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ROI - MOB

Measuring the return on investment in VET mobility in the European Union

cleup



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Mobility in the 21st Century Europe: Challenging Factors

Mobility has helped young generations to understand and appreciate diversity on the *old continent* as a unifying rather than a divisive factor. It is an undeniable fact that for centuries, Europe lived at war with itself. Whether wars were in the name of God or the Sovereign or the Fatherland, Europeans fought over territory, ideology, religion, politics and greed. Two twentieth century world wars fought primarily on European soil, built walls of prejudices, intolerance and mistrust among entire populations culminated by the building of the Berlin Wall that divided Europe into two antagonist blocks.

The creation of a European Union (out of the European Coal and Steel Community) and Perestroika or Glasnost were two milestones in European history that brought prosperity, peace and development across many parts of Europe. With a United Nations firmly established and a Council of Europe determined to bridge the divides between people and cultures, the Europe of the 21st Century is the result of dialogue, communication, cooperation and confidence-building measures that secured territorial integrity, sovereignty and mobility of goods and human capital between small and big European Nation States.

The latter value, mobility, is at the heart of a European project ROI-MOB (return on investment through VET mobility) which the partner consortium led by IFOA has conducted under the scientific supervision of the University of Padua through a survey among learners, schools, companies and stakeholders at local, national and European level. When measuring the return on investment of European mobility, the project explored how the movement of human capital across Europe has added value to a better understanding of cooperation and confidence-building at an individual, corporate and group level.

In measuring the benefits and the negative impacts of mobility on participants, it is undoubtedly interesting to note that as a principle of education, mobility is an opportunity to establish a better Europe for future generations. Technology is progressing rapidly and becoming an influential factor in our lives. Aviation has made it easier to move from one country to another – from one continent to another. Travel has revealed new political, cultural, social and economic realities that in the

past were impossible to understand and achieve. Travel has broadened the mind of millions of people across Europe. And through travel we have realised that there is richness in diversity; that people have common values, aspirations and needs; that ideologies, religions, value systems have more in common than we ever expected.

In exploring this new reality, mobility has gradually become an educational tool *par excellence*! With the EU programme ERASMUS and later ERASMUS+, learners, teachers, workers and other stakeholders have the chance to learn from other systems, cultures and modes of living and working. This sharing of knowledge and experiences has revolutionised the way we think, act and speak. With information technology dominating our lives, the world has truly become a small village in which happenings everywhere have negative or positive impacts on everyone. Exchanges have improved personal skills, professional competences, raised social expectations and forged new relationships at various levels of human interaction. In one word, mobility has changed the face of the Europe of the 21st century! On the one hand we have the privilege of interacting in real-time and across cultures and on the other we may grow sceptic about this openness that could threaten security of our jobs, our values and the traditions that have held societies together.

It is for this purpose that if we want a valuable return on investment through mobility then we have to ensure that mobility becomes a principle of education that cuts across all sectors, all disciplines, all learning processes and all qualifications. Technology has made it easy for all to be mentally mobile through smart phones, internet and computers. However, this is not enough. Virtual reality is computer-generated but not real. Education, the way Jean Jacques Rousseau interpreted it sought to underline the fact that nature (the real world) plays a fundamental role in educating the child. Later on Emmanuel Kant sought to focus the attention of policy-makers on the value of reason as a determining factor that distinguishes the man from any other living creature.

Today, the use of reason and the context of nature have a different connotation and a challenging impact on the learning process. While robotics and artificial intelligence are centre-stage in Industry 4.0, human intelligence and natural reason are increasingly becoming the new paradigm to guarantee that humans remain human and machines remain mechanical objects at the service of human beings.

In this context, vocational education and training has a platform which few other sectors in education can offer. Vocational and professional education and training (VPET or TVET) has at its foundation, work-based learning. Most of the qualifications in VPET are industry-driven but backed by a structured process to learn basic skills, attitudes and behaviours that most employers seek in their employees. In this sense, it is a holistic approach to learning. It aspires to create wise-hands; persons who can synergise their mental and physical faculties in harmony with each other. In doing so, experiencing different cultures and working and learning experiences adds enormous value to a person's formation. It is therefore imperative that mobility should permeate all learning processes and that it

becomes a compulsory requisite for acquiring a qualification. People who have had experiences in other cultures and systems are more open-minded, tolerant and respect diversity and accommodate change. These are the new values in the labour market of today and more importantly those of tomorrow.

In work environments in which machines will probably supersede human capital, openness to change, to learning new knowledge, skills and competences will increasingly become the only way to secure a job, experience upward career moves and a quality of life during and after the working years. Mobility is therefore the key for survival in a world dominated by technology, change, innovation and a constant cry for sustainability. Teachers, learners, employers, policy-makers, researchers and decision-makers are duty bound to embrace mobility as a value-added tool for competitiveness, productivity and service provision across all sectors of society.

ROI-MOB is therefore an eye-opener for policy makers. It reveals that investing in mobility is advancing human capital to a higher level of social and economic participation and securing human values in the use of technology and a more serene co-existence with artificial intelligence. Nothing is more valuable, creative, unpredictable and innovate than human interaction. Mobility provides a wider spectrum of diversity when engaged in such activities. It is this engagement that will make living in the next decades more humane. The biggest challenge to human beings will be artificial intelligence that is phenomenally much more mobile than human being themselves. Balancing this phenomenon with an education enriched by mobility and hands-on experiences among human being is a challenge which needs to be addressed sooner rather than later.

It is therefore of great comfort to witness that an old education institution such as the prestigious medieval University of Padua (1222), my own alma mater, is in the forefront in exploring how the phenomenon of mobility will impact Europe as a political entity and Europeans as makers of their own future. The study which has had the contribution of IFOA, EfVET and other organisations is a wake-up call for action and implementation of measures to give learners and workers the chance to experience learning and working in real diverse cultural environments and systems.

The European winds of change of the post-war period and the late 1980s continue to bring new hopes for an enhanced *common European home.*

Joachim James Calleja
President EfVET

The project ROI-MOB

Rationale

ROI-MOB is a 36-months project funded in the framework of Key Action 2 – Strategic Partnerships of the Erasmus+ Programme of the European Union.[1]

The Education and Training 2020 Strategy wishes for a challenging 6% rate of VET students involved in a mobility experience abroad. ROI-MOB springs from the idea that quality can increase quantity. But what is quality?

All people say work experiences abroad are useful, enriching, favour employability and development of one's skills, etc.. What are such statements based upon? Are there any studies or statistics about that declared worthiness, or better indicators to describe it and methods to measure it, in order to search for it from the very inception of mobilities and assess it downstream, to improve quality of offer, attractiveness to participants and companies, and to provide data to better focus mobility policies on EU territories?

The topic is relevant, considering that in 2014 Erasmus+ KA1 VET co-funded over 3.000 projects, involving over 126.000 students, of which over 66.000 in company training, worth over 264 million Euros.

The topic is also a complex one (mobility is useful…to whom? students? companies? "the economic system"?... should usefulness be measured as to personal training and development? employability? career perspectives? salary? overall "system" competitiveness?) and impacts also on non-technical, rather social fields (families are involved, as well as psychology, soft- and cross-skills, etc.).

Recent and accurate researches are available on the higher education side, especially regarding the Erasmus programme. However, it looks like no up-to-date study and statistics are available about the "Return on Investment" in VET mobility, nor apparently did anybody try to describe it with a single value, able to represent, with proper weights, the range of dimensions and factors affecting it.

[1] Grant agreement no. 2016-1-IT01-KA202-005396. Start date: 1.9.2016. End date: 31.8.2019.

Key messages

In the above-mentioned scenario, ROI-MOB partners believe that:
- European mobility is a key factor for the success of VET in the present economic and social context.
- The success of European VET mobility is not just a feeling, nor does it relate only to emotional factors: precise indicators demonstrate it.
- Knowledge and usage of such indicators allow design, implementation and exploitation of more effective and efficient mobility experiences, better fitting to the need for personal satisfaction and employability expressed by participants, for added value expressed by companies, for cultural and social growth expressed by the wider community.

Aims

This project aims at identifying and testing indicators suitable to measure the benefits brought by EU VET mobility (especially for 19+ years old participants, and EQF levels 4 and higher), compared to the 'investment' made by involved players (participants, schools and training centres, companies), by investigating affecting factors and devising methods and tools for turning them into success factors.

Its objectives are:
- increasing quality in learning mobility;
- attracting more participants to EU mobilities;
- attracting more companies available to host EU mobilities;
- supporting policies for mobility both at institutional and at provider/intermediary organisation level.

Partners

ROI-MOB his been developed by a strong Consortium, gathering eight partners from five European Union countries:
- I.F.O.A. – Istituto Formazione Operatori Aziendali – Training and employment agency of the Italian Chambers of Commerce, based in Reggio Emilia, Italy. Private, not for profit, leads the Consortium.
- Regione Emilia-Romagna – Directorate General for knowledge economy, labour and entrepreneurship – Regional Authority, decision-maker for VET and labour policies, based in Bologna, Italy. Public institution.
- Università degli Studi di Padova – Department of Statistical Sciences – Scientific and methodological supervisor, based in Padova, Italy. Public Higher

Education Institute.
- Arbeit und Leben Hamburg – VET provider and mobility agency, based in Hamburg, Germany. Private, not for profit.
- Hamburger Institut für Berufliche Bildung (HIBB) – Independent management agency of the Hamburg Ministry of Schools and Vocational Education, based in Hamburg, Germany. Public institution.
- International Consulting And Mobility Agency S.L. – VET and mobility provider, based in Sevilla, Spain. Private body.
- Euroyouth – Project management agency and mobility provider, based in Lisboa, Portugal. Private body.
- EfVET – European forum for Technical Vocational Education and Training – European network of VET providers, based in Brussels, Belgium. Private NGO, not for profit.

Activities

The project started collecting data from different stakeholders in partner territories: Erasmus+ VET National Agencies, VET providers, companies and associations, students, etc..

Collected data set the baseline for the definition of tentative performance indicators for the measurement of the ROI of EU VET mobility. Based on such indicators, partners planned and run a broad investigation round, actively involving a sample of over 1.500 stakeholders, and tested indicators on on-going mobilities.

Collected data have then been analysed, indicators weighted and conveyed into a single, composite, statistical figure, and outcomes presented as a comprehensive system of measurement. A final consultation round among stakeholders allowed for assessment and adjustment.

Deliverables

1. A survey, documenting factors that are perceived as drivers to EU VET mobility usefulness by stakeholders.
2. A set of indicators for measurement of "return on investment" in EU VET mobility.
3. An algoritm to measure the "return on investment" of EU VET mobility in partner territories and organisations.
4. This book, collecting all the above and offering guidelines to replicate processes and measures on one's own, plus recommendations for mainstreaming findings into mobility policies either at provider and at institutional level.

All deliverables, plus further information, can be found on the project website at: www.roi-mob.eu

Luca Boetti
IFOA - Project manager

Executive summary

This book is the final output of project "Measuring the return on investment from EU VET mobility – ROI-MOB", co-financed by the Erasmus+ Programme of the European Commission through the Italian National VET Agency INAPP.

The worthiness of EU learning mobility experiences is broadly recognised. The usefulness of VET mobility, especially when associated with work experiences, is even more strongly acknowledged. The well-known strategic framework for European cooperation in education and training "ET2020" declares that mobility for learners, teachers and teacher trainers is "an essential element of lifelong learning and an important means of enhancing people's employability and adaptability".[1] The 2012 Joint Report of the Council and the Commission on the implementation of ET2020 states that "mobility strengthens Europe's foundation for future knowledge-based growth and ability to innovate and compete at international level. It strengthens peoples' employability and personal development and is valued by employers"[2].

Many data are available regarding the impact of mobility in higher education, especially university. Very few information, on the opposite, is there regarding Vocational Education and Training. Available figures mostly relate to assessing participant satisfaction, logistics, etc., or to structural data about the Erasmus+ Programme (participants, most chosen countries and sectors, and so on). Participants fill in evaluation forms for the Mobility Tool, companies somehow witness acquired skills, but seldom the actual 'return' is assessed in a non-emotional way and compared to the 'investment' made in terms of time, engagement – including

[1] Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020')" (2009/C 119/02). Official Journal of the European Union, C119(52), 28 May 2009.

[2] 2012 Joint Report of the Council and the Commission on the implementation of the Strategic Framework for European cooperation in education and training (ET 2020) 'Education and Training in a smart, sustainable and inclusive Europe' (2012/C 70/05). Official Journal of the European Union, C70(55), 8 March 2012.

the financial one – by learners (and their families), sending and receiving organisations, both schools or training centres and companies.

Hence, either those data are dated, or they are the result of surveys focussing more on effectiveness (impact) than on yield (ratio effectiveness/efficiency).

ROI-MOB aims at putting some order in the above matters, by identifying and testing some indicators, suitable to measure the return on investment (ROI) in EU VET mobility, especially for 19+ years old participants, and EQF levels 4 and higher, investigating affecting factors, and devising methods and tools for turning them into success factors.

This book presents in detail the process, tools and findings of ROI-MOB. It describes the composite statistical indicator of the return on investment in EU VET mobility, how it was conceived and built, what it is for, how it can be used.

Its content is meant to offer a tool for better understanding features, complexity, but most of all advantages of VET mobility to all categories of actors involved. More, it provides for a method to monitor and self-assess on-going and future mobility actions, to plan future projects, to carefully select partners. In other words, to improve quality.

For sending organisations, it also stands as an instrument to increase attractiveness towards potential participants, their families, companies: it shows pros and cons, factors favouring and obstacles discouraging mobility, plus ways to work the latter around.

Last but not least, this book can support institutional stakeholders in assessing effectiveness, efficiency and impact of mobility actions, as well as in programming policies for mobility and lifelong learning at local, national and even European level.

Chapter 1 describes the research and the survey aimed at defining through an algorithm and quantifying through a set of direct surveys an indicator representing the both positive and negative, complex, short-to-medium term effects of European VET mobility. A preliminary survey, carried out among 70 privileged witnesses (i.e. representatives of groups of stakeholders, or of institutions) helped defining factors affecting the positive or negative perception of mobility by the three target categories identified by project partners: participants (encompassing students, apprentices, learners in dual tracks – and their families), schools and training centres at upper secondary and post-secondary level, companies. The second and third categories include either sending and receiving/hosting organisations.

Results of such preliminary round were used to build three questionnaires, one by category. After two pilot rounds of data collection simulation, the questionnaires, written in the four national languages (Italian, German, Portuguese, Spanish) of the project, plus English, were administrated to over 5.000 potential respondents, through a Computer Assisted Web-based Interviewing (CAWI) system, from March to August 2018. The rate of response was good, about 31%, corresponding to 1.545 valid questionnaires collected. Downstream this broad consul-

tation, a further survey was carried out on a fourth category of actors, representing various local, national and European institutions. Their role was of key-witnessing the quality of the VET mobility phenomenon, commenting on its functioning and suggesting possible adjustments and policies to improve the future Programme successor to Erasmus+.

Chapter 2 comments about the mobility experiences described by respondents. After a short introduction to VET mobility, a 'typical' VET mobility experience is examined, from a number of viewpoints:

- Length. The mean length of an Erasmus+ VET mobility experience in our sample was 8.3 weeks, with a notable variability among participants, highlighting very different duration strategies of the sending organisations.
- Monetary costs to families. Families in our sample have a median cost for outgoing mobility of about 428 Euros for a single experience, that is, about 55 Euros per week. However, figures greatly vary depending on the length of stay.
- Monetary costs to schools/training centres and companies. Sending bodies usually rely much more on EU funding (up to 76.6% for schools), compared to hosting ones. At the same time, schools exploit public funding much more than companies. It is worthwhile mentioning that in all cases a small percentage of other funding by public or private third parties was reported.
- Non-monetary costs to schools/training centres and companies. The most relevant entry for sending schools is given by organisational costs, for hosting schools by organisational costs and by making available dedicated structures, for sending companies by direct staff costs and for hosting companies by indirect staff costs. The cost required to send an apprentice is equivalent, on average, to 4.6 hours of work, while that for hosting a participant is more than twice as that (over 10 hours). In any case, very few schools and companies highlighted that mobility interfered with teaching and production, respectively.
- Selection of participants. Motivation to mobility is the most used criterion for participant selection, followed by merit/performance and personal/social skills. On average, 81.1% of applications to mobility are accepted. The organisations more structured and more investing in the mobility business are more selective than those dedicating just marginal energies and budget to hosting activities, or no budget at all. Schools belonging to a consortium not only select only the best candidates, but also are able to better advertise their mobility programmes and gain more applicants. In other words, the rate of applicant selection seems to be an indicator of the level of maturity of an organisation as regards mobility.
- Tasks performed. About 54% of respondents stated that mobility was in continuity with their training paths, either because working plans were related to curricula, or because tasks were similar to what they were doing or would be doing if they did not go abroad. Another 40% stated they had been involved in tasks somehow new or particular, that were not expected in a short experience abroad.

– Work environment. A total of 92.3% of participants declared they absolutely or partially felt themselves working in an international environment.

Chapter 3 deals specifically with the construction of the ROI-MOB composite indicator. It is a rather technical one, including mathematical and statistical reasoning and details on how questions were built, including scales proposed for respondents to answer. However, it clearly shows the foundations underlying the proposed indicator, and explains why such an indicator is valid (that is, able to represent phenomena it refers to), robust (that is, giving approximately the same results under the same essential data-collection conditions) and sensitive (that is, capable of reproducing even small variations of the concerned phenomena).

The chapter also provides the formula and the method to calculate the ROI-MOB indicator. For a given mobility experience, the participant, the sending and the receiving organisation fill in their questionnaires, where a reasoned set of questions guide respondents to (re)think about their experience, and lead them to provide their overall assessment. By feeding these three numbers (one by the participant, one by the sending and one by the receiving organisation) into the indicator's formula, we get the weighted measurement of how rewarding the experience was, on a scale from 0 to 1 (or from 0% to 100%, if one prefers).

One section in this chapter is devoted to describing who, in the respondents' opinion, gets the most out of mobility. Participants are widely acknowledged as recipients of the largest benefits according to all categories, followed by schools and companies, almost at the same level. The labour market and the EU as an institution share the remaining percentage. However, each actor claims a lower benefit than the others see as appropriate to them.

Chapter 4 discusses the advantages of VET mobility as perceived and declared by all categories. It also includes some technical passages. For participants, the focus is on personality improvement, professional skills improvement, occupational and social opportunities improvement. Most improved personal skill for participants is openness to initiative and new challenges, followed by consciousness of own resources and helpfulness to other people. Personality traits seem to continue increasing as the stay abroad grows, up to about 16 weeks. After that, no significant improvement is shown. Among professional skills, learners said that language skills improved the most, followed by technical and intercultural ones. 100% participants perceived mobility increased their chances to get employed, thanks to a higher willingness to work or move abroad, followed by enhanced self-confidence and the perception of having received added value to their profiles. The longer the duration of mobility, the higher the perception.

On the sending schools side, the highest benefit they see in sending learners on mobility is an improvement in participants' motivation to learn, followed by the improved language skills and by a broader mind-set. At the same time, the main benefit perceived by receiving schools is the chance to improve international

cooperation, followed by a broader mind-set and by the chance to increase their reputation/visibility, and consequently attractiveness.

The main benefit for sending companies is the improvement in own apprentices' language skills, followed by increased flexibility and motivation. For receiving companies, the highest advantage is found in the chance for an intergenerational exchange between own staff and hosts.

The chapter also underlines a number of interesting points regarding the gain in European mind-set by participants, a possible correlation between the attendance to a mobility programme and occupation, and the different weight and relevance of sending compared to hosting organisations.

Chapter 5 accounts for obstacles to VET mobility. It also includes some technical passages. For participants, obstacles fall into three main categories: time dedicated to preparing the experience, existential aspects sacrificed in order to attend mobility, language issues. As to the former, the biggest 'sacrifice' mobility imposes to participants is to leave their 'comfort zone'. Second, shorter mobilities (up to three months) take about a one-week preparation to participants, longer (over three months) about two weeks. Regarding languages, over 53% of learners used English at work, while about 40% the hosting country native language. On the opposite, in their leisure time, 40% used their mother tongue and 36% English. It is worthwhile noting that the monetary cost born by families shows independence to the sacrifices born by participants.

The chapter then moves to describe the most discouraging factors towards mobility for schools and training centres. For both sending and receiving organisations, the administrative burden comes first, followed by language barriers and by cost (e.g. outsourcing activities to third parties).

For sending companies, heavy costs come first, followed by administrative burden and insufficient grant. For hosting companies, most discouraging factors are language barriers, inadequate competences of incoming learners and total absence of financial support.

Indeed, international mobility requires complex machinery, specific expertise and good will of the involved people, a supplementary budget and a reliable, on-going network of relations.

Chapter 6 draws conclusions and pictures recommendations and working paths for future mobility development. Starting from acknowledging that 97.2% of participants would recommend a friend to leave on EU VET mobility, 79.9% of schools would be available to increase the number of learners they send in mobility, 76.7% of companies would be available to increase the number of learners they receive, this chapter presents the comments on the rich set of suggestions provided by respondents and regarding all phases of mobility. For a more immediate understanding, they are also displayed graphically as word-clouds.

Lessons learnt through the project are grouped in 7 points, relating to:
- the need for a strategic approach to EU VET mobility;
- the need for promotion, information and training;
- the need for a balanced qualitative/quantitative approach to mobility;
- the need for a 'win-win' multi-stakeholder approach;
- the role money plays in mobility;
- the assessment and certification of competences gained or improved through mobility;
- the role of intermediary organisations/mobility providers.

A final section describes possible usage of the ROI-MOB indicator, questionnaires and method as a planning, monitoring and evaluation technique for mobility quality improvement.

In the Appendix, full methodological notes and additional information on the data survey and analysis are provided for. This is obviously an exquisitely technical section, meant to refine the underpinning rigorous scientific value of the research.

A Glossary of essential vocabulary relating to EU education and training policies, frameworks and tools, as well as to mobility, completes the book.

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Ayuntamiento de Granada (ES)
Ayuntamiento de La Rinconada (ES)
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Camera di Commercio Italiana per il Portogallo (PT)
Diputación de Jaén (ES)
ESN - European Student Network Portugal (PT)
Roberta Grisoni – Agenzia Nazionale Erasmus+ VET INAPP (IT)
Susanne Kruse - Hamburg Freight Forwarders Association (DE)
Marlene Lecamus - Arbeit und Leben Hamburg (DE)
Stefano Lenzi – Unione Regionale delle Camere di Commercio dell'Emilia-Romagna (IT)
Stefan Metzdorf – IBS NA-BIBB (DE)
Wolfgang Rose - Member of the Hamburg Parliament (DE)

Hartmut Schäfer – IHK Projektgesellschaft Ostbrandenburg mbH (DE)
Oliver Thieß - Chamber of Handicrafts Hamburg (DE)
Hans Thormählen - Arbeit und Leben Schleswig Holstein (DE)

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24 May 2019

The Editors
Luigi Fabbris
Luca Boetti

List of abbreviations

CEDEFOP	European Centre for the Development of Vocational Training
CV	Curriculum Vitae
ECHE	Erasmus Charter for Higher Education
ECTS	European Credit Transfer System
ECVET	European Credit system for Vocational Education and Training
EfVET	European Forum for technical Vocational Education and Training
EQAVET	European Quality Assurance reference framework for Vocational Education and Training
EQF	European Qualifications Framework
ESCO	European Skills, Competences, Qualifications and Occupations multilingual classification
EU	European Union
HE	Higher Education
HEI	Higher Education Institute
IVET	Initial Vocational Education and Training
NA	National Agency
NQF	National Qualification Framework
ROI-MOB	Return on Investment from EU VET Mobility
VET	Vocational Education and Training

Chapter 1

The research design and the surveys

1.1. The research design

The ROI-MOB research was designed to give a holistic view on the international Vocational Education and Training (VET) mobility process in Europe. Precisely, its main challenge was to define through an algorithm and quantify through a set of direct surveys an indicator representing the (both positive and negative, complex, short-to-medium term) effects of European VET mobility.

The analysis of the process implies both the understanding of its relevant components and the intuition of the activities and policies to transform actions and problems into success factors. These aims are encompassed in the flagship initiative "Youth on the move" of the 2020 agenda for a smart, sustainable and inclusive growth of Europe (European Commission, 2010).

The expected effects to embed into the indicator, henceforth *ROI-MOB indicator*, are:

- both positive and negative, since the indicator aims to represent the mobility experience in full, with its positivity and problems on all stakeholders. Thus, the purpose of the indicator is to measure the current VET mobility process holistically from a "top of the hill" perspective.
- Complex, because the process is composed of several activities, whose realisation generates a plurality of pros and cons on stakeholders at each step and at various levels; moreover, its effects interact with each other, sometimes compensating, other times generating synergic effects on the actors of the process.
- Short-to-medium term. In particular, the indicator is aimed at measuring the effects of mobility on all actors of the process immediately after the completion of an experience (for participants), or a set of experiences (for schools, training centres, and companies), and its medium-term effects in the local contexts of mobility actors. In particular, we aim to evaluate the effects on participants' occupational and life strategies and on local and regional consequences for institutional and economic units involved in the process.

The research aimed also at:
- identifying best practices on mobility issues by analysing, at all levels, the results of EU VET mobility;
- collecting suggestions for improvement from participants, schools and companies directly involved in mobility actions.

Three sample surveys were held in four European countries – Germany, Italy, Portugal and Spain – to collect data on the phenomenon of VET international mobility funded by the Erasmus+ programme. After the analysis of the results, a fourth survey was carried out on a small sample of European key witnesses.

1.2. The involved populations

The factors involved in the evaluation of participants follow a rationale analogous to the Kirkpatrick and Kirkpatrick's (2005) stepwise sequence for evaluating a training programme. Their procedure, called "four evaluation levels", consists of observing:
(i) the initial participant's position, that is, what he or she feels about the programme;
(ii) the evaluation of learning processes during the programme;
(iii) the job behaviour consequent to the programme; and
(iv) the final outcomes, e.g. the return on investment (ROI) of the programme on people and companies participating in mobility.

Walkins et al. (1998) and Kaufman (2000) extend the scope of evaluation to a fifth level that includes the society, the institutions and the surrounding social environment concerned with both the improvement of youth training and other indirect benefits of the programme.

The evaluation procedure spans a longitudinal learning process. The idea of a process that develops in time was a background reference also in defining the ROI-MOB evaluation system. In other words, the mobility process represented in this system can be considered continuous in time. Indeed, the surveys investigated both:
(i) the limited-in-time experiences of participants, in the sense that each personal experience has a start and an end;
(ii) the experience of organisations (schools and companies) periodically sending or hosting lots of participants, who made-up their understanding of the process with a multiplicity of empirical cases.

