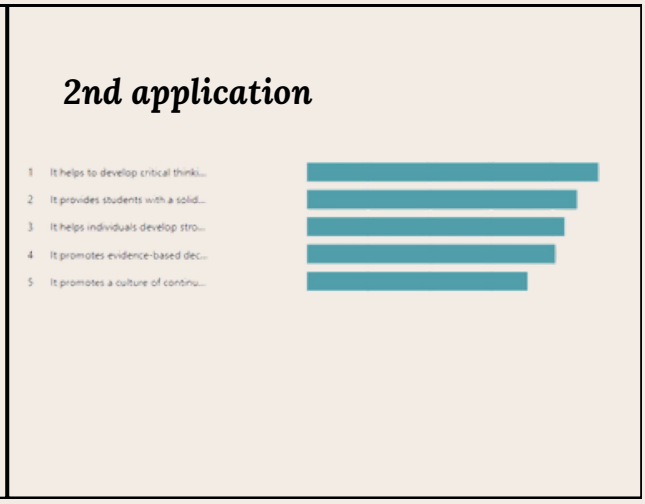

Figure 16- #3rd Round - 2nd application

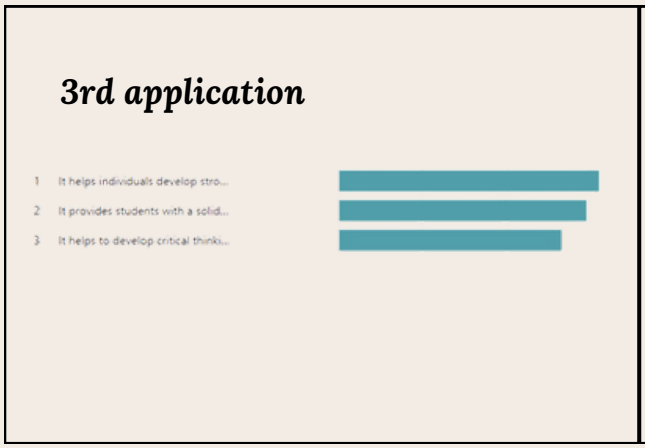

Figure 17- #3rd Round - 3rd application

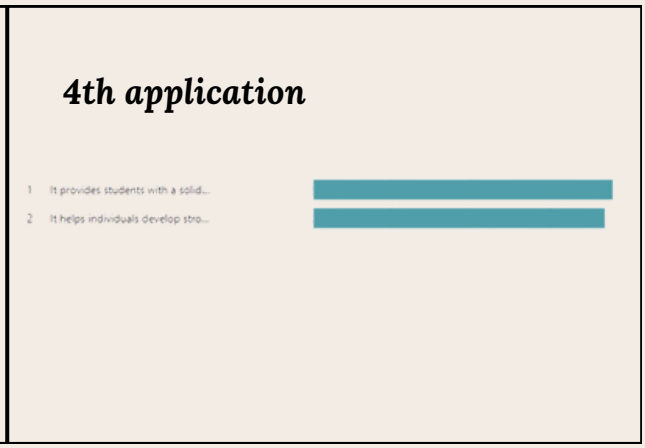

Figure 18- #3rd Round - 4th application

The sentence that had the highest level of agreement within the sample is:

Scientific training provides students with a solid foundation in scientific principles, enabling them to understand the underlying mechanisms and processes within their chosen industries.

4TH ROUND
Technological training

The fourth application of the Q Methodology was only online. There were 22 participants, distributed as follows:

Figure 19 - #4th Round - Country of the participants

Regarding the role of each expert, the following figure presents the distribution of respondents.

Figure 20 - #4th Round - Role of the participants

APPLICATION

In this fourth round the selected sentences were:

1. Technological training is crucial in preparing students for the labour market.
2. Technological training prepares students with the necessary skills and knowledge to address the needs of the market.
3. Technological training enables students to stay competitive in rapidly evolving industries.
4. Technological training enhances problem-solving abilities, critical thinking, and analytical skills, which are essential in today's digital world.
5. Technological training promotes adaptability and flexibility, enabling students to embrace and leverage emerging technologies.
6. Technological training encourages lifelong learning and continuous professional development.
7. Technological training promotes collaboration and teamwork, as often requires students to work together to achieve common goals.
8. Technological training opens doors to a wide range of career opportunities, particularly in high-demand sectors.
9. Technological training contributes to economic growth and competitiveness by developing a skilled workforce capable of driving innovation and productivity.
10. Technological training enables students to increase their employability prospects.