So, the ROI-MOB research is aimed to represent not just a single mobility process, but *the process* of VET mobility in Europe. That is why the research collects information also from European experts, able to evaluate the mobility process be-

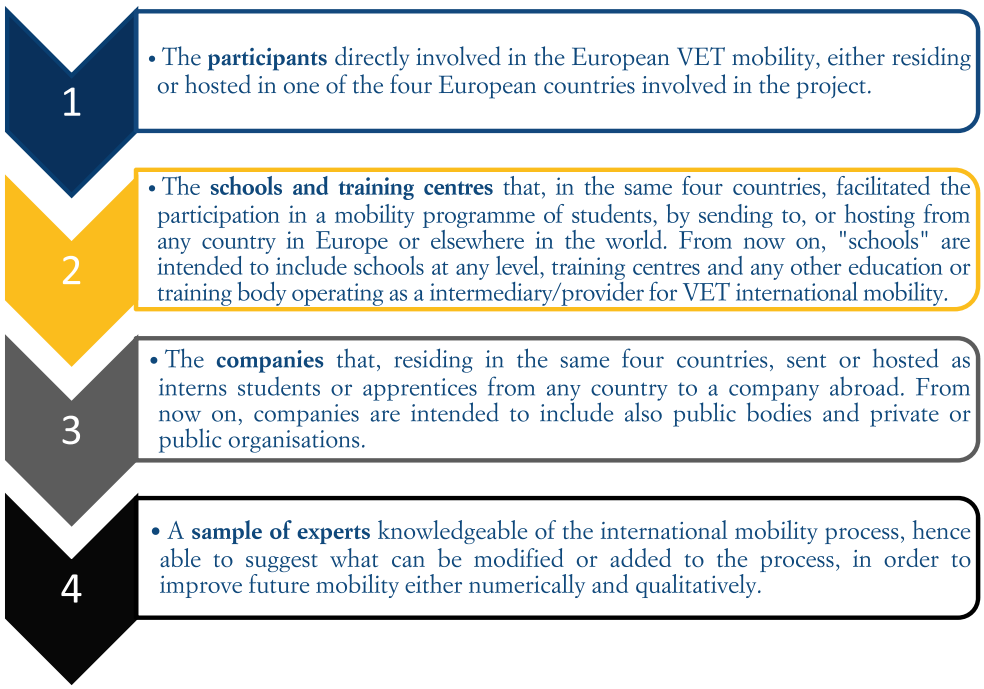
yond what participants and intermediary and hosting bodies can tell, when describing their direct experience. International mobility is such an adaptive process that also local, national and international communities, as actors, could be consulted for evaluation purposes. Hence, the Erasmus+ mobility experience figured out at this experimental evaluation stage was assessed by four categories of actors: participants, schools, companies and institutional stakeholders.

Moreover, since for practical reasons it was not possible to adopt a perspective data collection strategy, the ROI-MOB questions are set in retrospection, in order to recover the causation perspective. More, they are summative, to account for any possible set of experiences, which may vary according to respondent's will, country regulations and customs.

Indeed, the ROI-MOB evaluation questionnaires aimed:

(i) to represent the pre-experience conditions, the development of the mobility process and finally the outcomes with respect to own expectations of the mobility actors; and

(ii) to pinpoint positive and negative aspects of the mobility experience and collect suggestions for improving the European mobility system.



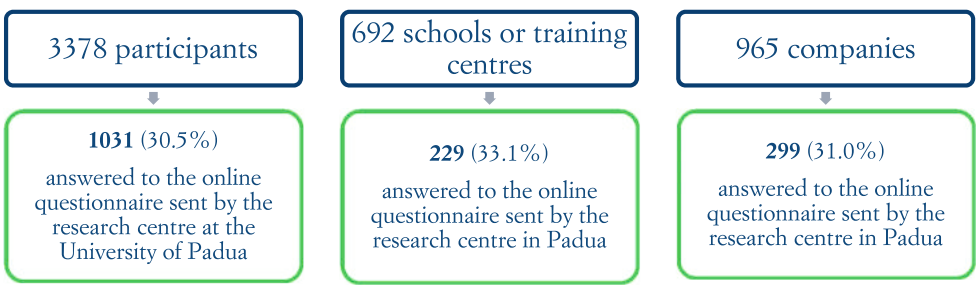
For both aims, all players in the mobility process acted as key witnesses of what works and what could be improved instead.

Finally, the surveys concerned the following populations:

Schools and companies were selected for the ROI-MOB research among those having an active role in recently either sending or hosting participants, so to involve in data collection only real actors of the mobility phenomenon and obtain first-hand description of the experiences and aware suggestions about it.

1.3. The surveys

The surveys were carried out from March 2018 to August 2018 through a Computer Assisted Web-based Interviewing (CAWI) system, consisting of an electronic questionnaire sent to samples of participants, schools and companies – whose email addresses were provided by project partners – upon statistical rules to achieve representativeness. Each sample of participants, schools and companies aimed to represent a national context.



A more detailed description of the involved samples is in Section 1.5.

The national representativeness does not allow to claim for a European representativeness of the overall sample. Though, when all data are pooled together, the presence in the sample of both Mediterranean and Central Europe countries, allows for a broad cross-national inference. Moreover, the four countries account for a substantial part of the international students and trainees across the Erasmus+ Programme. The European Commission (2014b) shows that, in terms of Erasmus+ mobility flows, out of 33 countries, Spain is first in Europe for receiving and third for sending, Germany is second for both receiving and sending, Italy is fifth for receiving and fourth for sending, and Portugal is seventh for receiving and eleventh for sending mobile students or trainees. The four countries account also for a large part of the VET activities that allowed approximately 160,000 learners to carry out a learning period abroad in 2017 (European Commission, 2018a).

1.4. The questionnaires

Questionnaires for the surveys were defined after thorough discussions within the research group and the realisation of two pilot surveys. These consisted of a data collection simulation, aimed to highlight in due advance problems related to both the questionnaires and the survey process and timing (see Section 1.5).

The three questionnaires devoted to participants, schools and companies were written in the four national languages (Italian, German, Portuguese, Spanish) of the project, plus in English, to be administered to participants residing in countries different from the four. So, a total number of 15 questionnaires was used for survey purposes.

1.5. Data validation

Data were validated during and after collection, in order to ensure processing only of good quality ones. As survey practitioners well know (Sudman and Bradburn, 1982), it is impossible to get error-free data, but if a targeted methodology is adopted, response error can be constrained within reasonable levels.

To limit this response error, the research group realised two pilot surveys, one internal to the research group itself and another involving small samples of each of the three populations: participants, schools and companies.

The first pilot survey, called *alpha test*, occurred in November and December 2017. All project partners had five questionnaires available on line in their own language for about ten days, for each of the three surveys, and undertook to fill them in, simulating interviews with employees of their own organisations. Partners were asked to write on the questionnaire's margin the difficulties they had in answering, to make sure questions used an everyday language, and if any questions they felt relevant to the subject were missing. After this test, questionnaires were redefined by the University of Padua with the intellectual contribution of all partners and a new version of each questionnaire was prepared for the second pilot round.

The second pilot survey, called *beta test*, was carried out in January and February 2018. All partners defined a small sample (7-10 people) of participants, schools and companies of their country. Again, questionnaires were administered in electronic format and, after question-by-question checks, a further online meeting among partners was held to define a new and final version, then submitted to the larger survey samples.

The "full" survey was launched in April 2018 and closed end of July 2018.

After the collection, other forms of validation were performed on data: the University of Padua, after a first tabulation of the obtained responses, realised several *consistency checks* by crossing the responses to questions that depended

on each other and asked partners to solve the impossible answers. Moreover, to limit or definitely cancel the response "other" in qualitative questions, partners checked if responses taped as 'other' could be conveyed in exiting 'closed' options (see Chapter 3). All partners contributed to this demanding phase that lasted till November 2018.

We can state that the data sets are now valid in terms of response accuracy and the created databases can be statistically processed. As usual, the databases are open to anybody's analysis after the data-owner authorisation.

1.6. Actors of Erasmus+ VET international mobility

The data presented in following paragraphs concern the characteristics of the actors of VET mobility experience, that is participants (Section 1.5.1), schools and training centres (Section 1.5.2) and companies (Section 1.5.3). Data concerning schools and companies are further split according to the activity they performed in the VET mobility phenomenon, e.g. whether they sent abroad or hosted participants.

1.6.1. *Participants*

Participants are youngsters enrolled as students, including those attending a dual track programme (see Box1), and apprentices (see Box2) belonging to companies (Figure 1.1).

Dual Track Programme

A ***dual track educational programme*** combines formal schooling with work-based experience. These programmes are increasingly important for all careers, including white-collar and professional careers requiring a bachelor's or a higher professional degree. Dual track education systems are common, in particular, in Germany, Switzerland, Austria, France, South Korea, US and Canada. The skills and theory taught in dual track educational programmes are regulated by national standards.

Apprentice

Apprentice is an entry position in firms. The term is used to identify a person who is learning by practical experience a trade, art, or calling under the supervision of skilled workers. Apprenticeship training is common in many European countries, reaching 55% – 70% of youth in Austria, Germany, and Switzerland. Apprenticeship typically lasts about three years, during which apprentices spend one to two days per week in a part-time vocational training school and work the remaining time (Franz and Soskice, 1995; Harhoff and Kane, 1997; Adda et al., 2009; European Union, 2013; Kautz et al., 2014). Germany has formally integrated apprenticeship programmes into its educational system: all students graduating in a secondary school, both low (Hauptschule), medium (Realschule) and high (Gymnasium), are qualified to participate in a dual track programme. Van der Velden et al. (2001) and Quintini and Martin (2006) show that in European countries where the apprenticeship system is more developed (Austria, Denmark, Germany and Switzerland) young people have better labour market outcomes than in other countries. As a matter of fact, in Germany and Austria more than half of those leaving school found a job without experiencing any period of unemployment. Moreover, Ryan (2001) and Kautz et al. (2014) state that apprentices' employability is higher compared to vocational school-based education for entering the labour market immediately after compulsory education also as a consequence of the increase in soft skills gained during these programmes.

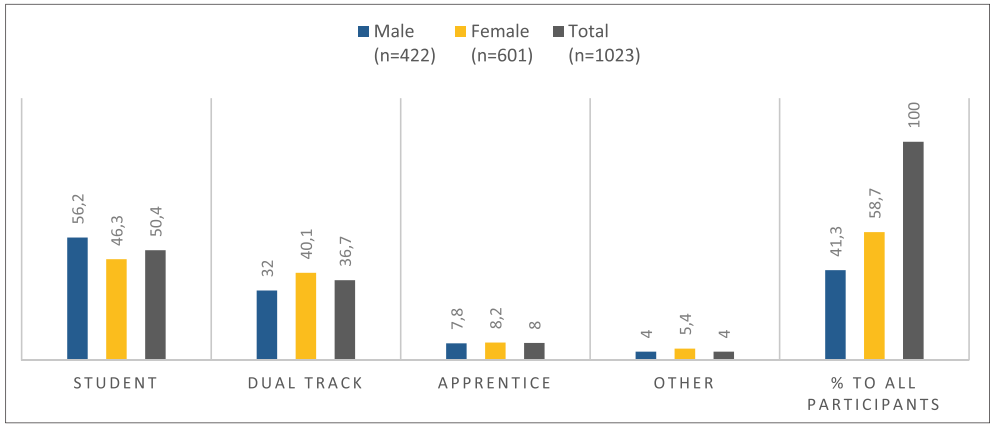


Figure 1.1. Per cent frequencies of participants to VET international mobility by gender and activity right before Erasmus+ mobility experience.

Students (50.4%) and dual track people (36.7%) represent by far the largest proportion of participants. Workers represented 8% of participants and people in other positions (doing nothing and unemployed) represented the remaining 4.9%.

The educational level attained by participants is medium-to-high: 43.2% of them possessed a vocational diploma, 54% a high school or university degree and just 2.8% a lower secondary title.

The median age at Erasmus+ mobility was 22.3 years without significant difference between genders (Table 1.1).

Table 1.1. Per cent frequencies and distributional parameters of participants to VET Erasmus+ mobility by gender and age class.

	Male (n=418)	Female (n=600)	Total (n=1018)
Less than 18	0.7	1.8	1.4
18-24	71.3	71.7	71.5
25-34	19.9	20.5	20.2
35 and more	8.1	6.0	6.9
Total	100.0	100.0	100.0
Mean	*23.9*	*23.7*	*23.8*
Standard deviation	*7.1*	*6.9*	*7.0*

About three out of four mobility experiences were realised in the age between 18 and 24 years and just 1.4% before the adult age. Another 20% of participants started between 25 and 34 years and 7% after 34 years.

Table 1.2. General characteristics of VET mobility participants, by country.

	Germany (n=245)	Italy (n=354)	Portugal (n=178)	Spain (n=251)	Overall (n=1031)
Mean age (years)	23.3	25.3	20.5	24.5	23.8
% females	72.6	57.6	44.6	56.9	58.7
% activity at interview: Students	11.0	58.9	72.5	61.0	50.4
Dual track	83.3	19.2	21.4	27.1	8.0
Apprentices	5.3	13.5	4.5	5.2	36.7
% education: Lower secondary	7.8	6.1	6.5	2.0	5.6
Vocational	20.8	8.0	61.5	66.1	34.8
Higher sec. & Univ.	71.4	85.9	32.0	31.9	59.6
% working at interview	38.8	38.3	36.0	32.7	36.6
% more than 1 mobility experience	11.4	34.3	17.6	24.4	14.7

The share of women participating in the survey is on average larger than males (58.7% *vs.* 41.3%). Before mobility, women were involved in working duties in the same proportion as males (8% as a whole), but were more involved in dual

track programmes (40.1% *vs.* 32%) than males.[1] For other structural perspectives (education, apprenticeship), young women did not differ from their masculine counterpart.

We notice that a relevant proportion (72.6%) of women collaborated in the German survey. This is quite unusual both as a whole in Europe and with reference to the German experience. In fact, the share of women in the European Union (Eurostat, 2016) among upper secondary students enrolled in vocational education and training is 44.5% but it is 92.1% among post-secondary vocational students *versus* 54% and 90.7% of males, respectively. Moreover, a survey on VET international mobility (NA-BIBB, 2018) shows a prevalence of male participants in German international mobility. Other data (Parey and Waldinger, 2011) show that women are over-represented in Erasmus mobility amongst tertiary education students, others (OECD, 2016) that women numerically prevail among international students (51% in EU22 countries) but at a lower rate than the share of women over all students (54%). Definitely, it may be that women take part in European mobility actions more than men.[2]

14.7% of participants experienced also other types of mobility in their lives, in particular the Portuguese (34.3%) and the Spanish (24.4%).

The per cent rate of participants working before mobility (8%) corresponds to the proportion of apprentices. That of people working at interview is 36.6%, with an increase of 28.6% over the before-mobility rate. Almost all other participants, before mobility, were studying either at high school or at a vocational school or training centre. It may be appreciated that the proportion of workers and, in parallel, of students is almost the same in all countries participating in the ROI-MOB project.

As shown in Table 1.3, where a sort of origin-destination matrix is represented, the largest part of Erasmus VET participants who work at interview continue working in the same business sector experienced during mobility. The proportion of participants working in the same sector can be found in the diagonal of the matrix, say 72.2% of those who realised their mobility in industry stayed in the industry sector and also 59.5% of participants who operated in the commercial and tourism business and 77.6% working in other services, but the industry services one, remained in the same sector. As a whole, two participants out of three

[1] Ryan (2001) argues that there are gender differences in the effectiveness of apprenticeship, but literature results are mixed, probably because of occupational and sectorial segregation of women. Segregation means that certain jobs or business sectors are typically 'dominated' by either males or females.

[2] The larger propensity of women to take part in Erasmus-like programmes is shown also by Böttcher et al. (2016) with reference to tertiary education. The authors estimate that women's attendance rate is 13% larger than the fraction of female students attending tertiary education in the Erasmus countries. This figure could confirm our hypothesis of a generally larger participation of women to Erasmus mobility.

remained in the same business sector in which they experienced their international mobility. The only sector in which people who changed business sector overwhelm those who remained is that of industry service: a larger part of those who experienced their mobility in the sector of services for industry, in fact, migrated to another sector of tertiary business. This could depend also on the small sample size at hand from this sector.

Table 1.3. Per cent distribution of VET mobility participants, by business sector during mobility and current job sector.

During mobility Current job	Industry	Commerce tourism	Industry services	Other services	Total	(n)
Industry	72.2	8.6	6.6	12.6	100.0	(151)
Commerce & tourism	12.8	59.5	7.4	20.3	100.0	(148)
Industry services	8.2	16.3	36.7	38.8	100.0	(49)
Other services	8.2	11.5	2.7	77.6	100.0	(182)
Total	27.7	24.5	8.3	39.5	100.0	(530)

1.6.2. *Schools and training centres*

The schools mainly involved in VET international mobility are the vocational ones (64%). Also lower (7.9%) and higher (19.7%) secondary schools and training centres (7.9%) send participants to, or host participants from foreign countries (Figure 1.2).

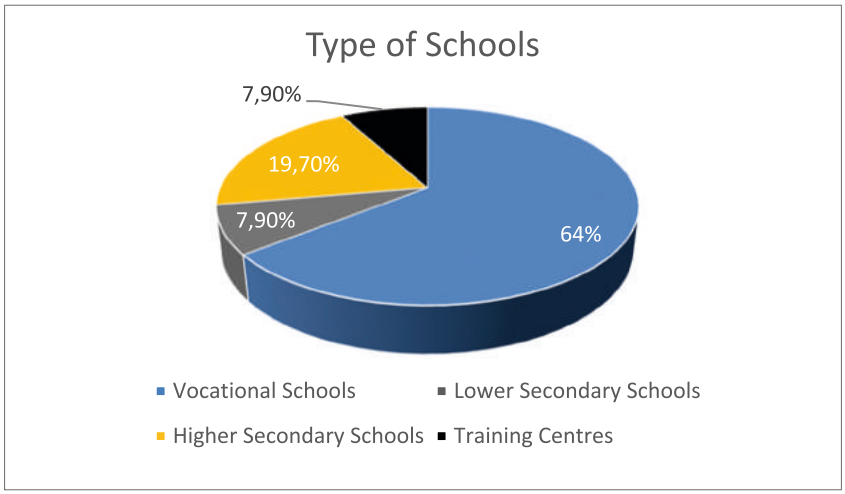


Figure 1.2. Per cent frequency distribution of surveyed schools, by type of school address.

Table 1.4. Per cent frequencies of schools and training centres active in VET Erasmus+ mobility, by size and role in mobility.

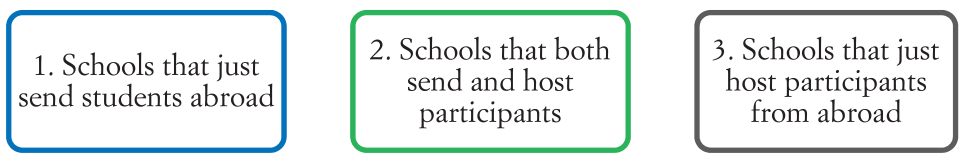
	Sending (n=217)	Hosting (n=123)	Total (n=226)*
Less than 100	41.0	44.7	41.6
101-200	6.9	5.7	6.6
201-300	4.6	3.3	4.9
301-500	4.2	3.3	4.4
501-1000	18.4	15.4	18.1
1001 and more	24.9	27.6	24.3
Total	100.0	100.0	100.0
*Median size***	*246*	*193*	*235*

* The overall number of schools is not the sum of sending and hosting schools due to the fact that 41.9% of schools both sent and hosted participants.
* * The median size of just sending schools is 410 (n=128) and that of schools doing both activities is 98 (n=116).

The median number of students enrolled at the sampled schools (Table 1.4, last line) is 235, which means that the majority of schools and training centres operating with VET mobility is of medium-to-low dimensions. Besides, one out of four involved schools have more than 1000 students.

The median size (in terms of students) of sending schools is somewhat higher than those that hosted participants: the difference in size is about 50, to the advantage of sending schools. Moreover, the (median) size of schools that just sent students abroad is 286 and that of schools that operated in both directions, namely sending and hosting participants, is 251 (data not shown). The observed differences are not large, but are significant because, altogether, it shows that schools need not be large to be able to host participants.

Since there are many schools that both send and host participants, the sample of schools can be partitioned in three categories:



It can be shown that the difference in size between the group of schools that just sent and the one that just hosted is even larger, with the group of schools that realised both activities in the middle. This may mean that smaller hosting schools are able to find in their neighbourhood companies, organisations and public bodies available to host participants from abroad in an easier way than larger ones.

Regarding the national samples, it appears (Table 1.5) that the majority of German schools that used to send students abroad are large (the median size was larger than 1000). Moreover, the sample of hosting schools is of limited size. Also the Italian sample was composed mainly of sending schools and just few hosted participants: that is why from now on we will not comment specifically the hosting schools of Germany and Italy. Spanish and Portuguese samples of schools are similar, in the sense that both the sending sample and the hosting one are numerically adequate for specific analyses.

All German sending schools are vocational, included a large number of enrolled students and are accustomed to organise the concerned type of mobility in a local and national partnership. The very large part of German schools has been operating in the mobility business for a long time.

The Italian schools are, instead, in large majority higher secondary schools or post-secondary (tertiary, non-academic) and just 38% vocational schools or training centres and they started more recently their mobility activity.

Spanish schools are similar in size to the Italian ones, both as regard the sending and the hosting ones. Concerning size, the Portuguese sample of schools seems much smaller than the other countries participating in the ROI-MOB project, though this may be due to a translation problem in the specific question. We have external-to-survey evidence of the similarity of all Mediterranean schools as regards size.

The types of schools in the Spanish and Portuguese samples are similar: the large majority of schools are vocational and operate autonomously or through informal networks in promoting and realising mobility. The peculiarity of the samples – which may derive from situational partners' selection – is highlighted in Table 1.6, in order to better understand the analysis that will be presented in the following chapters.

Table 1.5. General characteristics of sending schools, by country.

	Germany (n=29)	Italy (n=38)	Portugal (n=92)	Spain (n=61)	Overall (n=220)
Mean no. of enrolled students	1088	672	91**	771	508**
% lower secondary	0.0	0.0	12.1	9.8	7.8
% vocational, training centre	100.0	35.1	73.6	83.6	73.4
% higher secondary, university	0.0	64.9	14.3	6.6	18.8
% in mobility since 5 years	86.2	27.0	60.4	43.3	53.5
% autonomous, informal net*	24.1	31.6	58.7	65.6	51.4
% operating in a consortium*	10.3	50.0	15.2	27.9	24.1
% other supporting bodies*	82.8	36.8	42.4	31.2	43.6

(*) *Respondents were allowed to give more than one answer. Thus, the total of the last three indicators in the table does not sum up to 100. (**) Portugal figure is probably underestimated, due to a translation problem in the posed question.*

Table 1.6. General characteristics of hosting schools, by country**.

	Germany (n=13)	Italy (n=19)	Portugal (n=62)	Spain (n=30)	Overall (n=124)
Mean no. of enrolled students	1385	985	168***	1011	511***
% lower secondary	0.0	0.0	17.8	13.3	12.2
% vocational, training centre	100.0	0.0	66.1	83.3	64.2
% higher secondary, university	0.0	100.0	16.1	3.4	23.6
% in mobility since 5 years	NA	NA	62.1	58.6	56.8
% autonomous or informal net*	NA	NA	72.6	76.7	64.5
% operating in a consortium*	NA	NA	9.7	20.0	15.3
% other supporting bodies*	NA	NA	21.0	3.3	24.2

(*) *Respondents were allowed to give more than one answer. Thus, the total of the last three indicators in the table does not sum up to 100. (**) Frequency distributions are not computed (NA) for sample sizes lower than 20. (***) Portugal figure is probably underestimated, due to a translation problem in the posed question.*

1.6.3. *Companies*

Companies involved in VET international mobility belong to all business sectors (Figure 1.3): the largest sector in terms of involvement is commerce, trade and tourism (27.4% of the involved companies), but also (traditional) industry[3] (18.1%) and companies that produce services for industry (14.4%) are involved in a relevant proportion. Other sectors relevant to VET mobility are services for persons and families (7.7%) and other third-sector services (education, social and health, banks, public administration and not-for-profit services (27.7%).

The size of sending companies is much larger than that of the hosting ones (Tables 1.7 and 1.8): the larger the size, the more likely that company is available to send, which means that these large companies abnegate for a limited period to one or more of own apprentices. Indeed, the mean number of apprentices sent abroad is 7 per year per company (Table 1.9).

[3] The industry companies category includes both the commonly-intended industry (mechanic, mechatronic, chemical, electric, electronic, maintenance, etc.) and construction and energy industries.

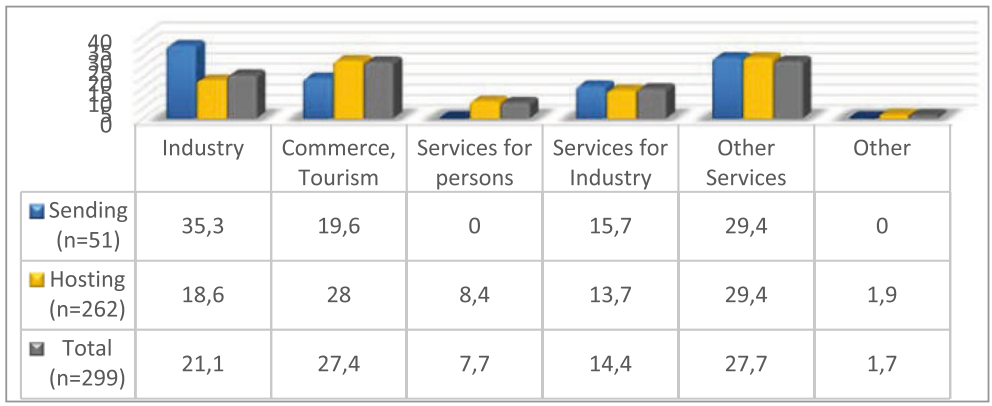


Figure 1.3. Per cent frequencies of companies active for VET Erasmus+ mobility purposes, by business activity and role in mobility[4].

Table 1.7. Per cent frequencies of companies active for VET Erasmus+ mobility purposes, by company size and role in mobility.

	Sending (n=50)	Hosting (n=259)	Total (n=295) [4]
1-9 employees (micro)	4.0	45.2	41.7
10-49 (small)	6.0	27.8	25.4
50-249 (medium)	26.0	15.4	15.6
250 and more (large)	64.0	11.6	17.3
Total	100.0	100.0	100.0
Median size	*726*	*16*	*23*

Table 1.8. Per cent distribution of companies, by activity and size.

	Micro	*Small*	*Medium*	*Large*	*Overall*	*Median size*
Just sending (n=28)	3.6	3.6	17.8	75.0	100.0	Large
Just hosting (n=231)	47.5	29.1	15.2	8.2	100.0	Micro
Both activities (n=15)	6.7	13.3	26.7	53.3	100.0	Large
Total (n=274)	40.9	25.5	16.1	17.5	100.0	Micro

Instead, the size of companies that hosted young people from abroad in their production or sales lines is very much lower than the sending ones. The difference between the two groups of companies is relevant. The median size of hosting companies is much lower than 20 (that is, more than 50% of hosting activities was carried out by micro or small companies), whilst the median of sending companies is above 250 (that is, more than 50% of apprentices were sent abroad by large or

[4] The overall number of companies is not the sum of sending and hosting companies due to the fact that 4.4% of the surveyed companies both sent and hosted participants.

very large companies). A smaller number (4.4) of guests per company (Table 1.10) balances the diffusion of participants across hosting companies.

We conjecture that a small company is available to host participants more than a large one because smaller companies are able to effectively welcome provisional entries into their productive organisation, as they master their own productive system in an adaptive fashion, either substituting temporary vacancies with provisional staff or improvising new duties for temporary human resources. It may also depend on the capacity of smaller organisations to grasp offers of public subsidies for apprenticeship. Another possibility may derive from the funding system, though the possible tendency of European subsidies to encourage firms to start training but not to increase the demand for apprentices in firms accustomed to train, is limited and controversial (European Commission, 2013).

The functioning capacity in the mobility business of the involved companies is rather recent: just one third of companies dates its first mobility programme more than five years back, independently if they sent or hosted participants.

Regarding the type of support which companies resort to, about 14% of sending and 8% of hosting companies rely on a consortium. The remaining companies rely on own relational capacity and informal networks (56.9% for sending and 46.9% for hosting units), and/or on the support of intermediary bodies (39.2% for sending and 50.4% for hosting units). In general, companies that can act in full autonomy when it comes to find placements are the multinationals, through their own branches abroad. In Germany[5], about one out four participants performs his/her mobility through this channel. The other companies operate in a network and rely upon external collaboration: even if contacts with abroad schools or companies may be spontaneous, companies outsource applications, scholarships and administrative work to intermediaries.

Table 1.9. General characteristics of sending companies, by country**.

	Germany (n=39)	Overall (n=51)
Mean number apprentices sent	5.7	7.0
% in mobility since 6 years or more	24.3	31.9
% autonomous or informal net*	61.5	56.9
% operating in a consortium*	10.3	13.7
% other supporting bodies*	41.0	39.2

(*) Respondents were allowed to give more than one answer. Thus, the total of the last three indicators in the table does not sum up to 100. (**) Indicators are not computed for countries whose sample size is lower than 20.

[5] The practice represented in our data mainly refers to the City of Hamburg, which is characterised by the presence of a steering institution, such as Arbeit und Leben, one of the ROI-MOB project partners. Nevertheless, the relationships highlighted in this volume are meant to represent the German situation, rather than just the Hamburg one.

Table 1.10. General characteristics of hosting companies, by country.

	Germany (n=20)	Portugal (n=173)	Spain (n=68)	Overall (n=262)
Mean number hosted participants	1.6	3.7	7.1	4.4
% in mobility since 6 years	25.0	39.4	27.9	35.1
% autonomous or informal net**	55.0	50.3	36.8	46.9
% operating in a consortium**	20.0	8.7	3.0	8.0
% other supporting bodies**	30.0	46.8	64.7	50.4

(*) Frequency distributions are not computed for country's sample sizes lower than 20. (**) Respondents were allowed to give more than one answer. Thus, the total of the last three indicators in the table does not sum up to 100.

Regarding the business sector, sending and hosting companies are rather similar (Tables 1.11 to 1.13). In Germany, country accounting for more than three quarters of the ROI-MOB sample of sending companies, companies belong to all business sectors, even though the traditional industry prevails (46.1% of the sample at stake). On the opposite, we have very few German hosting companies in our sample, even though it is known that Germany is the second European destination of international mobility.

The hosting activity represented in our sample is mainly realised in Portugal and Spain. This activity is just partially realised in industry (about 20%) or services for industry (another 14%), but involved prevalently firms from the commerce and tourism sector (28%) and the traditional services (38%). This indirectly explains either the small size of the hosting companies and the rather easy placement of schools in the local companies.

The availability to host students and apprentices varies according to the country: Spanish companies host about 7 participants per year and German about 2; in the middle stays Portugal with 4 guests per company. Even if there are differences among countries, it is possible to state that the large majority of companies pursue similar policies for both outgoing and incoming participants. The number of apprentices that in a given company are allowed to leave for a period abroad, possibly in a foreign branch of the same company, and of those that can be hosted, even from a branch of the same holding, can be counted on two hands in an outgoing direction and on one hand in an incoming direction.

1.6.4. *Other stakeholders*

In this residual category, two main actors of VET mobility are included: the EU as an institution and the labour market. The labour market as a whole remains an indistinct category. We did not separate the local, national and European labour

markets on purpose, to favour respondents in assessing an economic category that is not the participants, nor the schools, nor the companies.

Table 1.11. Per cent distribution of sending companies, by business sector and country of origin*.

	Germany (n=39)	Overall (n=51)
Industry	46.1	35.3
Commerce, tourism	23.1	19.6
Services for industries	18.0	15.7
Other services	12.8	29.4
Total	100.0	100.0

(*) Frequency distributions are not computed for country's sample size lower than 20.

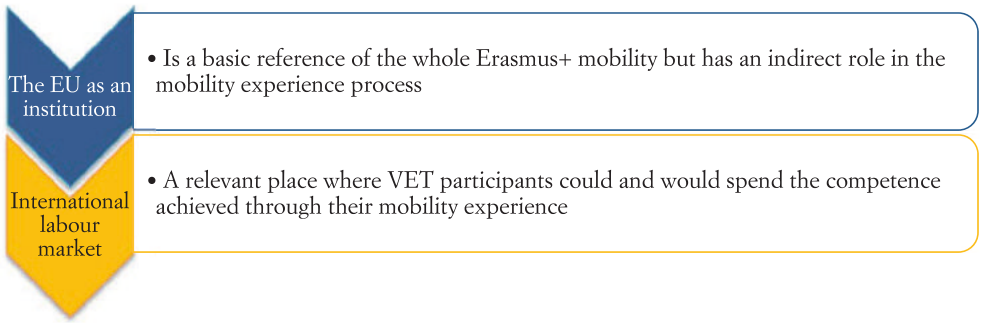
Table 1.12. Per cent distribution of hosting companies, by business sector and country.

	Germany (n=20)	Portugal (n=173)	Spain (n=68)	Overall (n=262)
Industry	35.0	17.9	22.1	20.6
Commerce, tourism	25.0	24.8	36.8	27.9
Services for industries	15.0	13.9	13.2	13.7
Other services	25.0	43.4	27.9	37.8
Total	100.0	100.0	100.0	100.0

Table 1.13. Per cent distribution of hosting companies, by business sector and size.

Size:	*Micro*	*Small*	*Medium*	*Large*	*Overall*	*Median size*
Industry (n=54)	46.3	16.7	20.4	16.6	100.0	Small
Commerce, tourism (n=73)	49.3	32.9	6.8	11.0	100.0	Small
Services for industries (n=34)	58.8	23.5	11.8	5.9	100.0	Micro
Other services (n=98)	36.7	31.6	20.4	11.3	100.0	Small
Total (n=259)	45.2	27.8	15.4	11.6	100.0	Small

The EU as an institution aims at highlighting the relevant role of political institutions for promoting, funding and accounting for mobility projects. The EU is in fact the most relevant institution to those purposes, even if other institutions, namely national and regional ones, are relevant as well.



A fourth survey was carried out on this residual category of actors, which involved, as a whole, 29 persons in representation of various local, national and European institutions. Their role was of key-witnessing the quality of the VET mobility phenomenon, commenting on its functioning and suggesting possible adjustments and policies to improve the future Programme successor to Erasmus+. Table 1.14 shows where this group of key witnesses, henceforth "other stakeholders", comes from.

Table 1.14. Key witnesses participating in the fourth survey.

Organisation	*number*
International organisations, EU included	5
National, regional or local governments	7
Education and training centres	12
Labour market organisations and others	5
Total	29

Their role is at the top representative or managerial level in their organisations: 3 represent politically an institution, 11 are executives or decision makers, 11 are activity managers in their units, and 4 are deans or school directors. All but 4 stakeholders were involved somehow in mobility issues and 22 were directly involved in VET international mobility.

The territorial width and the competence variability of these stakeholders allow us to use their informed comments and suggestions – together with those of participants, schools and companies and with the results of the analysis of survey data – to sketch our final comments and suggestions, that will be presented in Chapter 6.

Chapter 2

Mobility experiences

2.1. Introduction to VET international mobility experiences

According to the Erasmus+ Programme Guide[1] a VET international mobility project for learners can comprise one or more of the following activities:

– mobility in VET providers and/or companies abroad, from 2 weeks to less than 3 months;
– long-term mobility in VET providers and/or companies abroad (ErasmusPro), from 3 to 12 months.

An applicant, once selected and specifically trained, is normally supported with a grant from the EU. Other monetary support is normally added by his/her family.

Organisations involved in the mobility project assume the following roles and tasks: (i) the applicant organisations are in charge of applying for the mobility project, signing and managing the grant agreement and reporting; the applicant can be a consortium coordinator; (ii) the sending organisations select the candidates and send them abroad; (iii) the hosting organisations receive the learners and offer them activities, that can take the form of full work placements with learners hosted in a company or other relevant organisation, or at a VET provider (a school, institute or other organisation providing vocational education and training) offering a combination of school-based learning and a work-based component (work placement). In the case of long-term mobilities (ErasmusPro), while the host body can be a VET provider, the activity should have a clear work-based learning component–usually in the form of a work placement in a company.

In the said activities, all organisations can be assisted by intermediary bodies (sometimes also called "mobility providers") with administrative procedures, practical arrangements, matching apprentice/student profiles with the company needs in case of traineeships, and participant preparation.

[1] https://ec.europa.eu/programmes/erasmus-plus/programme-guide/part-b/three-key-actions/key-action-1/mobility-vet-staff_en.

In what follows, we will focus just on learners, schools and training centres (henceforth: schools) and companies on which we carried out parallel surveys (see Section 1.3). To better understand the survey results one should keep in mind what can be considered a specificity of mobility in Germany.[2] In this country, due to the dual VET system, companies are active players of mobility and assume the role of sending company, which does not exist in Italy, Portugal or Spain, where sending organisations are only schools, no matter if they are involved in any dual VET experience.

Even if this aspect may bring some difficulty to those who are not close to this reality, it is also challenging as it brings diversity and richness of perspectives to debates over mobility. For this reason, sending and hosting schools and sending and hosting companies are often mentioned separately.

The remaining part of the chapter is devoted to the description of a typical VET mobility experience (Section 2.2), its monetary and non-monetary implications (Section 2.3), the selection processes adopted by both the sending and the hosting organisations (Section 2.4) and the activities implemented during the experience abroad (Section 2.5).

2.2. A typical VET mobility experience

The basic characteristics of an Erasmus+ VET mobility experience are sketched in what follows taking the information from all surveys, both that on participants and those on schools and companies. The data refer to the mobility of participants in the four countries involved in the partnership – Germany, Italy, Portugal and Spain (Section 2.1.1) – and the experience length (Section 2.1.2).

Let us remind that the organisations that collaborated to our surveys were participating in mobility programmes for many years. Most of the companies and schools participated for four or more years, that is, since the beginning of Erasmus+ and, likely, since the Leonardo da Vinci and other previous programmes. Hence, their points of view, practices and problems are based on a consolidated experience and deep knowledge of international mobility.

2.2.1. *Countries involved in mobility*

The countries involved in mobility experiences described in what follows are, of course, the four partner states, plus other countries particularly attractive from both the origin and destination of the mobility experiences.

[2] Actually, the dual VET system is not uniquely pertaining to Germany. But Germany is the only country implementing dual VET, among partner ones in ROI-MOB.

The basic data are described in Figure 2.1 and Table 2.1. The four countries involved in the ROI-MOB project were responsible for 92.8% of participants sent and 60.2% of those hosted. Out of the four project countries the most attractive destination countries in our sample are the U.K. (13.6%), Ireland (4.3%) and France (4.0%). Other countries well represented as destinations are: Malta (also English speaking), Central Europe countries (mainly Poland, Czech Republic), Austria, Denmark, Lithuania and Greece (18% as a whole). There are few cases of mobility out of Europe.

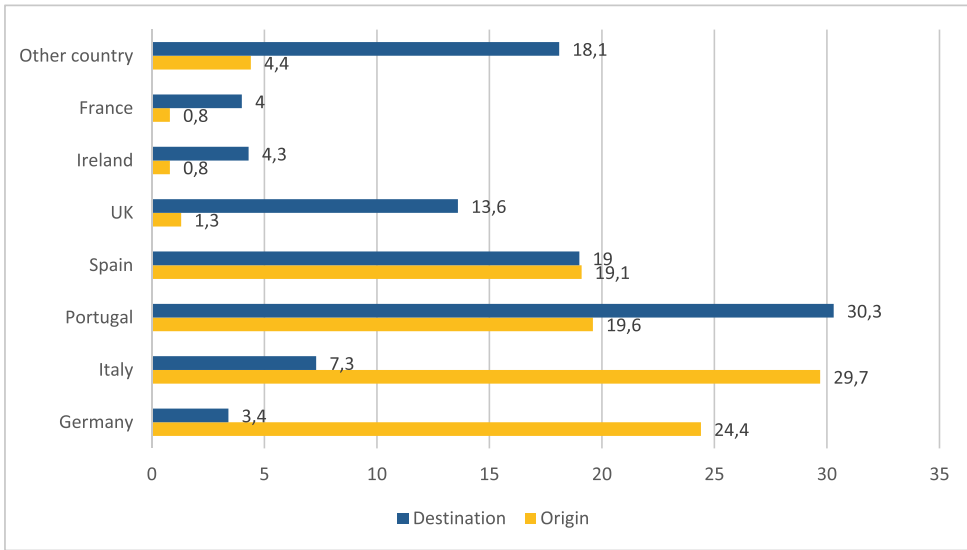


Figure 2.1. Per cent frequencies of participants to VET Erasmus+ mobility by country of residence and of destination (*n=1027*).

Table 2.1. Origin and destination of VET mobility experiences of participants (*n=1018*).

Destination Origin	*Germany*	*Italy*	*Portugal*	*Spain*	*Other EU*	*Out EU*	*Total*
Germany	1.8	0.9	0.3	1.9	18.8	0.6	24.3
Italy	0.7	2.4	13.3	8.9	4.5	0.1	29.9
Portugal	0.7	1.5	7.5	2.0	8.1	0.0	19.6
Spain	0.2	2.7	7.7	4.4	4.2	0.0	19.2
Other	0.1	0.0	1.7	1.9	3.5	0.0	7.0
Total	3.4	7.4	30.4	19.1	39.1	0.7	100.0

On the one hand, if you look at the numbers of Italy, Portugal and Spain (Mediterranean countries with Latin languages) it seems that cultural and linguistic proximity is taken into account, as a way to favour integration in society and at work.

Integration is a fundamental aspect in any mobility, in particular in short mobilities, as it speeds up the adaptation period and makes staying abroad smoother and more advantageous. On the other hand, the U.K. and Ireland altogether account for 17.9% of the mobility destinations. This preference may be due to the opportunity they represent to learn English, that seems to remain strategic for successful international careers.

This is likely to strengthen another relevant finding: schools and companies chose destination countries for their students or preferred hosting participants from specific countries according to different criteria and strategic reasons. The organisations declaring to send more to some countries than others are: 63.6% of sending schools and 49% of sending companies. The preferences about the origin of the received participants are not so strong: 41.8% of schools and 8% of companies used to receive more from some countries than others.

1.2.2. *Experience length*

The mean length of an Erasmus+ VET mobility experience in our sample was 8.3 weeks, with a notable variability among participants (Table 2.2). The variability unveils very different behaviours of participants: Figure 2.2 highlights at least three of them, each corresponding to a strategy of the sending organisations: (i) mobilities lasting around one month or so, (ii) mobilities lasting around two months, and (iii) mobilities lasting about three months. It may be perceived also a fourth behaviour that encompasses a minority of participants who experienced a mobility longer than three months. The latter relates to the ErasmusPro scheme, which started in 2017. That might be one of the reasons behind the lower number of this kind of mobilities.

The differences among types of participants are relevant (Table 2.2 and Figure 2.3): apprentices from firms perform the shortest periods of mobility (54% of cases of one month or less, the median period being 4.1 weeks), students in a dual track system had mobilities lasting an intermediate time (mean and median period: 6.8 weeks, almost three weeks more than apprentices), and students in other VET schemes experiencing longer periods, about two weeks more than dual track students (mean and median above 9 weeks). From now on, we will refer to this triple categorisation of participants (students, dual track learners, apprentices) as the main reference while discussing mobility experience.

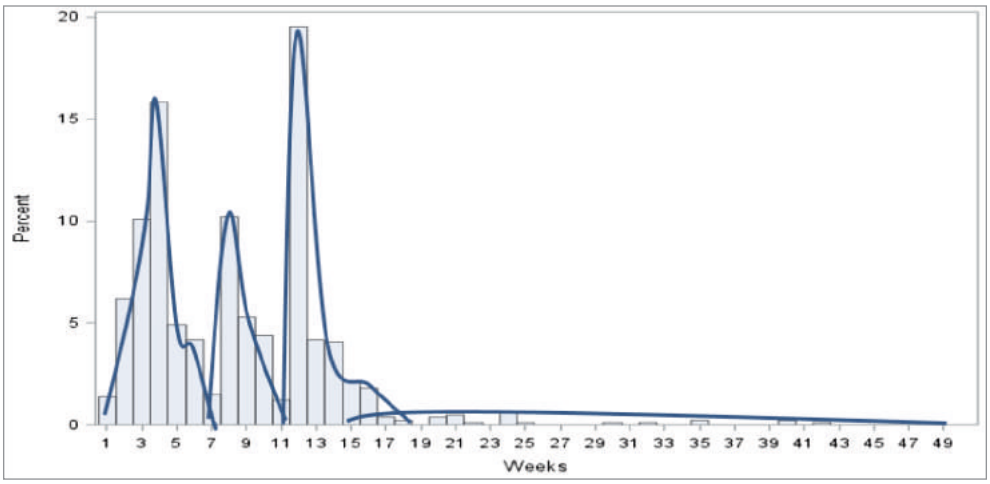


Figure 2.2. Distribution of participants to VET Erasmus+ mobility by number of weeks their experience lasted (n=1003).

Table 2.2. Per cent distribution and distributional parameters of participants to VET Erasmus+ mobility, by duration of the experience and participant's main activity right before mobility.

Weeks	Student (n=505)	Dual track (n=371)	Apprentice (n=80)	Total (n=1003)
1-2	4.3	6.2	33.8	7.5
3-4	17.2	42.1	20.0	26.0
5-6	9.3	10.5	5.0	9.1
7-8	13.3	10.8	8.8	11.7
9-10	11.9	8.1	5.0	9.8
11-12	25.9	12.9	15.0	20.7
13-14	10.5	5.1	6.2	8.6
15-16	4.2	2.4	5.0	3.8
17-18	1.4	0.6	0.0	1.1
19-20	0.6	0.0	0.0	0.3
21 and more	1.4	1.3	1.2	1.5
Total	100.0	100.0	100.0	100.0
Mean	*9.3*	*6.8*	*6.5*	*8.3*
Median	*9.5*	*6.8*	*4.1*	*7.8*
s.d.	*4.6*	*4.0*	*5.8*	*5.0*

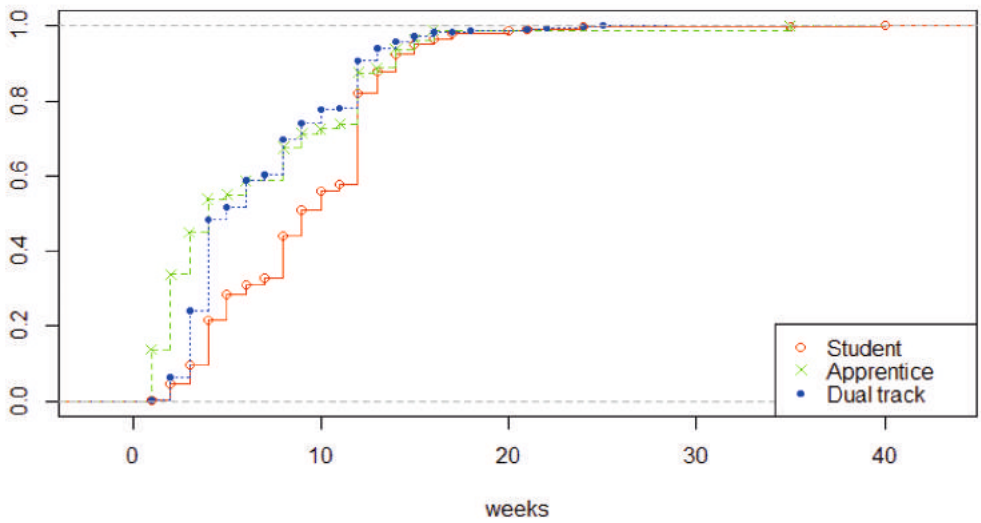


Figure 2.3. Number of weeks the VET mobility experience lasted, by activity of participants before mobility.

Various factors can concur to explain these variations. Even though there are no major differences in duration according to the production sector (Table 2.3), internships realised in the industrial or in commerce and tourism sectors appear to be the shortest. The only business sector in which internships exceeded three months with a certain frequency is services for industry (21.5%).

Partitioning mobility duration by country of origin (Table 2.4), we ascertained that in Germany the mean number of weeks is 4.6, the lowest. This is precisely the country where the largest sample of apprentices and dual VET students resided. Also, in the German sample there is a high representation of industry companies typically hosting internships with shorter durations.

In Italy, the mean duration is 8 weeks, matching with the average of Erasmus+ programme, while Portugal and Spain means are 10.7 and 10.6 weeks, respectively. In these three countries the duration is possibly influenced by the legally established duration of curricular internships. In any case, in Portugal and Spain mobility strategies seem to point to longer stays since 2014, closer to the twelve weeks proposed by the European Commission in 2017 with the ErasmusPro program.

Table 2.3. Per cent distribution and distributional parameters of participants to VET Erasmus+ mobility, by duration of the experience and business sector during mobility.

Duration (weeks)	*Industry (n=281)*	*Commerce & tourism (n=265)*	*Industry services (n=98)*	*Other services (n=355)*
4 or less	36.7	35.1	19.4	33.0
5-8	24.6	17.0	21.4	20.6
9-12	26.7	34.7	37.7	28.7
13-14	6.4	6.0	13.3	11.0
15 or more	5.6	7.2	8.2	6.7
Total	100.0	100.0	100.0	100.0
Mean duration	7.6	8.2	9.8	8.5
Median duration	6.6	7.6	9.7	9.7
Standard deviation	4.3	4.7	4.8	5.7

Table 2.4. Indicators of engagement of VET mobility experiences, by country of origin of participants.

Indicator	Germany (n=238)	Italy (n=348)	Portugal (n=172)	Spain (n=244)	Overall (n=1003)
Mean number of weeks per experience	4.6	8.0	10.7	10. 6	8.3
Grant amount* per week (Euros)	136.3	87.8	156.1	182.1	187.9

(*) The grant amount by country was averaged using the number of participants as a weight.

Duration can have a decisive impact on the learning curve of participants. Hence, it should be planned carefully because any stay abroad has to consider an adaptation period and a closure period. A mobility of one month or less can be too short to allow participants to overpass the adaptation stage and enter into what can be called a "productive" mode much before going back home, especially considering work placements.

On the opposite end, a mobility of six months or more also needs careful planning. As it allows a long period of learning and practice, there is the risk that participants become so well integrated that they feel a negative sense of routine and of performing always the same duties. A too long duration could prevent them from acknowledging learning outcomes and the expertise they are gaining, thus resulting in a negative or neutral feeling regarding the experience.

2.3. Monetary and non-monetary costs for mobility

The monetary costs caused by mobility are examined globally, referring to all actors of the mobility system. Costs incurred by families, schools and companies are presented in Sections 2.2.1 and 2.2.2, respectively, and the basic data are presented cumulatively in Table 2.5. A distinction of costs according to participants' activity is done in Table 2.6.

Schools and companies defined also the type of other, non-monetary costs generated by Erasmus+ mobility. The types of non-monetary costs pinpointed by schools and companies are presented in Table 2.7.

2.3.1. *Costs to families*

Families in our sample have a mean cost for outgoing mobility of 863 euros for a single experience (Table 2.5 and Figure 2.4). This amount, relativized with the duration of the experience – which is 8.3 weeks as presented Section 2.2 – makes an average of 104 Euros per week per participant.

Table 2.5. Indicators of costs of a VET mobility experience, in Euros, by country**.

Indicator	Germany	Italy	Portugal	Spain	Overall
Mean cost per experience for participants' families	786.2 (n=215)	628.7 (n=326)	859.6 (n=146)	1278.0 (n=223)	863.4 (n=910)
Mean cost per week for participants' families	192.8 (n=215)	102.3 (n=326)	98.1 (n=146)	136.1 (n=223)	131.7 (n=910)
Mean cost per participant for sending schools*	67.1 (n=25)	199.1 (n=23)	145.2 (n=72)	211.2 (n=50)	160.4 (n=170)
Mean cost per participant for hosting schools*	NA	50.1 (n=11)	32.3 (n=40)	64.6 (n=22)	45.5 (n=77)
Mean cost per participant for sending companies*	214.3 (n=28)	NA	NA	NA	404.9 (n=33)
Mean cost per hosted participant in companies*	49.0 (n=10)	NA	47.1 (n=121)	75.7 (n=56)	57.5 (n=187)
Mean yearly cost per company for hosting participants*	675.0 (n=10)	NA	473.1 (n=121)	442.0 (n=56)	474.6 (n=187)

(*) *The cost does not include possible grants received by the Erasmus+ Programme and ignores non-monetary aspects such as dedicated time, worries, etc. (**) If the sample size is lower than 10, estimates are not computed (NA).*

The analysis of cost indicators highlights that mobility experiences varied widely (standard deviation=1086). Indeed, the median (428) is about half the mean of the

distribution.[3] This means that 50% of experiences costed to families less than 428 Euros and the other 50% costed more than that. If the median cost is relativized to the median duration, the weekly cost to the median family is about 55 Euros. This figure is much more affordable than the one computed using the mean and is also coherent with the idea that most of the funding is from the Erasmus+ program. Of course, durations longer than the median, in particular of four months or more, cost to families much more than that. We avoid commenting these results, though it would be interesting if future studies compare it with standard weekly costs of an average family for child support.