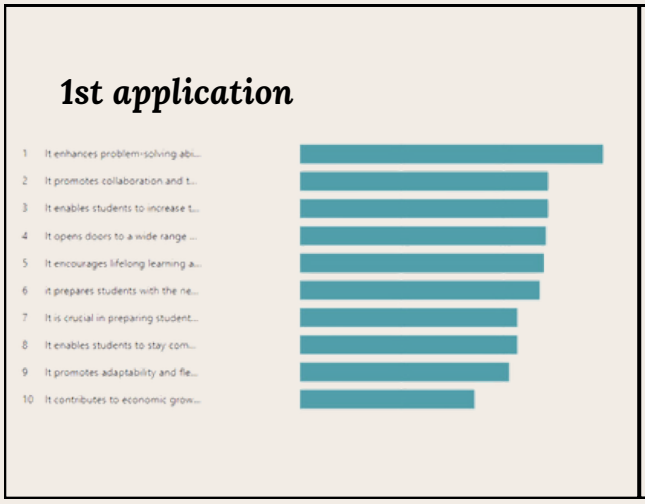

Figure 21 - #4th Round - 1st application

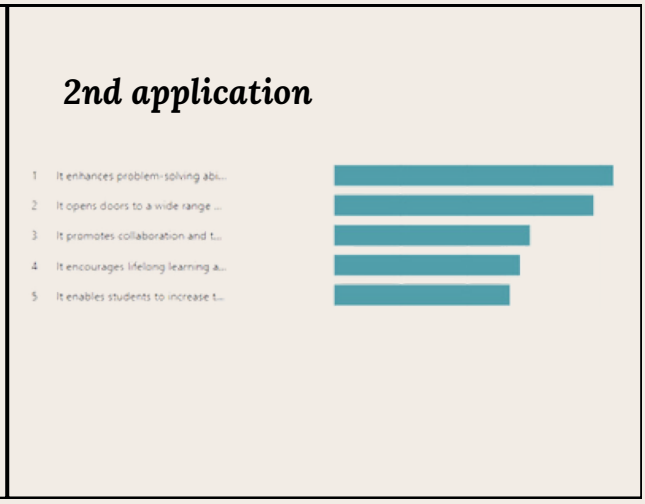

Figure 22- #4th Round - 2nd application

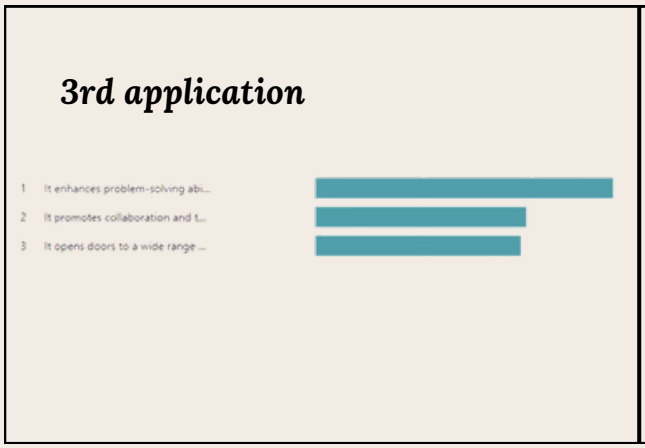

Figure 23 - #4th Round - 3rd application

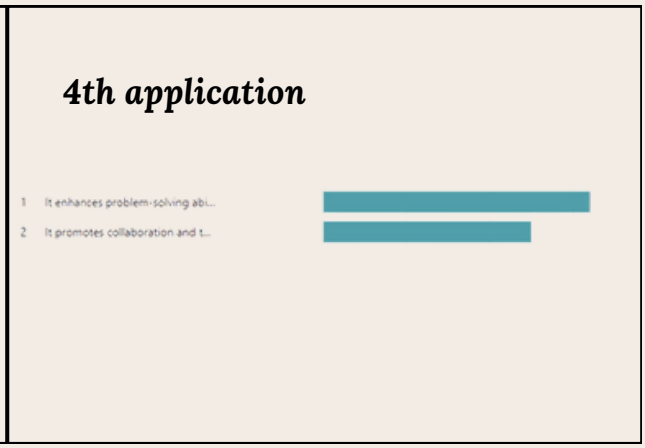

Figure 24 - #4th Round - 4th application

The sentence that had the highest level of agreement within the sample is:

Technological training enhances problem-solving abilities, critical thinking, and analytical skills, which are essential in today's digital world.