The variability of the median costs among school students, dual track people and apprentices are similar. Instead, the mean costs of school students are about 33% higher than those of apprentices, and this depends on the usually longer periods of mobility abroad school students took. Differently from students or unemployed participants, apprentices and working participants continued to receive their income. This latter situation is particularly evident in Germany.

Indeed, a quota of 4.1% of the involved families spent more than 3.000 Euros to send their siblings abroad and another 19.4% spent between 1.000 and 3.000 Euros. On the contrary, 12.6% of participants stated their family did not have any direct expense. Living costs are generally lower in Spain and Portugal.

Table 2.6. Per cent distribution and distributional parameters of monetary costs borne by participants' families for VET Erasmus+ mobility, by participant's main activity.

Euros	Student (n=454)	Dual track (n=337)	Apprentice (n=76)	Total (n=911)
0	14.1	10.1	14.5	12.6
1-250	21.6	17.8	15.8	19.1
251-500	25.1	26.4	27.6	25.7
500-1000	16.3	20.2	26.3	19.1
1001-1500	5.1	8.6	6.6	6.7
1501-2000	6.8	7.7	7.9	7.3
2001-2500	2.6	2.7	0.0	2.4
2501-3000	2.9	3.8	0.0	3.0
3001 and more	5.6	2.7	1.3	4.1
Total	100.0	100.0	100.0	100.0
Mean	*882*	*871*	*656*	*863*
Median	*392*	*459*	*428*	*428*
Standard dev.	*1224*	*963*	*647*	*1086*

[3] A standard deviation larger than the mean indicates that the mean does not well represent the centrality of the distribution and that the median—that is the cost caused to the family staying right in the middle of the ordered list of costs—should be used for that purpose instead of the mean.

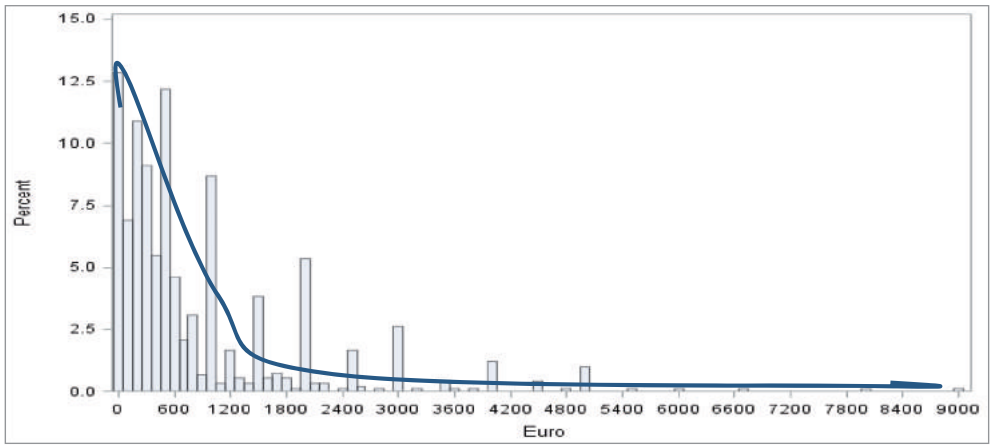


Figure 2.4. Distribution of participants to VET Erasmus+ mobility by monetary cost endorsed by participants' families (*n=911*).

2.3.2. *Monetary costs to schools and companies*

The source of budget entries for mobility was stated by schools and companies themselves through the questionnaire (Figure 2.5).[4] The main source of company budget for mobility is its own resources, while schools rely basically on EU funds. There is a compensation effect between own budget and EU support for schools and companies: if the main source is own budget, the second source of monetary support refers to the EU, while if the main source is EU funding, the second is systematically own budget.

There is a difference also between sending and hosting entities: sending schools and companies rely much more on EU funding availability than hosting organisations.

It is important to point that other public or private funds help both sending schools (9.4% of the overall budget used for mobility) and sending companies (6%), and also both hosting schools (15.7%) and hosting companies (10.1%). It is not possible to specify the financial sources since they were not asked the surveyed organisations, but one can imagine that local authorities and private and public charity bodies helped the sending and even more the hosting units to participate in this important training process.

[4] Some respondents did not clearly understand the questions regarding mobility financing. Two misunderstandings happened: (a) in spite of answering separately about own budget and grant received, in many cases, grants were confused with own budget; b) many sending organisations used to transfer to participants only the remaining grant, after paying costs like accommodation or travel, so some participants confused the money they received with the grant. Hence, data on grants have to be analysed with caution.

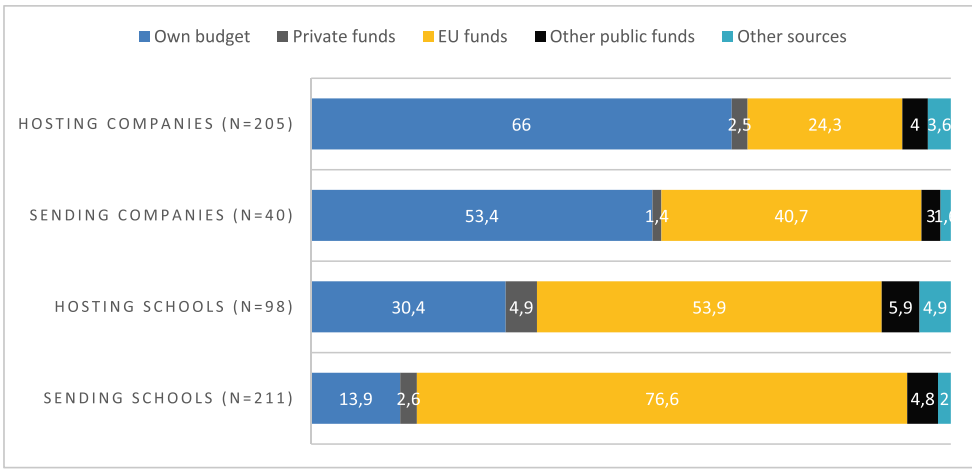


Figure 2.5. Per cent distribution of budget schools and companies devoted to VET Erasmus+ mobility by type of activity of schools/companies.

2.3.3. *Non-monetary costs to schools and companies*

Schools and companies stated they had also non-monetary costs generated by the Erasmus+ mobility. The data are presented in Table 2.7 and Figure 2.6.

The category of costs schools see as heavier are the ones due to the overall organisation (39.4% by sending schools and 29.4% by hosting schools), and costs and time of dedicated structures (21.3% and 29.4% by sending and hosting schools, respectively). Then also indirect staff costs (for tutorship, training, social activities and other indirect costs) are relevant both to sending (11.6%) and hosting (16.8%) schools. If the direct engagement of staff is considered, the proportion of staff cost raises to more than 20% for both sending and hosting schools.

Table 2.7. Per cent distribution of non-monetary costs caused by mobility to schools and companies by type of activity of schools/companies.

Non-monetary costs	Sending schools (n=207)	Hosting schools (n=98)	Sending companies (n=45)	Hosting companies (n=237)
Organizational costs	39.6	29.4	22.9	18.6
Direct staff costs	9.2	6.7	35.4	14.8
Indirect staff costs	11.6	16.8	8.3	32.9
Loss in production	8.7	6.7	6.3	6.3
Dedicated structures	21.3	29.4	14.6	23.2
External services	4.8	5.0	6.3	1.3
Other costs	4.8	5.9	6.3	2.9
Total	100.0	100.0	100.0	100.0

In the case of companies, the feeling of engagement shown by non-monetary costs is differentiated whether the company is sending or hosting. For the former, the highest non-monetary cost was by far the involvement of personnel: the proportion between direct and indirect staff cost is above four, that is sending participants requires four times as much direct involvement of company staff than indirectly involved staff. The other relevant costs due to sending activities are of an organisational type or deriving from keeping in activity the internal structures.

Instead, for companies that hosted participants, the main cost relates to staff indirectly involved in mobility at the same time as other activities were going on. It is likely that, in order to assure tutoring time to support hosted participants' performance and integration, regular duties became heavier and more staff was affected with this presence (32.9% of indirect costs *vs.* 14.8% direct staff costs). Also, costs and time of internal structures dedicated to host people from abroad are an important issue (23.2%) and the general cost for the overall organisation (18.6).

The number of hours required to staff to send an apprentice costs, on the whole, 4.6 hours of work, while staff time for hosting a participant is more than twice as that (10.1 hours); see Figure 2.6. The level of engagement for hosting a participant seems neatly higher than that of sending one. This fact may be explained with the practice of sending organisations either to use networks in order to place participants and manage logistics, or to require from participants an active role in organising mobility, externalising or sharing part of the workload.

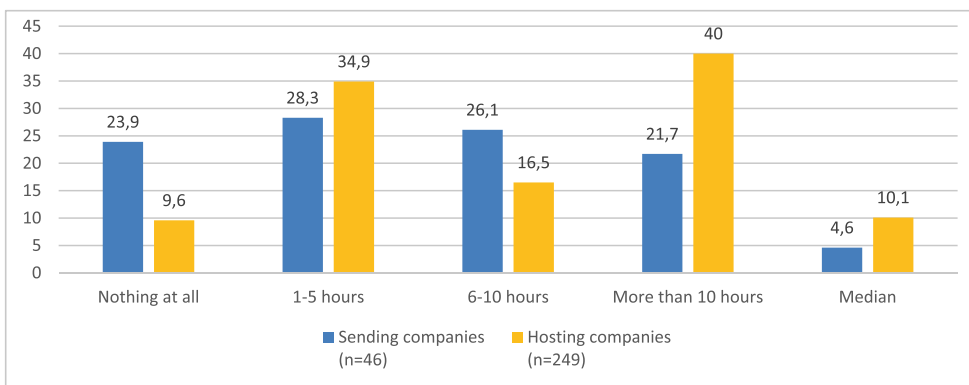


Figure 2.6. Per cent distribution of the number of hours per participant dedicated to mobility by companies, by company activity.

It is to be stressed that very few schools and companies highlighted that mobility interfered with teaching and production, respectively. This may reflect one of two realities: either mobility is kept aside of the main activities of the hosting organisation, having specific duties and their own track within the organisation, or integration strategies are well developed and integration of interns is smooth and

does not damage work rhythm and quality. In any case, this avoids an increase of duties for both staff and structures of the hosting organisation.

When the organisation is not able to cope with this additional activity, it recruits external energies, but this seldom happens. Hosting companies very rarely outsource to external services: either they already have the possibility to host participants or they do not start this business at all.

2.4. Selection of destinations and participants in VET mobility

Destination countries are not chosen at random and differences among countries are indeed remarkable. On average, schools sent a number of about 22 participants to whatever country in 36.4% of cases. This rate oscillates from 8.3% in Spain to 51.4% in Italy (Table 2.8) and the mean number of participants varies from a minimum of about 12 students per school in Italy and a maximum of about 34 in Germany. In the case of sending companies, the number goes up to 52.6% in Germany. The difference in the mean number of applicants sent abroad by schools and companies is remarkable: on average, it is seven from companies and more than three times as much as that from schools.

This might mean that in some countries, like Spain, partnerships and networks stand for long and are more consolidated, and that sending organisations opt to place their participants within these connections, as they represent a trustworthy partnership and an added security for participants and the whole process deployment.

The impact of this networking on applicant selection is twofold. On the one hand, it guarantees that the participant profiles are carefully selected and negotiated in advance according to skills and expectations, thus improving the quality of mobility. On the other hand, it may mean that only available business sectors and predefined numbers are accepted, not to change or adapt projects to improvised needs. However, unpreparedness has a small possibility to occur as there is much flexibility in sending participants to whatever country.

Another non-trivial conclusion is that schools are able to mobilise the largest part of applicants in the project countries. Moreover, it means that even in German companies, who are accustomed to sending some of their apprentices in abroad internships, the mean number per company is limited. Remembering that sending schools have a median number of enrolled students of 246, our estimates imply a yearly proportion of VET internships of 9 every 100 students of all grades, while sending companies have a median number of 726 employees, implying the sending of one every 100 employees. Of course, apprentices are just a minority of company employees, though the rates recall the necessity of more advertisement towards companies.

Sending organisations work with a variable number of participants: in fact, the rate of adoption of a fixed quota of participants in each flow is 17.5% for schools and 8.3% for companies. The criterion of varying numbers—usually associated with organisations that do not possess a VET Charter—might result from changing mobility and strategy needs, but also from an unstable access to funding, which can negatively affect long term strategies and consolidation of school-labour networks (Tables 2.8 and 2.9).

Table 2.8. Selection criteria of applicants adopted by sending schools, by country.

	Germany (n=29)	Italy (n=37)	Portugal (n=91)	Spain (n=60)	Overall (n=217)
Mean number students sent	33.8	11.9	26.7	16.8	22.3
% sent to whatever country	34.5	51.4	49.5	8.3	36.4
% selecting a fixed quota	10.3	2.7	12.1	38.3	17.5

Table 2.9. Selection criteria of applicants adopted by sending companies, by country.

	Germany (n=37)	Overall (n=47)
Mean number of students sent	5.7	7.0
% sending to whatever country	52.6	51.0
% sending a fixed quota	8.1	8.3
Median % acceptance rate	97.3	94.7

Participant selection is in the order of the day in every project, and involves all phases, from planning to evaluation. As we will see ahead, hosting organisations pinpointed this aspect as one of the issues of mobility organisation and hence of quality in mobility.

Incoming organisations confirmed this is an important aspect of mobility as only 4.9% declared not to apply selection criteria and only 2.7% used to give grants following the order of application (Table 2.10). The most rated criteria relate with potential to perform in internship (62.7% stated to select applicants also on a CV basis), but most schools based their selection on motivation to take part in mobility (65.5%), on the ascertained personal and social skills (62.3) that can ease adaptation, communication, resilience and self-development, and also on language skills (49.6%). The need for previous mobility experience is very low, indicating that also inexperienced participants can benefit from mobility: this may be considered an equity principle.[5]

[5] Actually, many sending organisations tend not to favour an immediate second mobility chance for learners who already had their first. We can see two main reasons behind that: (1) funds for mobility are finite: on an equity base, schools prefer to offer this chance to as many learners as possible, provided that learners prove they can banefit from mobility; (2) very often, as discussed in this chapter,

Table 2.10. Per cent selection criteria adopted by sending schools, by country.

	Germany (n=29)	Italy (n=38)	Portugal (n=92)	Spain (n=61)	Overall (n=220)
No selection criteria	27.6	0.0	1.1	0.0	4.9
First-come-first-served	10.3	2.6	0.0	3.3	2.7
Curriculum or performance	10.3	65.8	73.9	68.9	62.7
Language skills	24.1	73.7	40.2	60.6	49.6
Personal and social skills	48.3	21.1	80.4	67.2	62.3
Previous work experience	3.5	0.0	2.2	4.9	2.7
Previous mobility experience	0.0	2.6	1.1	1.6	1.4
Motivation to go on mobility	69.0	79.0	67.4	54.5	65.5
Staff certainty of usefulness	20.7	11.5	12.0	26.2	16.8
Median acceptance rate	96.3	45.7	80.6	83.2	81.1
Median participation rate	3.7	9.7	6.5	6.7	6.4

The difference in hosting strategies between schools and companies can be deduced from Tables 2.11, 2.12 and 2.13. The figures of hosted participants mirror those of the sent ones: on average, a school hosts about 21 people and a company 4.4. We should remind that hosting schools have a median of 193 enrolled students. If we take the ratio between the interns hosted per year and the median number of enrolled students, we determine that there is one intern every 10.9 students attending the schools in our sample. Since the hosting companies are much smaller than the sending ones, the number of interns per employee is much higher in hosting companies: 27.5%. Hence, the density of interns and the roles they can fulfil in hosting organisations are very diverse. In hosting firms, in particular, their role can be relevant also for production or sales purposes.

Roughly, out of three hosting schools, one does not apply any selection, another selects a predefined number of participants per flow and the third behaves in a more episodic manner, using a case by case criterion.

As we can see, most schools and companies accept the large majority of applicants. The origin of participants seems to be unimportant to both schools and companies (hosting from any country: 58.3% and 90.8%, respectively). The notable figure is for sending companies, whose median acceptance rate is almost 95%, with 42.5% of companies sending all the apprentices who applied for abroad mobility.

Examining the acceptance rate by country, it is to be highlighted the high median rate of acceptation of German sending companies (97.3%), of German sending schools (96.3%) and of Spanish hosting schools (92,5%). These estimates reveal

mobility implies costs for learners or their families, in addition to the Erasmus+ funding: schools tend not to set up procedures that would favour only wealthier learners.

that causes of very high rates shown by sending units may be numerous: a hypothesis can be that not only spontaneity drives the applications but also some pressure of the organisation towards students attending classes and apprentices working in firms. Another hypothesis is that, in some countries, the number of applicants is so small that lowering the bar is necessary for reaching sufficient numbers of leavers. It may be a coincidence, but the highest rates were ascertained where the samples were limited in size.

The sending schools selected applicants according to their professional and language skills (about 65% and 51% of cases, respectively). A second criterion used was the duration of the planned experience (45%), then the time of the year in which the application was feasible (38%) and finally the age of the applicant (18%). In an irrelevant number of cases, selection was made also according to gender and nationality, but it is unclear in which direction the selection process operated. So, these latter can be ignored in this work.

The choices concerning the selection of participants reflect the attempt of organisations to benefit from mobility and give a meaning to it, which highlights their commitment and motivation to participate in mobility as a learning and exchange process.

Table 2.11. Selection criteria of participants adopted by hosting school, by country of origin.

	Germany (n=12)	Italy (n=18)	Portugal (n=58)	Spain (n=28)	Overall (n=116)
Mean number hosted students	23.0	10.9	23.2	20.6	20.7
% hosting from any country	NA	NA	79.0	28.6	58.3
% selecting as planned	NA	NA	17.9	37.9	31.0
% selecting case by case	NA	NA	46.4	31.0	39.6
Median % acceptance rate	91.5	38.0	85.8	92.5	84.0

(*) Frequency distributions are not computed (NA) for sample sizes lower than 20.

Table 2.12. Selection criteria of participants adopted by hosting companies, by country of origin.

	Germany (n=18)	Portugal (n=169)	Spain (n=68)	Overall (n=257)
Mean number hosted students	1.6	3.7	7.1	4.4
% hosting from any country	80.0	94.2	86.8	90.8
Median % acceptance rate	29.7	64.4	86.9	76.5

Table 2.13. Per cent selection criteria and median rate of acceptance adopted by hosting schools, by country*.

	Portugal (n=36)	Spain (n=20)	Overall (n=82)
No selection applied	35.7	31.0	29.4
Duration of internship	47.2	55.0	45.1
Time of the year	47.2	40.0	37.8
Language skills	33.3	70.0	51.2
Professional/technical skills	63.9	75.0	64.6
Age	8.3	15.0	18.3
Gender	2.8	0.0	1.2
Nationality	0.0	5.0	2.4

(*) Frequency distributions are not applied (NA) for sample sizes lower than 20.

If we further disaggregate the acceptance rates of candidates to mobility according to structural characteristics of schools and companies we obtain the following results (Tables from 2.14 to 2.18):

– The acceptance rate shows no difference in relation to the grant amount assigned to participants, nor to school size.
– The way sending schools organise their mobility programmes is mildly related to the rate of acceptance of applicants. The more organised schools, e.g. those belonging to a consortium, are more selective than schools operating in autonomy or informal networks and even more than those recurring to intermediate organisations (acceptance rates: 71%, 79% and 84%, respectively). Besides, the acceptance rate is high for all types of schools.
– The acceptance rate decreases as the number of hours spent by hosting companies to manage an intern: all applicants were accepted by companies dedicating to apprentices from abroad no time at all, while those dedicating them at least ten hours each selected 29% of applicants.
– A similar relation is shown if the acceptance rate is crossed with the cost incurred by companies specifically for hosting apprentices from abroad. The rate steeply diminishes from 85% for a yearly cost of 250 Euros to 50.5% for the companies incurring in additional cost amounting to more than 1.000 Euros.

All the above suggest that the organisations more structured and more investing in the mobility business are more selective than those dedicating just marginal energies and budget to hosting activities, or no budget at all. Schools belonging to a consortium not only feel stronger in selecting only the best candidates, but also may be able to better advertise their mobility programmes and gain more applicants. In other words, the rate of applicant selection seems to be, at least in a relative sense, an indicator of the level of maturity of an organisation as regards mobility.

Table 2.14. Median rate of acceptance of students' requests for mobility and median rate of participation of students attending a sending school, by type of organisation of mobility programmes*.

	Autonomy, informal net (n=120)	Consortium (n=53)	Intermediary, others (n=114)	Overall (n=196)
Median acceptance rate	78.8	71.0	84.4	80.8
Median participation rate	6.6	5.9	7.1	6.8

(*) Schools could indicate more than one type of organisation.

Table 2.15. Median rate of acceptance of students' requests for mobility and median rate of participation of students attending a sending school, by average amount of grants (in Euros) assigned to participants.

	≤ 800 (n=49)	801-1500 (n=46)	1501-3000 (n=69)	3000-5000 (n=18)
Median acceptance rate	79.1	84.2	76.3	83.8
Median participation rate	6.0	7.3	5.7	7.4

Table 2.16. Median rate of acceptance of students' requests for mobility and median rate of participation of students attending sending schools, by school size.

	≤ 100 (n=86)	101-500 (n=34)	501-1000 (n=30)	>1000 (n=53)
Median acceptance rate	79.8	87.5	81.1	79.3
Median participation rate	6.3	12.0	8.0	3.9

Table 2.17. Median rate of applications accepted by hosting companies, by hours company spent for hosting participants from abroad.

	None (23)	1-5 hours (n=86)	6-10 hours (n=40)	>10 hours (n=95)	Overall (n=246)
Median acceptance rate	100.0	77.9	73.4	71.8	76.1

Table 2.18. Median rate of applications accepted by hosting companies, by yearly cost a company incurred from hosting participants (in Euros).

	≤ 250 (n=122)	251-500 (n=48)	501-1000 (n=34)	≥ 1001 (n=33)
Median acceptance rate	85.4	78.1	65.1	50.5

The duration of the experience was crossed with the activity of the sending organisations and the business sector in which participants developed their internships (Tables 2.19 and 2.20). One can easily see that the average number of weeks duration relates to both variables in a limited manner. If we go in depth into the

estimates, we find something that was partially observed examining the participant activity, namely that apprentices take shorter periods (6.5 weeks on average) than students (8.5). Moreover, and not difficult to understand, students enrolled in lower secondary schools stay for periods even shorter than apprentices (5.2) while vocational schools perform the longest ones (9.7 weeks).

Regarding the business sector in which the interns deployed their activity, the only partial difference is between services for industry and services for persons and families (9.8 and 9.5 weeks, respectively) and the industrial sector (7.5).

The within-category variability of both sending unit activity and internship business sector varies little with respect to means. This mirrors a fair homogeneity of behaviours within the analysed categories and may mean that duration depends primarily on the before-leaving activity of participants and the business sector in which they developed their abroad internships.

Table 2.19. Mean number and standard deviation of duration of participants' experience, by activity of sending organisation (in weeks).

	Lower secondary (n=54)	*Vocational (n=336)*	*Higher sec, university (n=571)*	*Company (n=80)*	*Total (n=1003)*
Mean number of weeks	5.2	9.7	7.8	6.5	8.3
Standard deviation	3.3	4.1	5.5	5.8	5.0

Table 2.20. Mean number and standard deviation of duration of participants' experience, by business sector during mobility (in weeks).

	Industry (n=249)	*Commerce & tourism (n=265)*	*Person services (n=63)*	*Industry services (n=98)*	*Other services (n=324)*
Mean number of weeks	7.5	8.2	9.5	9.8	8.3
Standard deviation	4.3	4.7	6.9	4.8	5.4

2.5. During the experience

This section is dedicated to the description of tasks performed by participants during the Erasmus+ mobility experience. The question posed to participants was: "*What did you do during your stay?*" and the obtained answers are presented in Table 2.21.

Table 2.21. Per cent distribution of activities realised by participants during their VET Erasmus+ mobility by participant's main activity.

What did you do during your stay?	Student (n=504)	Dual track (n=369)	Apprentice (n=79)	Total (n=1002)
More or less same duties as in my origin company	4.2	13.8	22.8	9.3
More or less same duties as an internship in my country	18.8	13.3	5.0	15.7
Fair duties considering short period	14.7	14.1	19.0	14.8
Activities related to my educational programme	30.9	23.8	34.2	28.8
Things outside my educational programme	26.4	27.1	11.4	25.3
Nothing specific, visits	4.2	6.5	7.6	5.2
Other answer	0.8	1.4	0.0	0.9
Total	100.0	100.0	100.0	100.0

International mobility programmes were perceived by participants either as similar to the activities they used to do in their country of origin or as an improvement with respect to the normal educational or training patterns the participants belonged to. By and large, 54% stated that mobility was in continuity with their training paths, either because working plans were related to curricula, or because tasks were similar to what they were doing or would be doing if they did not go abroad. Another 40% stated they had been involved in tasks somehow new or particular, that were not expected in a short experience abroad. Finally, 6% gave answers pointing to other types of learning activities, like visits or other general purposes.

Crossing responses with participant activities, 30% of apprentices and 41% of students (either dual track or single track) said they performed activities specific to the mobility programme they would not have done otherwise in their home country.[6] In commerce, tourism and services for persons and families the novelty of tasks was perceived as more effective than in the industrial sector (Table 2.25).

The difference among the categories of participant activities can be partially explained with the closer contact dual track student have with companies and with the working world, being the novelty smaller when it comes to aspects like integration and adaptation to an organisation, gaining autonomy and trust or progressing in terms of tasks and responsibilities. On the other hand, continuity with training curricula or alternative internship working plans does not imply a negative feeling

[6] These numbers were obtained by merging the frequencies to the possible answers: "I realised fair duties considering the short period of the internship" and "I did new things outside my experience/ educational programme".

towards mobility. Many students need to make their internships with these specific contents to finish their graduation. In addition, students gain a deeper knowledge and domain of skills and techniques and are able to demonstrate with a certificate issued by a European employer that they can perform those tasks.

The other way round, apprentices seem to be the category perceiving mobility as a diverse way of doing the customary work activities. That does not mean they did not learn from the mobility experience, but that internship duties were more similar to everyday activities. To them, this was an occasion they took just partial advantage of.

The main conclusion, therefore, is that VET mobility programmes allow participants either to carry out something they were used to do in a different context or constitute a really new working experience in a before-unknown context. Regarding how they did it—communicate, integrate and perform—it is interesting to see that 95% used in their internships a language that is not their mother tongue, being it English or the language of the destination country (Figure 2.7).

These numbers are very different when it comes to private and leisure time, where 40% used their mother tongue. It is a usual practice sending participants in groups to facilitate both mobility organisation and participants' comfort: this might explain why mother tongue is so present in leisure time: participants sent together end up living together and sharing their social and leisure life.

A strong conclusion is that this type of work experience is challenging and professionally relevant for participants, but, as we shall see later on in detail, it is highly effective as a training for strengthening and shaping their human, psychological and social skills.

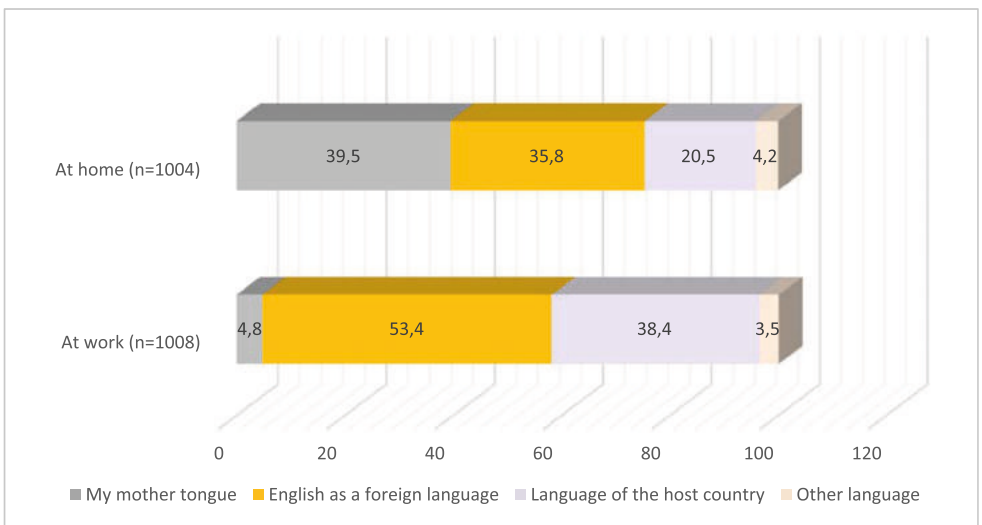


Figure 2.7. Per cent distribution of languages used by participants during their VET Erasmus+ mobility by social context in which language was used.

A total of 92.3% of participants declared they absolutely or partially worked in an international environment (Table 2.22), without appreciable differences between 'regular' students, students in a dual track and apprentices, showing that these participants became more fit to new work realities more common nowadays in a globalised world.

The experiences lived by participants were hopefully related to the changes and adaptations hosting companies did to host them, aiming at creating a good environment to work and learn, and increase the possibilities of integration. The integration of participants in the normal production system of services or products seems to be the most common choice (90.4%), which denotes that mobility is seen as an opportunity for real work experience and not just a simulation of it.

Table 2.22. Per cent distribution of participants working in an international environment during their VET Erasmus+ mobility, by participant's main activity.

International environment	Student (n=505)	Dual track (n=369)	Apprentice (n=80)	Total (n=1004)
Absolutely yes	65.9	67.2	67.5	66.2
Just partially	27.4	24.1	26.3	26.1
Not at all	6.7	8.7	6.2	7.7
Total	100.0	100.0	100.0	100.0

Table 2.23. Per cent distribution of participants working in an international environment during their VET Erasmus+ mobility, by participant's main activity and organisation that mainly helped them carrying out the experience.

Helping organisation	Student (n=505)	Dual track (n=368)	Apprentice (n=81)	Total (n=1004)
My school	53.5	34.0	29.6	42.6
My training centre	18.4	16.3	19.8	17.8
My company	6.5	13.3	19.8	10.3
Entity at destination	14.5	17.4	16.1	15.9
Other organisation	7.1	19.0	14.8	13.4
Total	100.0	100.0	100.0	100.0

Three different kinds of investments are typically made by hosting organisations (Tables 2.24 and 2.25): assigning specific persons as tutors to supervise participants throughout the internship (65.9%), buying extra equipment and materials (29.2% and 43.5%) and acquiring extra services that become necessary when hosting the participants (53.6%). The care and costs borne by hosting companies show their commitment and the feeling that hosting participants is worth to them.

Table 2.24. Per cent distribution of practices adopted by sending companies because of mobility, by country*.

The company	Germany (n=38)	Overall (n=49)
Devotes staff mainly to tutorship/training	0.0	6.1
Devotes staff mainly to social activities	0.0	4.1
Devotes staff to all activities	34.2	32.7
Devotes no specific staff to mobility	65.8	57.1
Total	100.0	100.0

(*) *Frequency distributions were not computed for samples of size lower than 20.*

Table 2.25. Per cent rates of practices adopted by hosting companies because of mobility, by country*.

The company	Portugal (n=174)	Spain (n=71)	Overall (n=294)
Buys extra equipment	40.6	6.1	29.2
Buys extra working materials	44.1	44.9	43.5
Buys other needed services	46.0	67.4	53.6
Devotes staff mainly to tutorship/training	83.5	33.8	65.9
Devotes staff mainly to social activities	2.9	0.0	2.3
Devotes staff to all activities	4.1	11.8	6.2
Devotes no specific staff to mobility	9.4	54.4	25.6
Inrtegrates hosts in production	95.7	79.1	90.4

(*) *Frequency distributions were not computed for samples of size lower than 20.*

Chapter 3

The ROI-MOB indicator

3.1. The ROI-MOB composite indicator

Composite is an indicator obtained as a synthesis of a set of elementary indices measured at a sample of respondents. The ROI-MOB composite indicator, $I_{ROI\text{-}MOB}$, is aimed at measuring the overall quality of an Erasmus+ VET mobility experience or of a cluster of experiences.

The indicator is constructed by aggregating the final judgements obtained from the stakeholders of Erasmus+VET mobility through a convenient set of weights. In the following, we will use the perceived usefulness of the mobility experience to stakeholders as a synonym of quality and weights as a measure of the importance, or relevance, of the mobility experience to the stakeholders.

The first premise of the ROI-MOB indicator construction is that any single viewpoint is invariably limited in its capacity to represent the whole mobility process. For this, four surveys were carried out to represent the viewpoints of the mobility actors, one on participants, a second on schools, a third on companies and finally one on other institutional stakeholders. Interviewees of all four categories either are direct beneficiaries of the mobility experience or represent bodies that may in some way benefit of mobility.

A second premise is that evaluations were collected independently from one another, thus they can be merged to define a unique evaluation. Due to independence of the data collection procedures, no interaction between attributes of different actors is logically admissible.

A third premise is that weights conferred to actors depend on the perceived relevance of the actors themselves in the mobility process development. This premise is needed, as one may argue that weights attached to experience assessments should be proportional to the level of information possessed by the assessor or to other content-related variables. For the ROI-MOB indicator construction, all actors are hypothesised to be equally informed of the process, thanks to either the tasks performed or to cultural, legal or managerial involvement in the phenomenon. This assumption could allow other researchers to add to the indicator the

evaluations of possible stakeholders other than those included in this study, provided the additional stakeholders had an aware role in the process.

In this work, the categories of informed stakeholders having a role in the Erasmus+ VET experience are:

1. the participants, who were students attending either high school or dual track programmes, apprentices, and unoccupied young people;
2. the schools (or training centres) that sent or hosted participants in mobility,
3. the companies that sent or hosted participants, and
4. other private or public bodies that contributed, directly or indirectly, to the VET mobility process.

The structure of the ROI-MOB indicator can be represented as in Figure 3.1, in which each of the four categories is represented as a separate informer contributing to the composite indicator estimation with its own evaluation, X_k, and a specific importance weight, W_k.

A k-th evaluation can be either a summative measure, for instance a final judgement of the experience measured on an appropriate scale, or a set of measures of the dimensions contributing in a positive or a negative direction to define the quality of the experience. In this latter case, the set of measures expressed by stakeholder k (k=1, …, K) could be computed either at the end of a mobility experience or also at a given point in time as the balance of various independent factors representing the benefits s/he gained and the problems s/he met.

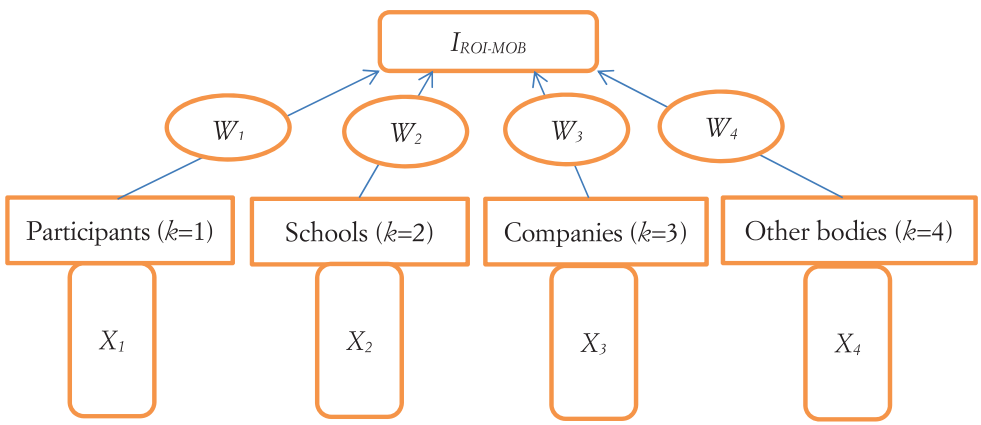


Figure 3.1. Structure of the ROI-MOB indicator.

Let us suppose that the generic k-th category of stakeholders stated that an entity, for instance a partecipant benefitted of two factors, B_{k1} and B_{k2}, and met cost C_{k1} and problem C_{k2}. In this case, the measure of X_k is a combination of the four factors, e.g. $X_k = g(B_{k1}; B_{k2}; C_{k1}; C_{k2})$, where $g(\cdot)$ is a function suitable to transform the observed benefits, problems and costs into a higher-level measure representing the overall evaluation of stakeholder k. If the importance of the four aspects varies, it would be necessary to weight them accordingly. Equal-size weights are admissible.

From now on, without losing generality, we assume that the evaluation of the k-th stakeholder is a single measure, either measured as a unique summative judgement or computed aside by merging the dimensions pertaining stakeholder k.

Technically, the indicator $I_{ROI\text{-}MOB}$ is a linear combination of the final evaluations given by the stakeholders of Erasmus+ VET mobility in Europe, each evaluation being weighted with a fixed weight:

$$I_{ROI-MOB} = \sum_{k}^{K} W_k \, X_k \tag{3.1}$$

where:

K is the number of stakeholders, or actors considered for evaluating a mobility experience. In our case, K=4 because we considered as informed stakeholders of Erasmus+ mobility: participants, schools, companies, and a pool of "other stakeholders". Indeed, further detail is also possible, for instance, sending schools could be considered separately from hosting ones;

X_k is a summary measure of the evaluations of an Erasmus+ mobility experience or a set of Erasmus+ experiences based on data collected at stakeholder k (k=1, …, K). The measure includes the overall evaluation of both benefits and problems encountered during the experience;

W_k is an 'importance' weight given by researchers to the evaluation X_k expressed by stakeholder k.

An X_k measure can be either an overall evaluation figure, for instance a final judgement on a quantitative scale, or a conveniently weighted combination of the evaluations given by stakeholders on more than one dimension of mobility. In the latter case, a summative measure may derive from the evaluation of various aspects; for instance, the evaluation could involve the improvement of professional skills, the reinforcement of personality traits, the offer of a new job, and similar benefits, together with costs and problematic situations encountered during the mobility experience.

In order to make the final evaluation comparable across measurement scales, stakeholders, countries and times, we will normalise the measures by taking the ratio between the distance of the observed measure, X^*_k, from its minimum, and its range:

$$X_k = \frac{X_k^* - \min(X_k^*)}{\max(X_k^*) - \min(X_k^*)} \quad (k = 1, \ldots, K) \tag{3.2}$$

where *min* (X_k^*) and *max* (X_k^*) denote, respectively, the minimum and the maximum value of the adopted scale.

This way, for a generic stakeholder *k*, X_k varies in a range between 0 and 1, with 0 representing the lowest level, that for which the experience was fully negative, and 1 its maximum value, corresponding to an experience producing only outcomes that fully met stakeholder *k*'s expectations. Values between these two extremes are assumed to mirror the balance between the positive and negative aspects in stakeholder's mind.

It can be appreciated that this type of normalisation formula applies to any quantitative scale. For the 1-to-10 scale, the normalisation formula reduces to: $X_k = (X_k^*-1)/9$ (k=1,…,K) and for the -10-to-10 scale to: $X_k = (X_k^*+10)/20$ (k=1,…,K) Consequently, a normalised standard deviation is a fraction of the original one: for a 1-to-10 scale it is $\sigma(X_k^*)=\sigma(X_k^*)/9$ and for a -10-to-10 scale is $\sigma(X_k)=\sigma(X_k^*)/20$.

In this work, since an overall judgement is provided by all stakeholders, we will estimate measuring it on all stakeholders with a 1 to 10 equal-interval scale, anchored at the extremes in a way that makes the respondent clear that 1 is the minimum and 10 the maximum value of the scale. Thus, it is possible to consider the scale as quantitative and compute mean and standard deviation of the gathered data. For our purposes, the mean of the responses given by stakeholders on a 1-to-10 scale can be considered a good tool to measure the quality of mobility experiences, since in many European school systems this is the way students are evaluated by their teachers and so it is legitimate to conjecture that both students and teachers are accustomed to use it also as a social evaluation scale. More reasons for adopting the 1-to-10 scale are presented in Section 3.2.1.

Importance weights W_k (k=1, …, K) should be constructed so to vary between zero and one, extremes included, and to sum up to one over all K stakeholders. In symbols:

$$0 \leq W_k \leq 1; \quad \sum_{k=1}^{K} W_k = 1 .$$

If both the evaluations and weights are standardised, the ROI-MOB indicator is bound to vary between zero and one, extremes included:

$$0 \leq I_{ROI-MOB} \leq 1 .$$

Zero means that the experience we aim to evaluate, overall, had a fully negative balance for all stakeholders; on the opposite, a value of one means that the experience was fully satisfactory for all stakeholders. Intermediate values represent situations for which the stakeholders gave various judgements: values of $I_{ROI\text{-}MOB}$ between zero and 0.499 are to be considered as a whole negative, values between 0.501 and one are as a whole positive, while 0.5 is the case of a perfect balance between advantages and disadvantages.

Of course, the indicator can be expressed in percentage terms, so to vary between zero and one hundred, being fifty the perfect balance between the opposite sides of the scale.

The indicator applies to various (sub)categories of beneficiaries. As far as participants are concerned, it can apply, for instance, to students, apprentices, or people attending a dual training programme. Also, it can apply to students or apprentices of a given country hosted by schools or companies of a different country. In what follows, for practical reason, we estimate weights just for large enough categories of stakeholders.

3.2. Computation of the indicator

The procedure for the estimation of the ROI-MOB indicator requires the implementation of the following activities:

a) *Choice of an appropriate evaluation scale*. For this purpose, we experienced various scales and finally defined the 1-to-10 scale as the more appropriate. This topic is dealt with in Section 3.2.1.
b) *Measurement of the evaluations given by stakeholders.* This topic is dealt with in Section 3.2.2.
c) *Normalisation of the evaluations delivered by the stakeholders.* The basic normalisation strategy for the ROI-MOB indicator was presented in Section 1. In Section 3.2.3 we present an alternative normalisation strategy.
d) *Analysis of data quality and data adjustment.* The summary of data quality analysis is dealt with in sections 3.2.1 and 3.2.4.
e) *Estimation of weights.* The topic is dealt with in Section 3.2.5
f) *Aggregation and weighting of the stakeholders' evaluations*. The topic is dealt with in Section 3.2.6.
g) *Validation of the composite indicator*. This particular aspect is dealt with in Sections 3.2.7 and 3.3.

3.2.1. *Choice of the measurement scale for evaluations*

The questionnaires administered to participants in mobility included three questions aimed to evaluate their mobility experience. The question style is similar to that used in marketing studies to evaluate a purchase experience. The three questions were addressed to participants in sequence, as follows:

i. A 1-to-10 interval question asking: "*What is your final judgment of the Erasmus VET mobility experience you had?*";
ii. A -10-to-10 interval question asking "*Imagine you have up to 10 'negative kilos' to weight all the efforts you made and the difficulties you faced (e.g. money, time, sacrifice, etc.); now imagine to have up to 10 'positive kilos' to weight all the benefits you got from mobility (e.g. increased skills, increased employability, new relationships, overall satisfaction, etc.). Now sum up positive and negative kilos, and tell us what the final result is:*";
iii. A 1-to-4 ordinal question, asking "*All in all, would you suggest a friend to start an Erasmus VET mobility experience like yours?*", with the following levels: "Yes, I recall only positive aspects / Yes, positive aspects prevail / No, negative aspects prevail / Not at all, so many negative aspects".

We analysed responses given by participants after some "cleaning" of the data (see Section 3.2.4). To understand if the scales measure the same concept we computed the correlation coefficients between all distinct couples of variables[1] (Table 3.1).

Table 3.1. Correlation coefficients between four evaluation scales.

	Evaluation scales		
	1÷10	-10÷10	1÷4
-10÷10	0.640		
1÷4	-0.504	-0.430	
Student first beneficiary	0.112	0.121	-0.028

The correlation analysis highlights that the only scale with high correlation levels is the 1-to-10 one, which correlates 0.64 with the -10-to-10 one and -0.50 with the 1-to-4 one.[2] The evaluation of the participant as first beneficiary is substantially uncorrelated with all three previous evaluation scales. Thus, henceforth we will ignore this latter scale as a measure of evaluation.

[1] In case the response on one scale was missing, the correlation coefficients were computed using the deletion technique named "pairwise", that is preserving the correlation between all pairwise comparisons between variables that were validly expressed. For correlation analysis, the 1-to-4 scale levels were computed as if they were quantitative.

[2] The reader should note that the 1-to-4 scale is oriented in an opposite direction than the previous scales.

These results are in line with the literature on scale theory (see, among others, Oliver, 1977, 1980; Moore and Shuptrine, 1984; Vikas and Patrick, 1998; Vikas and Wagner, 2001; Chen et al., 2010), which posits that:

– the first two questions interpret two ways of measuring people's satisfaction for an experience, that is making an internal analysis of the consequences of the mobility experience, which requires a retrospective investigation of the events that occurred to respondents during their mobility experience and also of the consequences in terms of work, study results, improvement of language and professional skills, problematic events that occurred during the experience, and so on;
– the third question has analogous aims but implies also a perspective evaluation since it enquires about the possibility to repeat the experience ("repurchase intention" in marketing terms).

To reinforce the hypothesis that the three scales evaluate different aspects of the same phenomenon, we computed the Cronbach's alpha (Cronbach, 1951). This index measures the mutual closeness among aspects of a supposed common factor. The closeness concept relates to the so-called convergent validity, which is the degree to which two or more measures of constructs that theoretically should be related, are in fact related.[3] In our case, we expect that the level of inter-correlation between the three concurrent evaluation scales is high. The estimate of the Cronbach alpha=0.80 indicates that indeed the three questions do fit a common underlying factor.[4]

In order to be able to select the best scale, we computed some data quality indicators (Table 3.2) and then performed a series of regression analyses aimed to understand the "capability" of the scales.

The indicators for the evaluation of the quality of a measurement scale are:

– *The nonresponse rate*. Non responses may occur to the whole questionnaire, and in that case we are left without any information on respondents, or to single questions, and in this case it may be possible to obtain indirect information from valid responses given to other questions. In comparing alternative scales, the indicator of differential collaboration measures the implicit difficulty in giving a correct answer. This difficulty is present in all surveys and may or may not induce the contacted sample to collaborate, and, for those who decide to collaborate, it may correlate with the burden and the anxiety level aroused in

[3] If, instead, the scales targeted to measure different constructs show low correlation, we can say that the variables possess discriminant validity. The two concepts, of convergent and discriminant validity are two aspects of the so-called construct validity.

[4] It may be interesting to know that the Cronbach alpha was 0.51 before the data were adjusted for inconsistencies. This shows the relevance to data quality of the adjustment for inconsistency. After adjustment, the value of alpha would be 0.67 if also the responses on participants as actors having the highest benefit were considered. This estimate highlights that the "beneficiary" question is not an evaluation question.

respondents by question content. In comparing the nonresponse rates from different scales, we can guess that the rates depend on the difficulty inherent to the question format (length, wording) and to the difficulty for the respondent to give an accurate answer (anxiety and embarrassment due to question content).

– *The level of accuracy of given responses.* The accuracy of responses and its opposite – the response error level – may depend on various causes. In evaluation questionnaires like those at stake, response errors may derive from complaisance, meaning that there will be more positive evaluations than real because respondents ended up trying to please the researcher. In our case, we can guess that complaisance could creep into the responses using a 1-to-10 scale while it should be limited with a -10-to-10 scale, the question associated with the latter one being worded in such a way to induce the respondent to meditate more on problems and difficulties met during mobility. Another response error can derive from the approximation of evaluations, which is revealed by the concentration of frequencies over the values zero and multiples of five.
– *The capability of the scale to capture as many predictors as possible.* For this, a regression model is estimated for each one of the three scales with the aim of highlighting which scale is able to select as many predictors of mobility quality as possible, all control variables remaining the same. Technical details and the data of the statistical analysis are introduced in Section A.2 and Table A.8, respectively.

Table 3.2. Indicators of data quality related to the first three scales (participants; n=1010).

	1÷10	**-10÷10**	**1÷4**
% missing data	0.970	2.13	1.16
% inconsistent responses	0.480	4.56	0.00
Coefficient of variation (CV)*	0.174	0.551	=
Normalised CV*	0.201	0.204	=
Questionnaire is interesting**	0.249	0.258	-0.121
Questions are clear**	0.158	0.165	-0.040
Questions are easy to understand**	0.122	0.139	-0.010
Questionnaire stressful/boring**	-0.138	-0.096	0.025

(*) Missing values and unreliable responses were excluded from computation. (**) Correlation coefficients.

The analysis of the data quality indicators highlights what follows.

– The missing collaboration rate is low for all scales, varying between 1% and 2.1%. If we add this rate to that of the data deleted or adjusted after inconsistency checks (see Section 3.2.3 for details), the total proportion raises but remains within reasonable limits: it is 1.5 and 1.2%, respectively, for the 1-to-10 and the 1-to-4 scales but raises to 6.7% for the -10-to-10 scale. Hence, with reference to the rate of missing or inconsistent data, one should prefer the 1-to-10 scale to the -10-to-10 one. This may depend also on the fact that the 1-to-10 scale is widely used as a docimology scale in many educational systems and appears instinctively in a respondent's mind for evaluation purposes, while the -10-to-10 scale requires at least a fast mathematical computation and the capacity to manage negative numbers for people to give a sensible answer.
– The shapes of the frequency distributions obtained administering the 1-to-10 and the -10-to-10 scales are about the same (Figure 3.2). However, the more detailed scale, the -10-to-10 one, shows unexpected holes in correspondence of some values (-4, 6 and 9) that parallel increments of multiples of 5, and a steep bump at the intermediate value of zero, the refuge-value of uncertain people. Instead, the response distribution of people presented with the 1-to-10 scale is smoother. This means that the former scale is so wide that some respondents simplified their response by being more inaccurate than they have been with the latter one. Moreover, a possible lack of frequencies can be observed over the 9 value but this occurs also for the 1-to-10 scale, although in smaller proportion: it seems as if respondents were hesitant to vote 9 and decided in some cases to vote either 8 or 10. Definitely, the -10-to-10 scale seems excessively analytic for the purpose of response accuracy. Besides, since the more analytic scale was presented after the 1-to-10 one and respondents may have suffered some fatigue to answer twice to the same argument, another experiment inverting the order of the two involved questions could confirm, or disconfirm, this result.
– The overall explained deviance of the regression analyses, measured by R^2, is high for the 1-to-10 scale (39% if adjusted for degrees of freedom) while the -10-to-10 scale is less receptive of advantages and disadvantages (25% after adjustment). This is rather unexpected from the technical viewpoint because the -10-to-10 scale spans a more detailed interval than the 1-to-10 and for this reason it should have been more correlated with the variables composing the evaluation than the latter. If we normalise the data so to eliminate the difference in width, the coefficient of variation – i.e. the standard deviation relative to the mean – is about the same (0.20) for both scales. As expected, the 1-to-4 scale is the least correlated, among the three analyses scales, to advantages and disadvantages ($R^2 = 19\%$).
– The 1-to-10 scale captured the covariance of 15 predictors, out of which 3 were disadvantages; the -10-to-10 scale correlated with almost the same number of predictors (14), but the costs and obstacles selected were more numerous (6)

than the former scale. Finally, the 1-to-4 scale co-varied much less with advantages and disadvantages (9 predictors, out of which 2 had a negative meaning). This result goes along with the level of significance with which the predictors entered the model, level that was generally higher for the 1-to-10 scale. These results show that the 1-to-10 and the -10-to-10 scales are similarly sensible and could be used interchangeably, though the latter 'attracts' more negative aspects than the former, while the 1-to-4 scale captures lesser positive or negative aspects and should be used as a customer satisfaction measure only in case of absence of the previous two scales.