APPLICATION

In this fifth round the selected sentences were:

1. EQAVET is a one-size-fits-all approach and doesn't cater to the diverse needs and contexts of VET.
2. Certification is an elitist concept that favors certain individuals or groups over others.
3. Quality assurance and certification are unnecessary expenses that burden VET institutions financially.
4. Certification validates skills and qualifications.
5. Quality assurance builds credibility and trust.
6. EQAVET aligns training with labor market and with university and polytechnic education needs.
7. Quality culture encourages excellence and innovation.
8. EQAVET identifies areas for improvement in training.
9. Certification motivates providers to maintain standards.
10. Quality training promotes social inclusion and access.

5TH ROUND

Quality, Certification and EQAVET

The last round aimed to analyze the perception of the sample, consisting of 35 experts, on the topic of Quality, Certification and EQAVET, from the following countries:

Figure 25 - #5th Round - Country of the participants

Regarding the role of each expert, the following figure presents the distribution of respondents.

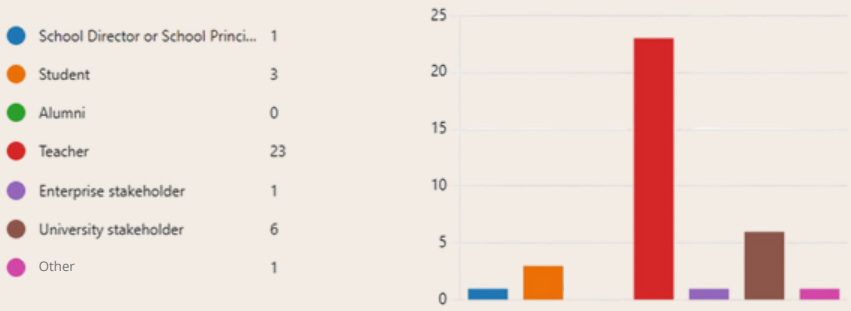

Figure 26 - #5th Round - Role of the participants

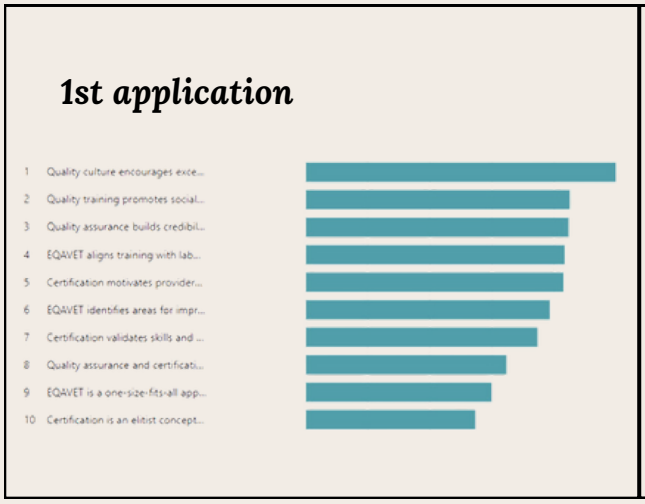

Figure 27 - #5th Round - 1st application

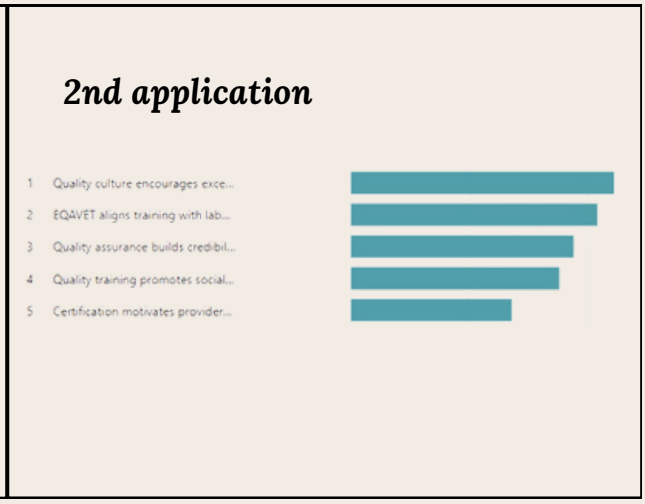

Figure 28 - #5th Round - 2nd application

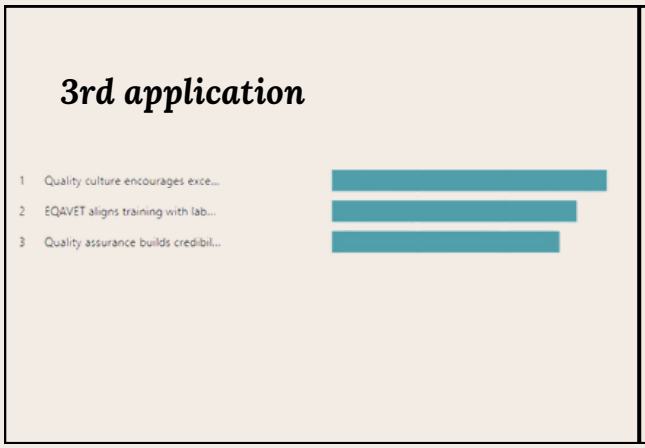

Figure 29 - #5th Round - 3rd application

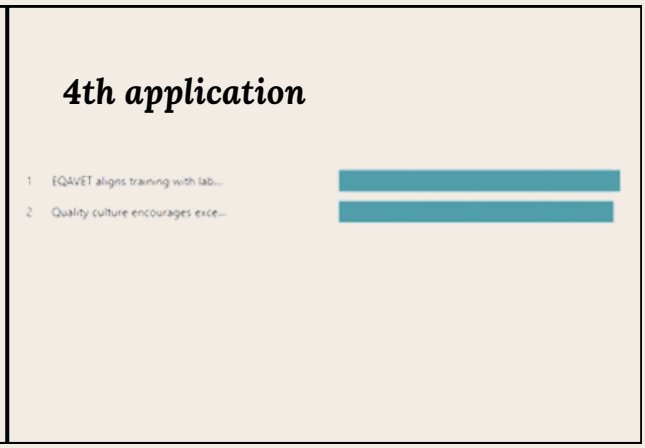

Figure 30 - #5th Round - 4th application

The sentence that had the highest level of agreement within the sample is:

EQAVET aligns training with labor market and with university and polytechnic education needs.

RESUME

VET are an important instrument for the social and economic progress of a country.

Socio-cultural training contributes to the construction of the students' personal, social, and cultural identity.

Scientific training provides students with a solid foundation in scientific principles, enabling them to understand the underlying mechanisms and processes within their chosen industries.