– If we compare the rate of positive responses to the three evaluation questions, we realise that the 1-to-10 scale gets 95.6% positive responses, the -10-to-10 scale 94.9%, and the 1-to-4 scale 97.2%. With these figures it is possible to evaluate the complaisance effect, that is the cheerful tendency to give positive answers believing that the researcher expects so. This cause of response error is common in population surveys and, when heavy, it may distort the estimates. The -10-to-10 question can be considered free from complaisance error due to the fact that it underlies the necessity of recalling also negative outcomes before judging own mobility experience. Indeed, it is if the question asks the respondent to put the negative weights on the left side of an ideal balance and the positive ones on the right and then take the difference. Given the observed data, we can conclude that just a marginal complaisance error may be present in responses obtained with the 1-to-10 scale: the maximum estimate of this error rate is 1.6%. In addition, remembering that the 'repurchase' rate is even higher than the satisfaction rate, we can state that the social desirability effect is close to zero. Hence, we are allowed to hypothesise that also the -10-to-10 scale suffers of response error, although in an opposite direction than the 1-to-10 one: it may depend on a sort of 'unkindness' effect that forced on evaluations a marginal level of undue displeasure. Of course, this is nothing but a conjecture. So, we can remain that the response error on the 1-to-10 scale due to complaisance is close to null.
– If we examine in detail which advantages and disadvantages correlate significantly with the evaluations expressed by participants when presented with the three scales, we see that the -10-to-10 scale relates to one negative aspect more than the former scale: the cost of mobility for families, and another more than the 1-to-4 scale: the time invested to prepare the mobility experience. On the opposite, the 1-to-10 scale attracts a larger number of social and occupational benefits. An unexpected result concerns the psychological trait we added to the 'big five' ones – i.e. the additional capacity to control own actions and managing own future. This trait is negatively correlated with the final evaluation whatever the evaluation scale. Since positive responses about the improvement of this trait amount to 88%, the negative relation with the final evaluation in regression analyses depends on the contemporary presence in the model of other

significant psychological traits which absorbed part of the covariance between this trait and the overall evaluation of the experience. This result occurs also in Section 5.2.2.

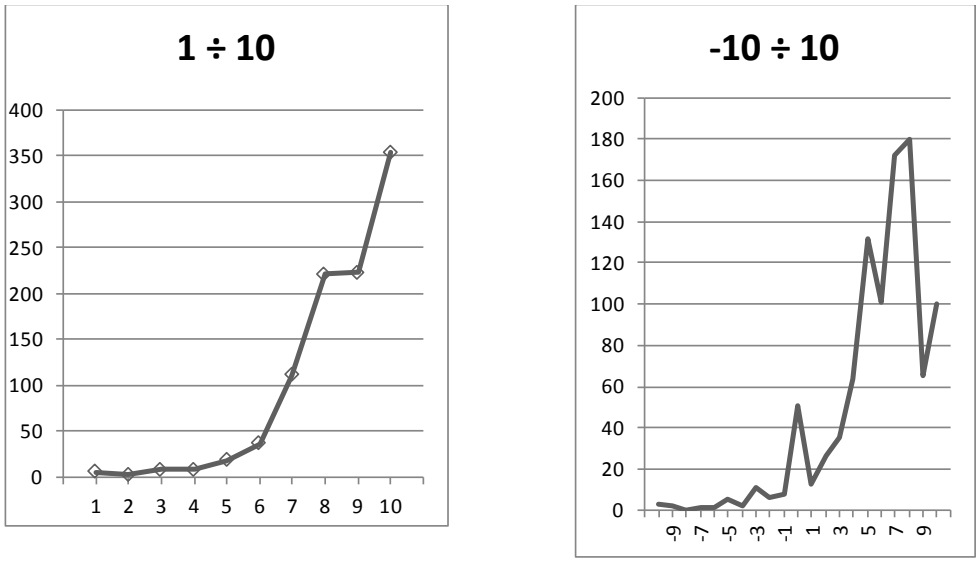


Figure 3.2. Frequency distribution of responses given by participants, by measurement scale. Source: Adapted from Zoccarato (2018).

– The personal characteristics we used as 'control variables' in regression analysis did not correlate with the scale format, meaning that no subgroup of the population at hand is more inclined than others to use a certain evaluation scale. So, the three analysed scales seem equally valid for a survey on participants as regard internal construct.

All in all, the analyses show that the two satisfaction questions referring to the 1-to-10 and the -10-to-10 scales are almost equally valid[5] but the former is preferable to the latter because it is shorter, embedded into common sense and also widely used.

The 'repurchase' question should be administered as a check, whatever the adopted satisfaction scale. As a matter of fact, in the ROI-MOB surveys, the re-experience question – which was intentionally posed with levels in reverse order than the previous satisfaction questions – has been used also to control the consistency of responses to the evaluation questions.

[5] See also the conclusions in Pearce (2011) in which scales of variouos granularity, included a 21-point scale, were compared.

As regards the question asking the participant to pinpoint the actors benefitting the most from mobility, it may be classified as a choice-related question. It is a question related but not targeted to evaluation. It can be assumed that the probability a participant chooses an option is a function of the value s/he perceives. The ability to ranking the possible beneficiaries of international mobility involves not only the skill to assess own experience but also the capacity to assume and interpret known and unknown experiences of other people and that of being an evaluator of the system, which is much more complex a task than just rating experiences.

In other words, when a ROI-MOB questionnaire asks the participants and the sending and hosting organizations to rank the possible beneficiaries of Erasmus+ mobility it gives for granted they are able to imagine and assess the whole mobility process. We can call this ability a 'socio-political' skill. This skill has a different nature than that necessary to evaluate a process these categories of actors have directly experienced. Since the ROI-MOB questions that were posed to actors as assessors required also the positioning of the actor itself along the ranking, it goes without saying that this choice is also a relative self-evaluation as a beneficiary. This type of assessment relates to theories on the utility of a service (see also Louviere *et al.*, 1999).

3.2.2. *Alternative normalisation strategies*

Formula (3.2) is the one we adopt to measure the ROI-MOB indicator. This formula is preferable to the easier $X_k = X_k^* / \max(X_k^*)$, because a generic level i of the scale (i=1, …, 10), from a geometric viewpoint, is a unit interval centred on i. Hence, a 1-to-10 scale ideally starts at 0.5 and ends at 10.5. This is not advantageous from many theoretical viewpoints.

Another formula that applies to our data is the complement to (3.2), that is the mean additional evaluations' marks required to reach the full satisfaction. For stakeholder k it would be:

$$X_k^{**} = \frac{\max(X_k) - X_k}{\max(X_k) - \min(X_k)} \qquad (k = 1, \dots, K) \tag{3.3}$$

which simplifies in $X_k^* = (10\text{-}X_k)/9$ for a 1-to-10 scale and in $X_k^* = (10\text{-}X_k)/20$ for a -10-to-10 scale. Also X_k^{**} varies between zero and one, the two extremes having an opposite meaning than X_k^*. This form of standardisation could be applied if the purpose of an indicator would be to evaluate the distance-from-maximum satisfaction instead of the mean distance. This means that we consider 10 as the top evaluation of any experience and we aim to estimate how much is still to be done to reach perfection.

3.2.3. *More on data quality analysis*

To evaluate the quality of the collected data, the basic data distributions have been checked for quality. The check involved the accuracy of responses obtained in all basic variables.

The consistency checks between concurrent evaluations from participants consisted in cross-checking the responses obtained to the two satisfaction questions (that with the 1-to-10 and that with -10-to-10 scale) and the "repurchase" question based on four ordinal levels. If a respondent stated his/her evaluation was very positive (very negative) using, for instance, the 1-to-10 scale, but was very negative (very positive) using the other two scales, a "democracy" rule was applied: the converging evaluations were kept and the diverging response was considered as haphazard and cancelled. Let us underline that we never changed the collected data but just excluded the inconsistent responses from further statistical analysis.

The same procedure was applied to evaluations delivered by schools and companies: in this case, the "democracy" rule could not be applied and in case of open divergence both responses were eliminated from the analysis.

Consistency checks involved also other basic data, that is responses to questions related to structural variables, such as:

– As regard participants, activity before mobility, duration of the experience, costs undergone by family, and time taken to prepare the experience. At the end of controls, the attendance of a dual track path was consistent with the educational level; moreover two 'impossible' responses on the cost of experience for the participant's family were cancelled.
– As regard schools, the yearly cost for sending/hosting one participant, according to the fact that school sends/hosts participants, and the number of students sent/hosted.
– As regard companies, the yearly cost for sending/hosting one participant, and the number of participants sent/hosted. In this case and in the schools' one, 'impossible' responses were cancelled.

Finally, consistency checks involved the possible answer "other (please, specify)" to some questions:

– As regards the participant's questionnaire, it involved the question on the business sector participants attended during their experience, and, if occupied when answering the questionnaire, that in which they were in. As a matter of fact, since the NACE classification of the business sectors exhausts all possible responses, all answers have been manually (re)coded.
– As regards the business sector companies operated. For the same above reason, this allowed to recode all 'other' responses.

3.2.4. *Measurement of evaluations*

An X_k measure could be either a single value or a conveniently weighted combination of the evaluations from more than one dimension of the experience. In this work we opted for the former possibility, using the final overall evaluation. The latter method could also be applied since various types of benefits, costs and problems related to mobility were measured with the administered questionnaires on both participants, schools and companies. We resorted to the former method because an overall evaluation includes either all the surveyed aspects of a given phenomenon and also other forgotten aspects. This is particularly true if the overall question is posed *after* a series of questions related to the phenomenon, so that respondents could be aware that the general issue contains also the specific ones.

As regards the ROI-MOB surveys, the 'overall' evaluation was measured on participants with the following question: "*What is your final judgment of the Erasmus+ VET mobility experience you had?*". The analogous question was posed to companies sending own apprentices abroad as: "*All in all, how much do you feel that sending Company apprentices abroad is worth the effort?*" and to those hosting participants as: "*All in all, how much do you feel that hosting apprentices or students is worth the effort?*". Analogously, the question for schools sending students abroad was: "*All in all, how much do you feel that sending participants abroad is worth the effort?*" and that to those hosting participants as: "*All in all, how much do you feel that hosting participants is worth the effort?*". Schools and companies that both hosted and sent participants, had to evaluate separately the hosting and sending outcomes.

It may be appreciated that the intention of the above questions was to collect first-hand data referred to own experience, so to stimulate the respondent to represent the situation s/he was effectively involved and not just picked up from general talks. In the case of schools and companies, the reference was to the set of Erasmus+ VET experience of the school or company the respondent belonged. Most of the questions posed to schools and companies were related to the last 12 months, so it is likely that, although the question was general, the answers focused on the more recent experiences.

In this work, since an overall judgement is available for all stakeholders, we will measure experience by measuring its effects on all stakeholders with a 1 to 10 equal-interval scale, anchored at the extremes so to make the respondent clear that 1 was the minimum and 10 was the maximum value of the scale (technically: 'Cantril scale'). The scale was presented to participants as follows:

Very negative = ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ = Very positive

and to schools and companies, the extremes were anchored to *minimum=1* and *10=maximum*. This way it is possible to consider the scale as quantitative and compute the mean and standard deviation of the gathered data.

Another possible estimator of the overall judgement is the proportion or the percentage of positive judgements. Using the 1-to-10 scale, we consider positive judgements those from 6 on. The proportion is estimated with the following formula:

$$X_{ki} = \begin{cases} 1 \; if \; x_{ki} \geq 6 \\ 0 \; if \; x_{ki} \leq 5 \end{cases} \quad (i = 1, \ldots, n; k = 1, \ldots, K) \tag{3.4}$$

where x_{ki} denotes the final evaluation question of respondent i (i=1,…, n) belonging to group k (k = 1,…,K). The proportion computed through these 0-1 values is a rougher measure than the mean because it gives the same importance to all judgements from six to ten while an evaluation of ten is not equally positive than a six. However, it can be considered a robust measure of the level of positivity of the realised mobility.

The other way round, putting $X_k = 1$ if $x_{ki} \leq 5$ measures the proportion of people who are at various grades unsatisfied with mobility. This coding may allow identifying the experiences for which the negative aspects prevailed over the positive ones.

For a more specific estimate of the composite indicator, we estimate the evaluations of:

a. Participants according to their activity, e.g. students, learners in dual paths, and apprentices. Also, gender and age may be variables discriminating among participants, but it is preferable for comparison purposes to keep the weights fixed and let the evaluations to vary. Another possible partitioning attribute is the attendee's country of origin.
b. Schools and training centres according to their role in the mobility system, e.g. those sending participants separate from those hosting participants.
c. Companies according to their role in the mobility system, e.g. those sending participants and those hosting participants.

The estimates of the evaluations expressed by participants, schools and companies in the ROI-MOB surveys are presented in Tables 3.3 through 3.7. Only estimates for which an adequate sample size was available have been computed. Moreover, only normalised estimates are presented in order to express evaluation estimates in per cent terms.

The mean score computed with participants' evaluations of own mobility experience is 84.2% in normalised units. Once and for all we state that this figure is not the simple average, which is 8.57 over a maximum of 10, but its standardised value ac-

cording to formula (3.3). This transformation makes the mean value to vary between 0 and 1 (or, equivalently, between 0% and 100%) rather than between 1 and 10.

The differences between countries are small. The lowest value is 82.2% from German participants and the highest that of Portuguese ones (87.1%). Also the proportion who would repeat the experience is highest among Portuguese participants (98.9% *vs.* an average of 96% for the whole sample), while the lowest proportion was registered among Spanish participants (93.6%).

With respect to experience evaluations, there is no difference between genders nor between the participant's activity before mobility. We could appreciate a certain difference between students belonging to high schools and those engaged in dual track programmes: the latter ones would repeat the realised mobility in 95.2% of cases *vs.* a mean disposition of the other students is 98.6%. It is easy to see that in both cases the disposition is close to 100%.

These results are very close to those in Alfranseder *et al.* (2012), in which data from the Erasmus student network survey are shown. This latter survey showed that 97% of students who studied abroad considered this experience an advantage on the job market and evaluated many professional and study related skills consistently higher than the peer group without a mobility experience. Hence, the feeling of very high appreciation stemming from participants' data is confirmed.

Schools and companies showed an appreciation pattern similar to participants. In fact, both sending and hosting schools and companies rated their experience positively, but with different values. Sending schools evaluated their experience with a mean of 91.7% and the hosting ones of 84.3%. Sending companies means were instead 80.6% and 72.7%, respectively. It can be highlighted that schools evaluated their international mobility experience at least 10% higher than companies and that sending units (both schools and companies) a 7-8 per cent points more than the hosting ones.

Table 3.3. Estimates of evaluation indicators from participants, by country and evaluative question.

Country	*Final evaluation*		*% would repeat experience*	*Student main beneficiary*	
	Normalised mean	*Normalised s.d.*		*1st (%)*	*2nd (%)*
Germany	0.822	0.193	96.7	82.1	10.2
Italy	0.841	0.174	96.1	67.9	11.4
Spain	0.842	0.188	93.6	57.7	13.9
Portugal	0.871	0.149	98.9	69.9	11.0
Total	0.842*	0.178*	96.0	69.0	11.7

(*) *Sample mean: 8.57 (sd=1.61).*

Table 3.4. Estimates of normalised means from mobility participants, by gender and participant category.

	Male	*Female*	*Total*
Student	0.837	0.853	0.846
Dual track	0.833	0.841	0.838
Apprentice	0.852	0.839	0.844
Total	0.841	0.842	0.842

Table 3.5. Estimates of the per cent proportion of participants who would repeat the mobility experience, by gender and participant category.

	Male	*Female*	*Total*
Student	97.6	99.4	98.6
Dual track	94.2	95.8	95.2
Apprentice	98.1	96.7	97.3
Total	96.7	97.5	97.1

A high variability of opinions was recorded among hosting schools and all types of companies. In fact, if we cross the evaluations by country, the mean rates vary between a minimum of 87.7% and 75.2%, respectively, for sending and hosting German schools and a maximum of 93.8% and 87.8% for Spanish schools. Regarding companies, the German ones gave the lowest rates for hosting (60.6%) and the Portuguese ones for the sending activities (76.4%). The top evaluations also in this case concern Spain (97.2% and 79.2% respectively) for sending and hosting companies.

Table 3.6. Estimates of normalised means and standard deviations of mobility final evaluation from schools and training centres, by school role and country.

	Sending schools and train. centres		*Hosting schools and train. centres*	
Country	*Normal. mean*	*Normalised s.d.*	*Normal. mean*	*Normalised. s.d.*
Germany	0.877	0.112	0.752	0.171
Italy	0.892	0.156	0.772	0.187
Spain	0.938	0.094	0.878	0.158
Portugal	0.926	0.103	0.867	0.154
Total *	0.917	0.114	0.843	0.167

(*) *Sample means: 9.25 (sd=1.03) for sending schools and 8.59 (sd=1.50) for hosting schools.*

Table 3.7. Estimates of normalised means and standard deviations mobility final evaluation from companies, by company role and country*.

	Sending companies		*Hosting companies*	
Country	*Normal. mean*	*Normalised s.d.*	*Normal. mean*	*Normalised. s.d.*
Germany	0.798	0.178	0.606	0.232
Spain	0.972	0.056	0.792	0.178
Portugal	0.764	0.226	0.716	0.181
*Total***	0.806	0.184	0.727	0.190

(*) Italian estimates not shown because of low sample size; (**) Sample means: 8.25 (sd=1.66) for sending companies and 7.54 (sd=1.71) for hosting companies.

We shall explain the reasons for the observed variability in Chapter 5, where the positive and negative aspects of mobility are juxtaposed and analysed with multivariate methods for a deeper understanding. However, we cannot avoid highlighting some macro-tendencies stemming from these first analyses:

– German actors tend to give more severe judgement about VET international mobility than other countries and this happens for both participants, schools and companies;
– sending organizations (both schools and companies) tend to perceive many more possible benefits from mobility than the hosting ones;
– schools tend to evaluate VET international mobility in much a better disposition than companies, also more than participants. In fact, the lowest mean of schools, that of those who hosted participants, is at the same level as that of participants, but that of sending schools is about 7% higher.

Regarding the high level of satisfaction recorded by all mobility actors, we can refer to most marketing studies (see, among others, Danaher and Haddrell, 1996), in which it is given for granted that, while evaluating a good or a service through the satisfaction of customers who purchased it, most people are fairly or fully satisfied with the purchase. Regarding in particular the achievement of a service, this may depend on the fact that people who decided to make use of it already benefitted of some social recognition of its quality.

In the case of international mobility, participants already know from word of mouth that international Erasmus+ mobility added values to so many students and apprentices. Hence, the individual evaluation of an experience becomes a measure of the conformity of his or her case to the prevalent feeling in the origin community.[6] Most students or apprentices would not even propose themselves for mobility if they believed that the foreign adventure would be at-risk of failure. Say, the

[6] The influence of antecedents is reported also in Oliver (1977, 1980), Bearden and Teel (1983) and Cadotte et al. (1987).

a-posteriori evaluation of a mobility process is in some sense a confirmation of its expected quality. A high evaluation means that the participant confirms that s/he perceived the same added value as the other participants before them.

3.2.5. *Estimation of weights*

Weights are basic to compose a multifaceted indicator. In our case, each weight applies to each stakeholder evaluation and represents the importance each stakeholder attaches to own evaluation.

To estimate the importance weights we processed the responses obtained by the various stakeholder categories so to obtain a shared acknowledgment of the relevance of the beneficiaries of mobility experiences. The following describes the estimation procedure.

(i) We posed a common question to participants, schools and companies to define, upon an agreed basis, the importance of the evaluations gathered with the same questionnaire as regards mobility. The question posed to participants was "*Which are the two categories that get the highest benefits from Erasmus+ mobility? (Please, click the first and the second category of possible recipients)*" and the possible responses were: *Students/apprentices; Schools and training centres; Companies (both sending and hosting); Labour market; The European Union as an institution*. The question was worded in a similar way to companies, schools and other stakeholders: "*Which are the categories of possible recipients that get the highest benefits and the ones that get the lowest ones from Erasmus+ mobility? Please, order the categories from 1 (highest) to 5 (lowest benefits)*" and the possible responses were identical to those for participants.

(ii) Collected responses allowed to obtain the distributions of frequencies of the ranks assigned by assessors to the possible beneficiaries of mobility. The assessing categories were: participants, schools, companies, and other stakeholders. The distributions of frequencies by category are presented in Tables 3.4 to 3.7.

These data can be processed as if they were univariate, that is referring to a single possible recipient at a time. Two are the possible estimates: (a) the proportion of respondents who put the recipient k in the first position; and (b) a weighted mean of the rankings obtained by recipient k. The latter estimate is much more informative than the former.

(iii) The frequency distributions were then processed in such a way to obtain a matrix of dominances between each distinct pair of possible beneficiaries. The matrices were processed with multivariate analysis (see Section A.1) in order to obtain a set of estimates of the importance weights to assign to stakeholders.

(iv) Several weighting systems were tried before deciding the final set of weights. The reader is addressed to Fabbris and Scioni (2019) for a more detailed analysis of the steps of the thorough process followed for weight estimation. The estimated weights are presented in appendix A (Tables A.1 and A.2) and in Figures 3.3 and 3.4 here below.

Table 3.8. Frequencies of main beneficiaries of Erasmus+ VET mobility as ranked by participants (*frequencies add up to 1 by row*).

	1	2	3
Participants	0.697	0.135	0.168
Schools	0.110	0.231	0.659
Companies	0.093	0.285	0.622
Labour market	0.036	0.150	0.814
EU as an institution	0.064	0.145	0.791

Table 3.9. Frequencies of main beneficiaries of Erasmus+ VET mobility as ranked by schools and training centres (*frequencies add up to 1 by row*).

	1	2	3	4	5
Participants	0.907	0.064	0.023	0.000	0.006
Schools	0.024	0.461	0.296	0.136	0.083
Companies	0.024	0.266	0.313	0.237	0.160
Labour market	0.000	0.149	0.226	0.393	0.232
EU as an institution	0.048	0.066	0.150	0.227	0.509

Table 3.10. Frequencies of main beneficiaries of Erasmus+ VET mobility as ranked by companies (*frequencies add up to 1 by row*).

	1	2	3	4	5
Participants	0.777	0.127	0.025	0.046	0.025
Schools	0.066	0.026	0.311	0.209	0.153
Companies	0.087	0.418	0.260	0.138	0.097
Labour market	0.020	0.135	0.233	0.378	0.233
EU as an institution	0.077	0.067	0.164	0.215	0.477

Table 3.11. Frequencies of main beneficiaries of Erasmus+ VET mobility as ranked by "other stakeholders" (*frequencies add up to 1 by row*).

	1	2	3	4	5	6	7
Participants	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Sending schools	0.0	32.1	17.9	32.1	10.7	7.1	0.0
Hosting schools	0.0	3.6	14.3	7.1	50.0	17.9	7.1
Sending companies	0.0	28.6	17.9	10.7	7.1	7.1	28.6
Hosting companies	0.0	3.6	28.6	14.3	25.0	21.4	7.1
Labour market	0.0	21.4	17.9	17.9	0.0	32.1	10.7
EU as an institution	0.0	10.7	3.6	17.9	7.1	14.3	46.4

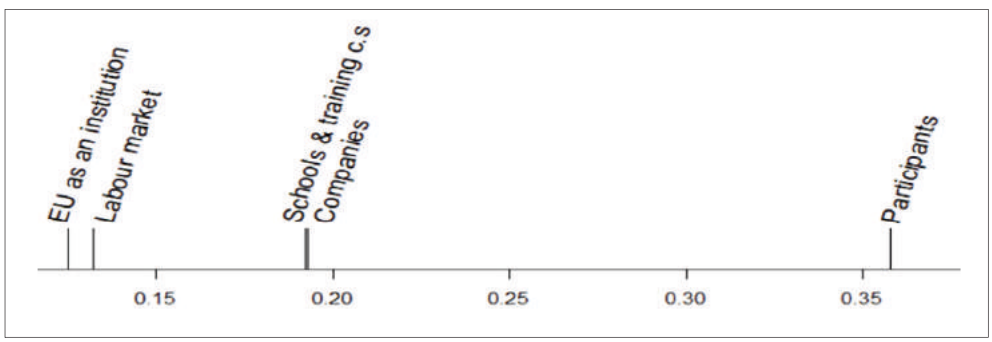


Figure 3.3. Estimates of weights to attach to the evaluations from actors of VET international mobility according to participants, schools and companies altogether.

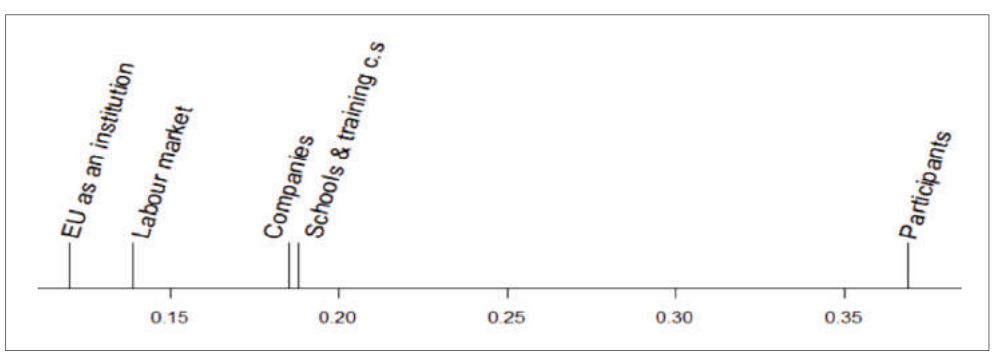


Figure 3.4. Estimates of weights to attach to the evaluations from actors of VET international mobility according to all mobility stakeholders.

Tables 3.8 to 3.13 and Figures 3.3 and 3.4 show that:

- Participants are widely acknowledged as recipients of the largest benefits according to all stakeholders: Erasmus+ mobility players ascribe about three-quarters of benefits to them, if we considered only the first position. The highest proportion of benefits (between 35 to 40%) is ascribed to them even if the subsequent positions are accounted for.
- Schools and companies are the second recipient in order of benefit rate, with something more than 10% each as regards the first position and with about 20% each on average, if also other positions are considered.
- The labour market and the EU as an institution share the remaining percentage: it is about 5% as a whole with reference to the first position and somewhat more (about 12% each) considering all other positions.
- Participants claim for themselves a proportion of benefits lower than other stakeholders recognise to them. The same happens also for all other actors: each actor claims a lower benefit than the others see as appropriate to them. The eye-catching figure is for schools and training centres, stating that almost all benefits go to participants and just a bit to themselves: schools look like an outlier of this evaluation process. This seems to us a good reason not to choose a single stakeholder as a privileged witness of the mobility process, but to pool together as many viewpoints as possible and to consider each viewpoint as an independent window on this phenomenon.
- The data collected at the panel of "other stakeholders", e.g. the set of mobility experts, are in general agreement with those collected at the directly involved actors. In other words, the experts recognised that the largest benefits belong to participants and, in the following positions, schools and companies with an average of 20-21% preferences and then, far behind, the overall labour market and the EU as an institution.
- Table 3.13 is the result of an attempt of weight estimation trying to distinguish between the sending and the hosting units. The hypothesis was that each group of schools or companies – either sending or hosting participants – evaluated just their own role in the mobility process, instead of that of the whole category. For instance, as evidenced in the first column of numbers of Table 3.13, sending schools evaluated their benefit at 20.2% and did not participate in the evaluation of hosting schools' benefit. Similarly, the hosting schools (second column) evaluated their benefit at 20.7% and did not participate in the evaluation of sending schools. The experiment showed that the differences with respect to the overall mean value of the categories are statistically negligible. Therefore, we decided to ignore the differentiation of the estimates related to the sending and the hosting units and rely on the overall estimates presented in the last column of Table 3.12.

– The data collected at the "other stakeholders" are part of an experiment addressed to get a deeper insight into the possible differentiation in terms of benefits between the sending and the hosting units. In fact, we asked the experts to rank the same five categories of beneficiaries as submitted to the three categories of mobility actors, but distinguishing between sending and hosting schools and sending and hosting companies. The results, as shown in Table 3.11, show that experts believe that sending schools and companies benefit from mobility just slightly more than the hosting ones. Hence, in order to define the weights for the five categories of beneficiaries, the sending and the hosting units were pooled together and the final estimates were described in Table A.2 and Figure 3.4.

Table 3.12. Weight estimates of Erasmus+ VET mobility beneficiaries according to all actors of mobility processes, by assessing category.

	Assessing category				
	Participants	Schools & training c.s	Companies	Other stakeholders	Mean value
Participants	0.337	0.397	0.350	0.297	0.345
Schools	0.190	0.202	0.183	0.259*	0.209
Companies	0.197	0.167	0.213	0.243**	0.205
Labour market	0.131	0.127	0.134	0.124	0.129
EU as an institution	0.145	0.107	0.121	0.077	0.113

(*) *Weight is the addition of 0.159 for sending schools and 0.100 for hosting schools;* (**) *Weight is the addition of 0.127 for sending companies and 0.116 for hosting companies.*

Table 3.13. Weight estimates of schools and companies benefitting from VET mobility according to schools and companies themselves, by schools' and companies' activity.

	Assessing category				Mean value
	Sending schools	Hosting schools	Sending companies	Hosting companies	
Participants	0.399	0.396	0.414	0.348	0.389
Schools, send*	0.202	=	=	0.193	0.198
Schools, host*	=	0.207	0.160	=	0.184
Companies, send*	=	0.154	0.214	=	0.184
Companies, host*	0.166	=	=	0.204	0.185
Labour market	0.127	0.120	0.123	0.130	0.125
EU as an institution	0.106	0.124	0.090	0.126	0.112

(*) Weights were computed in the hypothesis that schools and companies evaluated mainly their role in the mobility process, that is sending schools and companies evaluated just the sending activity and the hosting units the hosting activity.

The estimates of weights for the four countries participating to the ROI-MOB project are described in the last column of Tables 3.14 to 3.17, respectively for Germany, Italy, Spain and Portugal. It can be seen that the between-country differences are very limited. If we compare with the overall mean of weights, just the estimates related to Germany show differences larger than 4%: the benefit for participants is above the mean and that for schools is below the mean of a percentage between 4 and 5%. This result deserves further insight in following analyses.

Table 3.14. Weight estimates of Erasmus+ VET mobility beneficiaries according to all actors of mobility processes, by assessing category in Germany.

	Assessing category			
	Participants	Schools & t.c.	Companies	Mean value
Participants	0.369	0.371	0.424	0.388
Schools	0.172	0.142	0.151	0.155
Companies	0.182	0.229	0.215	0.209
Labour market	0.123	0.156	0.124	0.134
EU as institution	0.154	0.102	0.087	0.114

Table 3.15. Weight estimates of Erasmus+ VET mobility beneficiaries according to all actors of mobility processes, by assessing category in Italy.

	Participants	Schools & t.c.	Mean value
Participants	0.332	0.412	0.372
Schools	0.179	0.197	0.188
Companies	0.200	0.167	0.184
Labour market	0.124	0.120	0.122
EU as institution	0.165	0.104	0.134

Table 3.16. Weight estimates of Erasmus+ VET mobility beneficiaries according to all actors of mobility processes, by assessing category in Spain.

	Assessing category			
	Participants	Schools & t.c.	Companies	Mean value
Participants	0.319	0.393	0.312	0.341
Schools	0.227	0.212	0.225	0.221
Companies	0.211	0.150	0.218	0.193
Labour market	0.137	0.136	0.122	0.132
EU as institution	0.107	0.109	0.123	0.113

Table 3.17. Weight estimates of Erasmus+ VET mobility beneficiaries according to all actors of mobility processes, by assessing category in Portugal.

	Assessing category			
	Participants	Schools & t.c.	Companies	Mean value
Participants	0.338	0.417	0.347	0.367
Schools	0.181	0.213	0.174	0.189
Companies	0.199	0.155	0.207	0.187
Labour market	0.150	0.110	0.141	0.134
EU as institution	0.132	0.105	0.130	0.122

3.2.6. *Computing the indicator in practice*

To compute the indicator in practice we can use a more convenient formula derived from (3.1). The formula has the following form:

$$I_{ROI-MOB} = \sum_{k}^{K} W_k \, X_k \Big/ \sum_{k}^{K} W_k$$

where:

K is the number of stakeholders, or actors, selected as key witnesses of the set of mobility experiences at stake; for the construction of an indicator such as ROI-MOB, we propose to consider at least three actors of mobility: the participant, the sending unit and the hosting unit viewpoints.

X_k is a summary measure of the evaluations of an Erasmus+ mobility experience or a set of Erasmus+ experiences referred to participants, schools and companies;

W_k is the weight associated with the evaluation X_k. Normally, $\Sigma_k^K W_k = 1$ and the indicator reduces to just its numerator; if, instead, the sum of weights is different from 1, the numerator is to be relativised. See the example below.

3.2.7. *An example*

To evaluate an Erasmus+ VET mobility experience, it is necessary to pool together the evaluations obtained from the following actors: (i) the participant; (ii) his or her sending unit; (iii) his or her hosting unit; and (iv) other funding or organisational units. Also families are involved in the process, but we assume that their contribution is included in the participant's. The process is schematised as in

Figure 3.5, where only actors which may reasonably evaluate a mobility experience are included in black boxes. The other possible actors (hospitals; EU as a funding agent; local administrations participating as organising and/or funding bodies; etc., represented in the right box in Figure 3.5) are excluded from indicator computation if they do not give their evaluation.

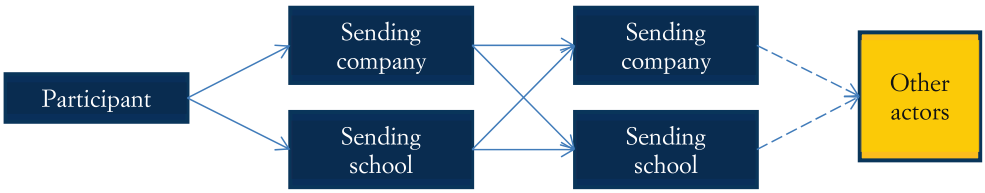


Figure 3.5. Actors involved in an Erasmus+ mobility evaluation process.

Let us suppose that a student is sent by his or her school to a hosting company in another country. From Table 3.12 we can draw the weights for the participant (0.345), the sending school (0.209) and the hosting company (0.205). Suppose that the standardised evaluation estimates for the three actors are the following: 0.80, 0.85 and 0.92 for the participant, the sending school and the hosting company, respectively. The indicator, computed as:

$$I_{ROI-MOB} = \frac{\sum_k^K W_k\, X_k}{\sum_k^K W_k} = \frac{0.345(0.80) + 0.209(0.85) + 0.205(0.92)}{0.345 + 0.209 + 0.205} = 0.846 = 84.6\%$$

shows that the hypothetical experience obtained an overall evaluation of 84.6%.

Let us now suppose that the same participant obtained a more severe evaluation from the hosting company, for instance, 0.70 instead of 0.92, all other evaluations remaining the same. Hence the new overall-evaluation estimate:

$$I_{ROI-MOB} = \frac{\sum_k^K W_k\, X_k}{\sum_k^K W_k} = \frac{0.345(0.80) + 0.209(0.85) + 0.205(0.70)}{0.345 + 0.209 + 0.205} = 0.787 = 78.7\%$$

is 78.7%, the difference being due to the different evaluation of the hosting unit.

3.2.8. *Validation of the indicator*

The expected properties of the ROI-MOB indicator are:

a. *Validity of the construct*. This property depends on the way the indicator and its components are computed. We are concerned, in particular, with the variables needed to compute weights and evaluation measures. For this, we compare the responses obtained from participants to questions concurring to represent the same phenomenon. Construct validity will be checked also to understand the reproducibility of the indicator construction process for situations analogous to the one for which it was proposed, for instance for other European countries.
b. *Reliability, or robustness, of the estimates*. The indicator is supposed to give approximately the same results under the same essential data-collection conditions. For this purpose, we checked the quality of the obtained responses with regards to the basic components of the indicator.
c. *Sensitivity of the measures*, that is the capacity of reproducing even small variations of the concerned phenomenon, so discriminating (in value) among groups of populations or for the same population in time. This property, also called discriminant capacity, is relevant if the effects of policies are to be assessed, and applies to sub-populations that experienced different levels of mobility quality or to the same population if there was a change of experience quality in time. Details about the measurement of sensitivity are presented in Fabbris and Scioni (2019).

Chapter 4

Advantages of VET mobility

4.1. Positive factors of mobility

If we take in one hand the positive aspects of international mobility and we deduct the negative ones in the other, we obtain a balance that can be considered the net return to the experience. For this reason, it is relevant to understand which are the possibly-independent, positive and negative dimensions of international work placement as perceived by its main actors.

We analyse separately the factors that led participants to give the responses related to the positive and negative aspects of VET international mobility. The analysis of the positive aspects as perceived by participants is given in Section 4.2, the negative ones in Section 5.2. The analysis of the quality of mobility experiences as perceived by school representatives are described in Sections 4.3 regarding the positive aspects and 5.3 regarding the negative ones, and the analogous perceptions from the involved companies are presented in Sections 4.4 and 5.4, respectively.

So, the remaining part of this chapter is organised as follows: the main positive dimensions for the evaluation of a single respondents' experience are presented in Section 4.2, a collective experience of schools both as regards their sending and/or hosting activities is presented in Section 4.3 and another collective experience of companies as regards their activities for sending and hosting participants is presented in Section 4.4. Section 4.5 contains provisional conclusions about the quality of the VET mobility experience in Europe.

4.2. Benefits participants obtained from mobility

The positive aspects according to which participants evaluated their mobility experience are the following:

1. *Personality improvement*. The personality traits considered for a participant's evaluation of his/her experience are the so-called 'big five' traits (Costa and McCrae, 1995; John and Srivastava, 1999) and an additional trait we assumed

to be peculiar of this type of experience.[1] The 'big five' traits have been widely used in various contexts as predictors of youth performance at school, in the labour market and during the lifespan (see, among others: Judge and Bono, 2001; Heckman *et al.*, 2006, 2011; Heineck and Anger, 2010; Khan *et al.*, 2011; Lundberg, 2012; Heckman and Kautz, 2012; Kautz *et al.*, 2014; Vittadini, 2017). In the ROI-MOB questionnaire, participants' personality has been investigated by asking them if they, as a consequence of international mobility experience, felt – at least with respect to their peers – to be:

i. more conscious of their own resources than before mobility, which involves the tendency to be organized, responsible, and hardworking (personality trait name: conscientiousness);
ii. more extroverted and enthusiastic of life, that is oriented toward the outer world of people and things rather than the inner world of subjective experience (trait: extraversion);
iii. more sociable and helpful to other people, which implies the tendency to act in a cooperative, unselfish manner (trait: agreeableness);
iv. more emotionally stable and more resistant to frustration (trait: neuroticism, if considered in a negative direction, or emotional stability in the same direction as the other personality traits);
v. open to initiative and new aesthetic, cultural, or intellectual challenges (trait: openness to experience);
vi. more able to control own actions and master own future (facet added to complete the 'big five' ones).

In the participant questionnaire, the personality traits were administered random, so to overcome the 'order effect' that could have otherwise altered the quality of responses in an unknown direction and quantity (see, among others, Sudman and Bradburn, 1982). In this research, the personality changes due to mobility were questioned in their shortest form, one question for each trait. Such a short measurement approach is certainly too blunt an instrument to capture the tangle of relationships between the mobility experience and personality growth, though the combination of traits showed very predictive of growth, as will be clearer henceforth.[2]

[1] The Big five traits are supposed to describe everyone's personality. They are named also 'character skills' to underline their persistence in time, or 'non-cognitive skills' to highlight that their origin is not scholastic but social, and in particular derive from family and social communities. In some cases they are also called 'raw intelligence' to state that they can compete with intelligence and learning in explaining individual outcomes.

[2] Despite the simplicity of the question on personality improvement, we can say that it worked. Indeed, the responses to this question echoed with similar intensity also in responses to the other questions on benefits. We maintain that also in future questionnaires with similar purposes this question should be self-assessed, with a single question per trait, retrospectively oriented so to summarise

2. *Professional skills improvement*. In the ROI-MOB questionnaire for participants the possible improvement concerned the following skills:
   i. **Technical-specific skills**, that consist, in the case of trainees, of cognitive skills specific of their own job, or, in case of students, the job duties they expect to realise as a consequence of their education and training.
   ii. **Language skills**, and in particular the mastering of English, e.g. the skills that most participants expect to develop while going abroad, in particular when the internship is realised in the UK, in Ireland, in France or in another country characterised by a vehicular language.
   iii. **Cross-job, or soft, or transversal skills**, e.g. the cognitive skills that apply to any job and involve the capacity of problem solving, not only of technical category, mental flexibility/agility at work and elsewhere, and the ability to work in team and communicate with others. Also the soft skills questions have been administered in random order so to overcome the 'order effect' on responses and according to the 'best-worst' measurement technique. In this work, the technique consisted of asking the respondent first to select a certain number of very beneficial aspects from a list of aspects shown in random order, and then to select from the reduced list the least improving aspects. The application of the best-worst technique implies a special analytical procedure (see Section A.1 for a more detailed presentation of this topic).
   iv. **Entrepreneurial skills**, e.g. the capacity of being pro-active in the labour market and in the broader society, which involves the aspects of taking initiative in both job seeking and duty performing, autonomy in self-managing duties, a fuller professional self-confidence, and a deeper commitment to own professional entity.
   v. **Intercultural skills**, e.g. the skills that include a more solid commitment to own sending school/company and that to the hosting unit, a deeper feeling of integration with own country, a feeling of empathy with the hosting country (for instance, interest in following news about the hosting country) and with other foreign countries and, finally, the development of a feeling of European citizenship.

The improvement of professional skills may be considered a higher outcome with respect to that of personality traits. It is easy to guess that entrepreneurial skills are a direct declination of openness to initiative as applied to occupational and social issues, but involve also other cognitive and non-cognitive skills. Moreover, intercultural skills follow a specific-to-situation ability to manage sociability and extroversion propensities, with the addition of culture. Personality is, at its turn, improved by new cognitive inputs. Other mutual conditionings are not difficult to imagine.

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the improvement with respect to a period antecedent mobility period, and administered in random order.

3. *Occupational and social opportunity raising*. In the ROI-MOB questionnaire the following issues were considered:
   i. More chances to find a new job or to improve one's current job conditions (for instance, getting a longer term contract or better career chances) or school outcomes (for instance, the final mark).
   ii. The raising of the willingness to start one's own business, either in the home country or abroad.
   iii. The increment of the willingness to working and living abroad.
   iv. The possibility to change life plans after the mobility experience.

This evaluative dimension can be considered a higher layer of personal growth, at least with respect to labour. For instance, the possibility to change own life plans as a consequence of an international experience, which improved both personality skills and social and occupational chances, can be a relevant issue for youngsters who are less inclined to move far from home while looking for a job. Similarly, it is easy to imagine that the raising of the willingness to work abroad can be an expression of both self-consciousness, openness to initiative and the achievement of intercultural skills altogether. Also, the raising of the willingness to start an own business can derive from the empowerment of a participant's personality, who is now aware that initiative and risk-taking and hard-working often give returns and that people like him/her belong to an elite group able to grasp opportunities.

4.2.1. *Improvement of personality traits*

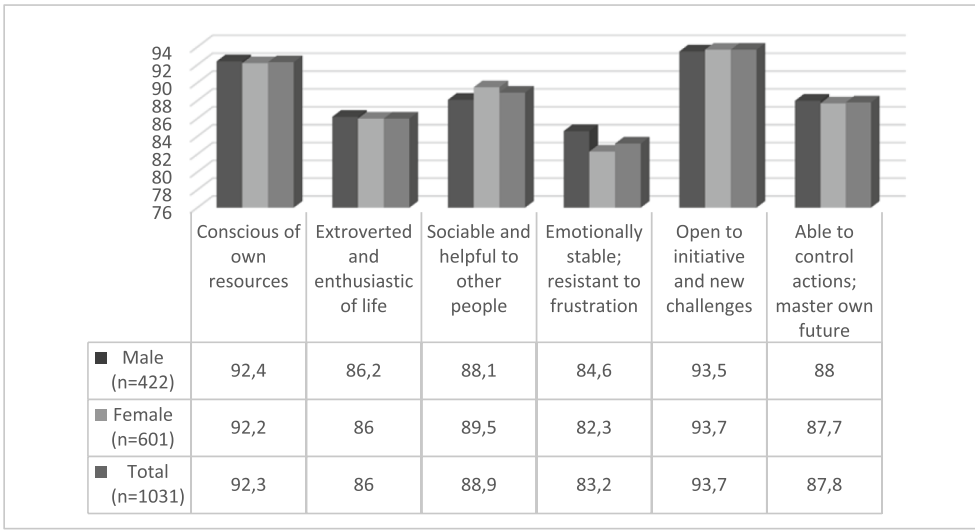
How and how much participants felt their personality traits improved after mobility are presented in Figures 4.1 to 4.4 and Table 4.1.

The proportion of participants who stated their mobility experience enabled them to improve their own self-competence is amazing. A quota ranging from 83 to 94% of participants recognised their character was reinforced by the mobility experience. In this range, the lowest improvement was in their capacity to master emotions and resist to frustration, the largest one, with a percentage that bordered on 100%, related to the enhancement of the capacity to start autonomous initiatives and being able to face new challenges. Precisely, self-consciousness and openness to initiative improved in 92% and 94% of respondents, respectively. Other socio-psychological aspects, such as extroversion and sociability, were endorsed in a proportion between 86 and 89%. Emotional stability was endorsed by "only" 83% of participants. The item added by ROI-MOB partners to the big-five list – e.g., the ability to controlling actions and mastering own future, which is more a consequence of psychological strength than a personality trait in itself – stayed in the middle (88% endorsement) of the five items.

Let us comment the increase in self-consciousness. The awareness of own resources derives from travelling, reasoning, studying, working and living together

with peers, of both genders and from a variety of cultures. This continuous matching, at the age of twenty, is highly formative for work and life and is a widespread outcome for almost all those who attended a VET mobility programme. Many of these results could be obtained also through other mobility programmes, for instance an academic one, or might develop naturally at work, though it is relevant that they developed after an experience of few weeks and in an occasional working context. This character enhancement is likely to be fruitful also for other personal and social issues.

There are no significant differences between males and females as regards the character reinforcement: the differences between genders are all within chance limits. The homogenisation of gender attitudes and behaviours is reasonable while analysing educated youngsters. Though, it is relevant to ascertain that this happens as an effect of VET mobility and for people residing in various European countries.



	Conscious of own resources	Extroverted and enthusiastic of life	Sociable and helpful to other people	Emotionally stable; resistant to frustration	Open to initiative and new challenges	Able to control actions; master own future
Male (n=422)	92,4	86,2	88,1	84,6	93,5	88
Female (n=601)	92,2	86	89,5	82,3	93,7	87,7
Total (n=1031)	92,3	86	88,9	83,2	93,7	87,8

Figure 4.1. Percentage of participants who improved their personality as a consequence of VET Erasmus+ mobility, by gender and personality trait *(The percentages of "Certainly yes" and "More yes than no" have been pooled together).*

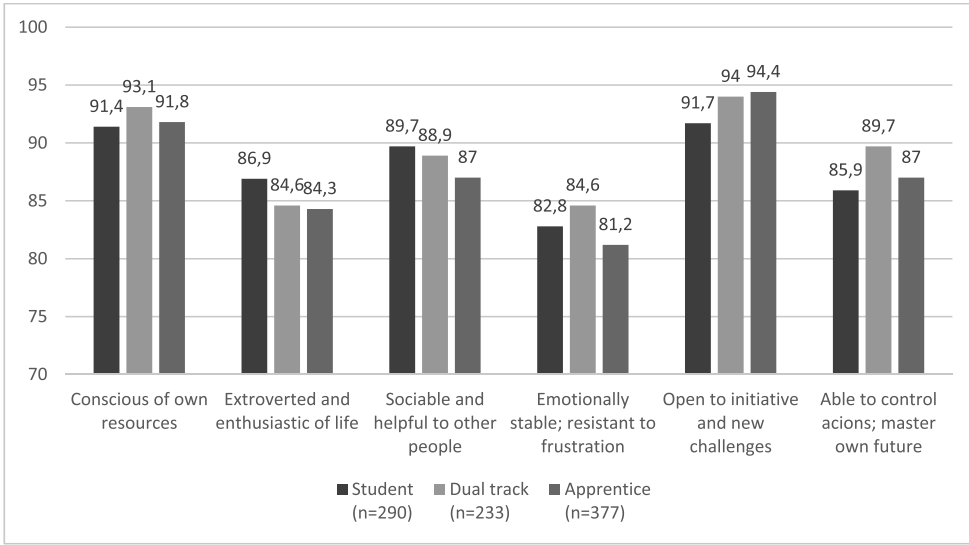


Figure 4.2. Percentage of participants who improved their personality as a consequence of VET Erasmus+ mobility, by participant's activity and personality trait *(The percentages pool together the responses "Certainly yes" and "More yes than no").*

Also the personality improvements according to the activity of participants—that is, being a school student, a student in a dual track, or an apprentice—are not statistically different: the width of the range between the trait showing the largest and the lowest improvement, as well as the order of improving traits, are similar to the mean ones. There is some difference in the level of gains: school students seem to gain somewhat less than people in a dual track or in apprenticeship. Indeed, students' gains range from 83 to 91%, while students in a dual track range from 85 to 94% and apprentices from 81 to 94%. Besides, for no trait the difference among categories of activity is larger than 4%.

Larger differences are shown, instead, by country improvements. German youngsters evaluated their gains in personality in different proportion than the average: they showed the largest endorsement of self-consciousness (96%) and the lowest in emotional stability (78%), with a range between the two most distant traits of 18%. The other countries had much narrower proportions, ranging from 83 to 93% (Italy), from 89 to 95% (Portugal) and from 90 to 94% (Spain). It is not easy to imagine why German participants had such a wide spectrum of results and the Mediterranean countries more restricted ones. This issue could be a matter for further insights.

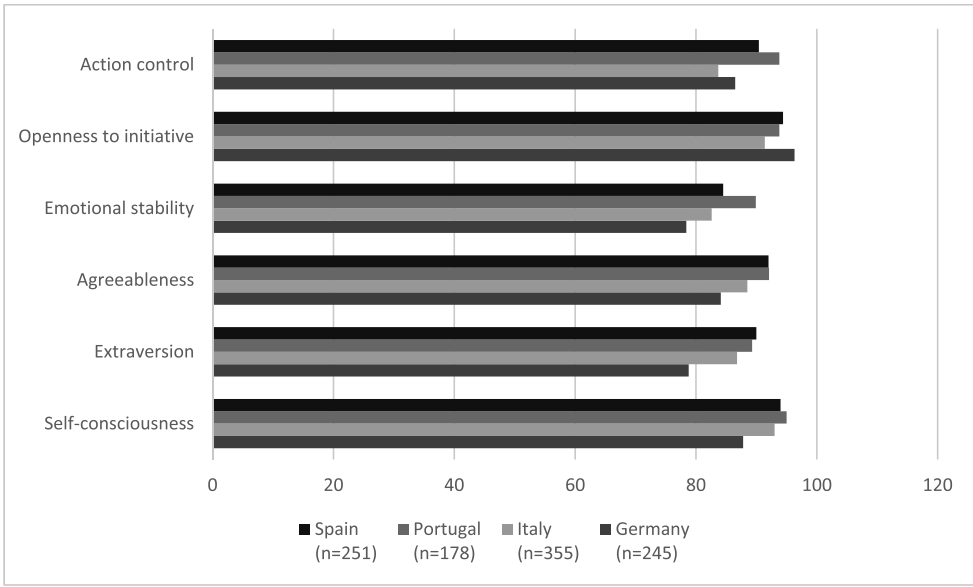


Figure 4.3. Per cent rate of improvement of participants' personality as a consequence of mobility*, by country and personality trait *(The percentages pool together the responses "Certainly yes" and "More yes than no").*

Finally, we checked if the effects of mobility on participants depended on the business sector or on the duration of stay. The improvement in participants' personality did not show significant differences among business sectors. Instead, the enhancement of socio-emotional skills highly correlates with duration, tough in a non-linear trend: there is a progressive improvement of skills from the shortest to the 4-month work placement period, and then a sudden downward change for stays longer than four months. As a matter of fact, the maximum achievement is for the class 13-to-16 weeks duration, for which the gains range between a minimum of 4 points increase in openness to initiative and a maximum of 13 per cent points increase in agreeableness and extraversion above the period 1-to-4 weeks. But the slope turns downward of 7-9 per cent points for all personality traits but emotional stability and action control if the experience lasted more than four months. This duration category may be either a special case of mobility, with different aims and practices than shorter VET mobilities, or it may be too long a period for VET mobility so that people's attitudes implode. Unfortunately, with the data at hand, it is not possible to get further insight into this issue.