Technological training enhances problem-solving abilities, critical thinking, and analytical skills, which are essential in today's digital world.

EQAVET aligns training with labor market and with university and polytechnic education needs.

CONCLUSION

The adaptation of the Q Methodology was applied in 4 hybrid sessions and 1 online session (session 4). The hybrid sessions took place in the various countries that make up the network. In each session, the host country could invite its experts to join the in-person group to analyze the phrases selected for each of the topics.

The Q Methodology aims to assess the perception of a sample, previously selected, on topics under discussion, based on sentences considered relevant to the object under study.

This methodology is, by definition, applied in a roundtable format and in a face-to-face format. However, given the nature of the project, we decided to adapt it to a hybrid format. Windows Forms and the Order correct question type were the tools selected for this adaptation.

During 18 months, 5 applications of the methodology were carried out, aiming to reflect on 5 topics that, in the context of the candidacy of the Filipa de Vilhena Secondary School for EQAVET certification, were considered fundamental. From this reflection emerged the 5 statements that were presented.

As limitations of this study, we mention the fact that there is a large proportion of teachers relative to other represented groups; the fact that the number of experts was not stable per session, since the initial objective was having all experts participating in all rounds. We also present the limitation that this report only presents descriptive statistical data. For future studies, we leave the following suggestions:

- Balance in the number of experts;
- Expansion of the areas of study;
- Application of more in-depth statistical tests, namely factor analysis, crossing responses by country and by specialty;
- Complementing the results of this methodological application with other studies, namely, questionnaires, with similar questions.

Comissão Europeia

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