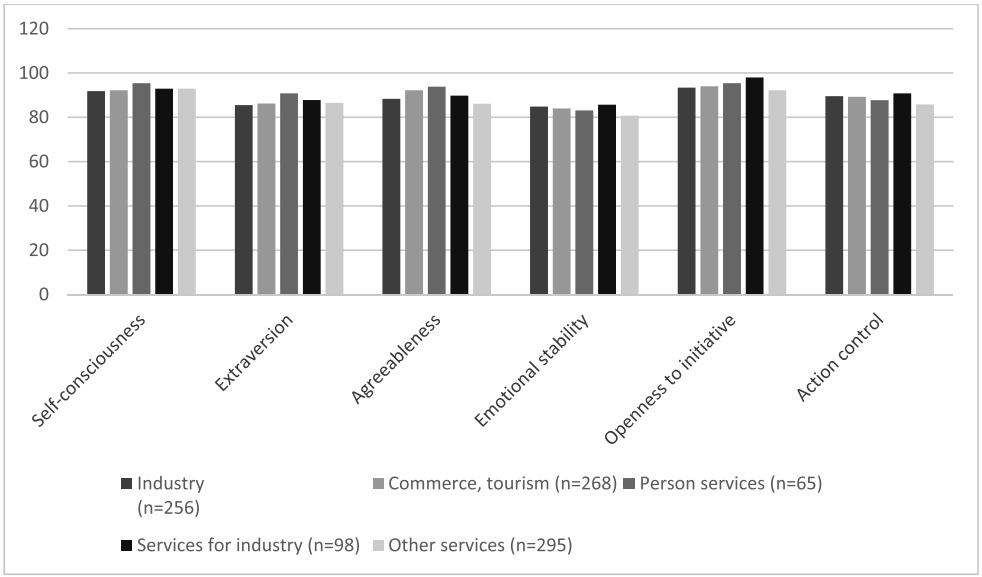


Figure 4.4. Per cent rate of improvement of participants' personality as a consequence of mobility, by business sector during mobility *(The percentages pool together the responses "Certainly yes" and "More yes than no").*

Table 4.1. Per cent rate of improvement of participants' personality as a consequence of mobility*, by length of mobility (in weeks).

Personality trait	1-4 (n=336)	5-8 (n=208)	9-12 (n=306)	13-16 (n=124)	17 & more (n=29)
Self-consciousness	88.7	91.4	96.1	97.6	89.7
Extraversion	81.8	86.1	89.2	95.2	86.2
Agreeableness	85.7	84.6	93.1	98.4	89.7
Emotional stability	76.8	82.7	88.2	90.3	89.7
Openness to initiative	92.9	92.8	96.1	96.8	89.7
Action control	85.1	84.6	91.8	93.6	93.1

(*) *The percentages pool together the responses "Certainly yes" and "More yes than no".*

4.2.2. *Improvement of professional skills*

Whatever the duration and site in which mobility was realised, professional skills somewhat improved. Also, it is obvious that learning was proportioned to experience, and we already know that, on average, it lasted two months, too short a time to master the many professional skills that are relevant to a job, unless strong theoretical and/or practical bases are already present in VET participants. Nev-

ertheless, given these limits, participants showed a large variability of behaviour and professional learning. This variability is described in Tables 4.2 and 4.3 and Figures 4.5 to 4.8.

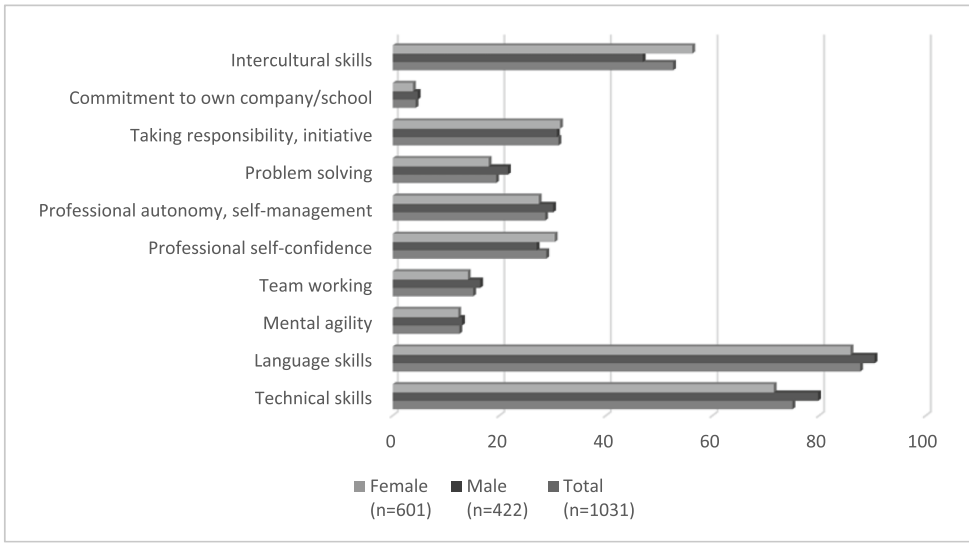
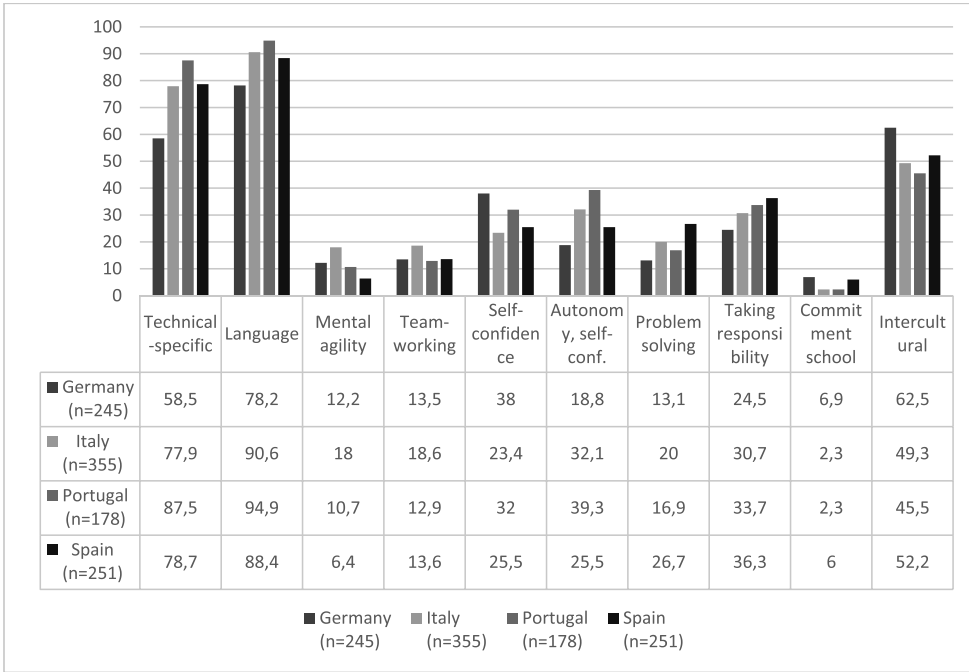


Figure 4.5. Per cent improvement of skills participants showed after their VET Erasmus+ mobility, by gender.

Table 4.2. Per cent improvement of skills participants showed as a consequence of VET Erasmus+ mobility, by participant's activity.

	Student (n=290)	Dual track (n=233)	Apprentice (n=377)
Technical skills	79.3	75.1	71.8
Language skills	86.9	89.1	86.8
Mental agility	11.7	15.5	12.5
Team working	18.3	14.2	12.2
Professional self-confidence	26.6	32.2	28.4
Professional autonomy, self-management	29.7	25.3	29.2
Problem solving	22.4	14.6	19.1
Taking responsibility, initiative	32.8	25.8	32.9
Commitment to own company/school	2.1	4.3	5.9
Intercultural skills	49.3	59.2	52.3



	Technical -specific	Language	Mental agility	Team-working	Self-confidence	Autonomy, self-conf.	Problem solving	Taking responsibility	Commitment school	Intercultural
Germany (n=245)	58,5	78,2	12,2	13,5	38	18,8	13,1	24,5	6,9	62,5
Italy (n=355)	77,9	90,6	18	18,6	23,4	32,1	20	30,7	2,3	49,3
Portugal (n=178)	87,5	94,9	10,7	12,9	32	39,3	16,9	33,7	2,3	45,5
Spain (n=251)	78,7	88,4	6,4	13,6	25,5	25,5	26,7	36,3	6	52,2

Figure 4.6. Per cent improvement of skills participants showed as a consequence of mobility, by country of origin.

Three out of four participants felt themselves stronger in terms of technical skills. To a student, this sensation may derive from both new abilities learnt in a real working context and from the factual confirmation of the learning they started at school or in a laboratory context. To an apprentice who realised new skills or who had the possibility to compare in a different context the production methodologies s/he was accustomed to practice in her/his company, the sensation of novelty was important but in a lower proportion than that felt by a student. This justifies the difference in perception of technical improvement between students and apprentices (79% *vs.* 72%). In between, are the results shown by learners in a dual track (75%).

Regarding professional skills improvement, German participants stated that they perceived gains that are much lower (59%) than those stated by participants from other countries (minimum rate: 78%). Portugal is the country of origin of participants who stated they earned the most (88%) in technical-professional terms from mobility. Of course, improvements do not reflect the final levels of skills achievement, because the starting point can differ significantly: it is possible that high skilled participants improved their skills less than others who moved from home lower skilled. This can be the case of German apprentices who used to go abroad during the second year of their VET, when they are nearly employees in their companies.

Instead, students, dual-track attendants and apprentices did not show differences among them regarding language skill improvement. The level of improvement was high and similar for all three, about the average proportion, e.g. 88%. Also for language skills, the German participants stated they had a contribution from mobility that resulted lower (78%) than those from the other countries in the project (around 90%).

Regarding the soft skills, which can be considered tools for one's personality to generate professional capacity in participants (Suneela, 2014), the proportion of participants who felt they maximally improved their intercultural skills (53%) is eye-catching.[3] These skills imply understanding foreign countries and cultures, tolerance for diversity, and other social abilities that mobility can develop as a response to the need for coping with work duties in an international environment.

Other soft skills developed by mobility experience are the abilities to take responsibility and initiative (31% endorsement), professional autonomy and self-management and professional self-confidence (both 29%). The three latter skills could be clustered together to define a general "entrepreneurial skill" because they are strictly related to both the propensity of starting own business and (in case of employed people) to the capacity of self-managing their own activity and life.

The high achievement of intercultural skills, which are basically social skills, outperforms all other soft skills. In a certain way, it measures how and how much a youngster achieves social culture by matching her/his culture with that of others. This match not only relates to different ways of eating, behaving in private life, at work and outdoor, but also in realising common teamwork activities, in solving problems that require a common understanding, in manifesting own culture while expressing her/his ideas in public, and the like working activities.

In other words, the intercultural competence achieved through working activities is a much more intense type of interaction with other individuals, compared to the one just a trip could give, and even much more target-oriented than just living together in an apartment. If you are bound to get a result that has common significance for all those who participate in it, you are drawn to reflect on your values, beliefs, previous behaviour. And adapt yourself. You are bound to reflect on future attitudes and behaviours, on what is substantial and what is irrelevant, and the like. Thus, you mature on the spot. Hence, it is easier to become intercultural.

According to participants' perception, the remaining soft skills (problem-solving, team working, mental agility) were just partially developed from such short an experience. This is a counter-current result if compared with the recent survey (European Commission, 2014a) of the impacts of the Erasmus exchange programme on employability and skills of participants. This survey ascertained that interns developed their transversal skills at a rate of about 90%, and the raised

[3] It is to be mentioned that, for items like "mental agility", participants were given just two possible answers out of eight items.

skills included knowledge of other countries, ability to interact and work with individuals from different cultures, adaptability, foreign language proficiency and communication skills.

Although the definition of soft skills is in progress – for instance, it should include teamwork skills and adaptability to contingent situations, as surveyed with the ROI-MOB questionnaire –, our study showed that the questioned participants are much less sensitive to soft skills than to the technical and socio-cultural ones. This may depend on the fact that basic technical skills, such as the linguistic and technical-specific ones, are of the cognitive type and can be immediately detected when put to the test, while the soft skills, that are a mix of both cognitive and non-cognitive resources, require a longer practice for an adequate development and perception.

Even the intercultural skills are easier to detect after an international work placement since they are made up through progressive stratification of abroad experiences (see also Alfranseder *et al.*, 2012). Finally, the milder endorsement of participants for soft skills may depend on the fact that these skills are hidden until they are not exercised, but this does not mean they did not improve during mobility. Thus, participants likely improved their soft competencies but their effects may deploy in the medium term.

Mobility did not improve the commitment of students and apprentices to the school or company they respectively belonged. This 'social' attitude showed to be left in the background also in analogous studies described in European Commission (2014a).

From a professional perspective, there are differences between genders. On average, women feel a rate of improvement of 8% lower than men after mobility. Also, the linguistic achievement of women seems somewhat lower than that of men, but the difference is less than 5%. Regarding the soft skills, the differences between genders are less than 4%: in some cases, women show benefits higher than men, in other cases it is the opposite. So, we can say that soft skills equally improved to both genders.

What is really relevant is the gender difference in intercultural skills: women achieved much more than men. This 'social maturity' indicator, as discussed above, may mean that women had the major social contribution from a VET mobility experience which consisted of working in a community and living on their own for a certain period. We do not know if this larger improvement depends on an initial lower starting point for or on a major effect of mobility on women. Our data do not allow to compare the current with the starting level of the two genders. It could even be that men are still better professionally equipped than women. The gender difference could also derive from a higher level of social awareness of women. In any case, it is relevant that women show to be good recipients of social effects of mobility and this reduces the possible distance between genders' skills.

The frequencies regarding the activity participants were involved before mobility show a cross between technical and intercultural skills, in the sense that the group of participants who felt a larger improvement in technical skills (e.g., the school students) is that that stated a lower intercultural improvement, and vice versa, the group with the largest intercultural improvement (e.g., the dual track people) had a lower-than-average outcome regarding technical skills. This sort of compensation between effects deserves further insight.

Regarding the differential improvement of technical skills according to nationality (Figure 4.7), the main evidence is that German participants stated a lower technical and linguistic skills improvement than participants from the other countries: the difference is larger than 20% for technical and about 13% for linguistic skills. Again, it is difficult to state if these lower improvements depend on a higher starting level or on an effective lower impact of mobility.[4] This deficiency is compensated by a larger proportion (10% above the average) of participants who felt improvement in intercultural skills. The improvement in soft skills attained by German interns is more or less the same as that attained by the participants from the other countries involved in the project.

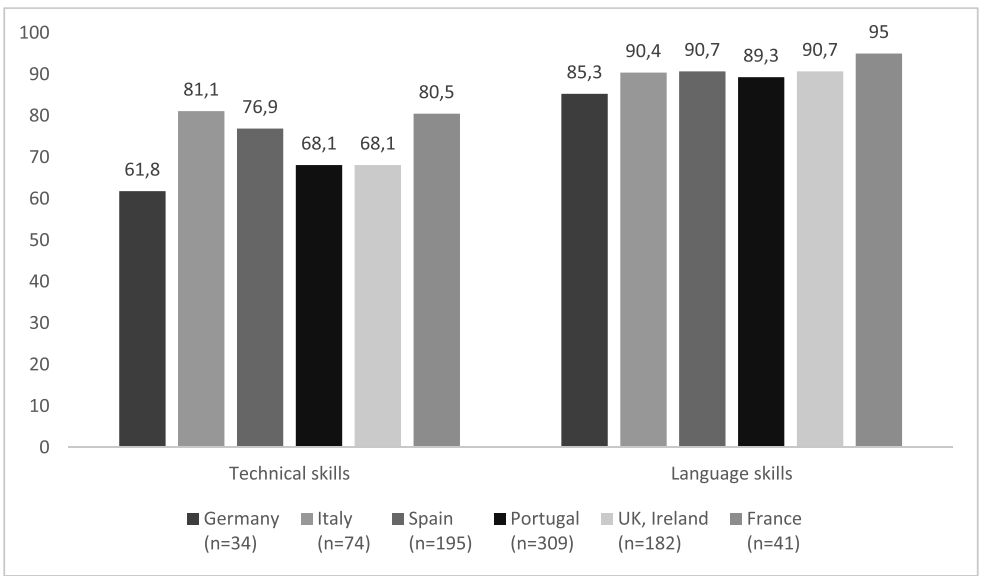


Figure 4.7. Per cent improvement of skills participants stated as a consequence of VET Erasmus+ mobility, by hosting country.

[4] Usually, the English skills of German candidates are good or very good (B2/C1 corresponding to the European framework). A starting point higher than the average in linguistic skills implies lower chances for improvement after a short mobility experience.

Also, the improvement of job-specific skills is lower for internships carried out in Germany than, for instance, in Italy and France as countries of destination. The proportion is similar to that stated by participants according to the country of origin. It is unclear why this happened because just 7% of participants who resided in a German town realised their mobility in the same country (see Table 2.1).[5]

Figure 4.7 shows that so many participants reached the UK, Ireland, and France to improve their linguistic skills. Let us remind that the UK is by far the most popular destination but the four countries in the ROI-MOB project not only of participants belonging to our sample, but also in Europe as a whole (see Chapter 2 for more details on destination countries).

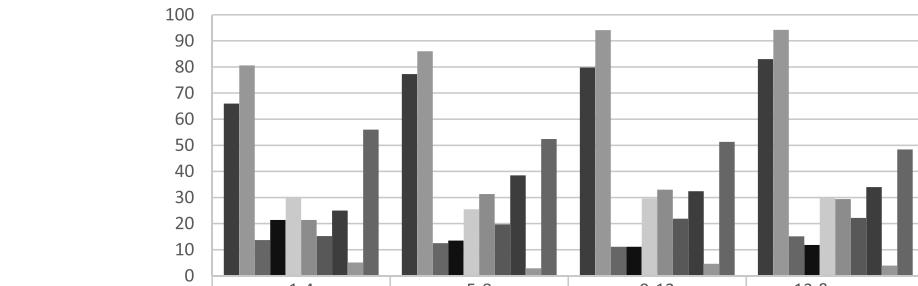
Table 4.3. Per cent improvement of skills participants showed as a consequence of mobility, by activity sector during mobility.

Skills	Industry (n=256)	Commerce, tourism (n=268)	Person services (n=65)	Services for industry (n=98)	Other services (n=295)
Technical-specific	77.3	75.9	81.3	73.5	71.3
Linguistic	86.0	89.1	92.3	89.7	86.1
Mental agility	12.5	14.9	10.8	9.2	12.5
Team-working	18.4	11.9	13.9	15.3	15.6
Self-confidence	26.2	28.0	32.3	24.5	32.9
Autonomy, self-conf.	25.0	29.5	23.1	37.8	26.8
Problem solving	16.0	20.5	18.5	17.4	21.4
Taking responsibility	35.2	28.7	35.4	30.6	29.8
Commitment to school	6.3	4.1	3.1	5.1	3.1
Intercultural	48.8	55.6	60.0	56.1	50.2

There are no clear differences in skill achievement if crossed with the business sector. Some sectors prevail in the achievement of certain skills, but there is no constant prevalence throughout skills. Highlighting the prominent figures, we point out that 92% of people working in services for persons and families improved in linguistic skills and also in job-specific (81%) and intercultural ones (60%). People who worked in the industry improved their ability in team-working (18%).

Instead, a clear trend is shown in skills improvement if crossed with the length of the mobility period. The trend is not linear because of some random fluctuation, but the improvement in job-specific skills goes from 66% for 4-week periods to 83% for a 13 or more weeks duration; for linguistic skills, it goes from 81% for a 4-week experience to 95% for a 13-week or more one.

[5] This is possible because some people residing in Germany but studying elsewhere realised their mobility in Germany as a hosting country.



	1-4	5-8	9-12	13 & more
Technical-specific	66	77,3	79,8	83
Linguistic	80,6	86	94,1	94,2
Mental agility	13,7	12,5	11,1	15,1
Team-working	21,4	13,5	11,1	11,8
Self-confidence	30,1	25,5	29,7	29,8
Autonomy, self-conf.	21,4	31,3	33	29,4
Problem solving	15,2	19,7	21,9	22,2
Taking responsibility	25	38,5	32,4	34
Commitment to school	5,1	2,9	4,6	3,9
Intercultural	56	52,4	51,3	48,4

Figure 4.8. Per cent improvement of skills participants showed as a consequence of mobility, by length of mobility experience (in weeks).

Again, there is no clear trend for soft skills, while there is a strange inversion of the trend for intercultural skills: the maximum (56%) is for one-month experience and the minimum (48%) for a permanence lasting more than three months.

4.2.3. *Raising occupational and social opportunities*

The frequency of participants stating their occupational and social opportunities raised as a consequence of mobility are presented in Tables 4.4 to 4.6 and Figures 4.9 to 4.11. The outcomes that participants considered as a consequence of mobility are, in descending order of endorsement:

a) More willingness to work abroad. This is a very important result of international mobility: a performance in an international context frees people from the fear accompanying an abroad internship. In fact, 87% of participants, without differences between both genders and activities, are available to cross borders again for employment. In hard times for occupation and in countries of high juvenile inoccupation this availability is socially relevant for both the origin and the destination countries. The origin country benefits of a lower pressure in

terms of unemployment and the destination country benefits of already trained labour. In fact, the willingness to work abroad parallels the interest for the country were the work placement was realised: 70% of participants started following the news from the hosting country. This may make the search and finding of an occupation abroad not an escape from the home country but a consequence of the achievement of an 'international dimension'.

b) Increase in self-confidence. This issue was already highlighted when discussing of achievements in terms of personality traits (Section 4.2.1) and of professional opportunities (Section 4.2.2). We will not add comments here because the consolidation of self-confidence (in this case 85%) stands above all other personal achievements of participants. We can see that this outcome involves in an equal measure both males and females and all activity categories of participants. The increase in self-confidence may help participants while reflecting about their future to clarify own life plans (see also Section 4.5).

c) An increased feeling of European citizenship. This parallels the achievement of a cosmopolitan dimension but is more specific: Europe is considered a country which the participants feel to belong to. Mobile youth are better informed about the EU institutions and European politics and feel more likely to travel than peers (Fellinger *et al.*, 2013). We did not find differences between genders. Partial differences may derive from education: students are more Europe-prone than apprentices (83% vs. 77%). There are larger differences according to the country of origin: 73% of German participants and 85% of Italian ones feel themselves as European citizens, the other participants stay between these two extremes.

d) Added value for labour. The opportunity to increase employment – which the Europe 2020 strategy includes as a flagship consequence of mobility (European Commission, 2010) – was perceived in a high proportion (79%) by participants. A mobility experience is a concrete chance not only to psychologically reinforce participants as job seekers but also for the society as a whole. The chances related to the expected job parallel the opportunities for a better career (74% of participants). Both genders and all activity groups equally perceived the raise of opportunities regarding future jobs and career. The beneficial effect of creating new marketable ideas abroad may derive from both the opportunity of building an own international network and from the consistent raise of self-confidence. Both achievements may spur entrepreneurship and have an effect on employability, both in the home market and abroad (see also Alfrandeser *et al.*, 2012; Fellinger *et al.*, 2013). As a matter of fact, almost all participants who were not students at interview were employed and in 92% of cases worked in an international environment (Figure 4.10).

e) Also, the raising of the willingness to undertake an own business can be considered a relevant added-value for youth employment chances, since in almost all European countries the youth increasingly tend to work as an employee, to be regulated by an open-ended contract, with constant compensation and with a fixed schedule of working time. The proportion of participants feeling they could start their own business is large (45%), much larger than the current rate of self-employed in Europe. So, it is unrealistic believing that such a high proportion of young people would start own business in the future, but it might mean that many more people than in the past would consider the possibility to start an own business rather than just heading directly toward an employed work. The entrepreneurial mentality can be an advantage also for employees, since being organised, proactive and future-oriented helps career development. Indeed, some companies look for employees capable of proposing new projects, business ideas and able to commit themselves to the strategic framework of the organisation.

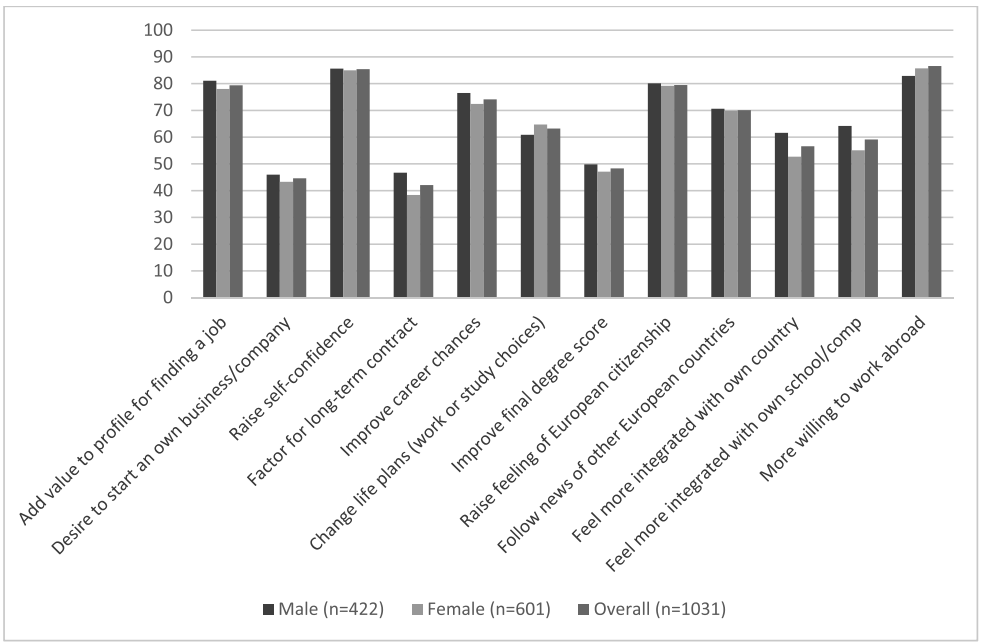


Figure 4.9. Per cent addition of participants' occupational and social opportunities from their VET Erasmus+ mobility, by gender *(The percentages pool together the responses 'Very much' and 'Fairly').*

Table 4.4 Per cent addition to participants' occupational and social opportunities from their VET Erasmus+ mobility*, by participant's activity.

	Student (n=290)	Dual track (n=233)	Apprentice (n=377)
Add value for finding a job	82.1	81.6	79.1
Desire to start an own business / company	50.7	46.8	42.5
Raise self-confidence	85.2	83.3	86.2
Factor for long-term contract	42.8	41.6	42.4
Improve career chances	75.2	79.4	74.3
Change life plans (work or study choices)	58.6	67.0	64.5
Improve final degree score	49.7	55.4	46.4
Raise feeling of European citizenship	82.8	79.0	77.7
Follow news of other European countries	68.6	68.2	71.6
Feel more integrated with own country	60.0	55.4	55.2
Feel more integrated with own school/comp	63.8	60.9	56.8
More willing to work abroad	83.5	85.8	84.9

(*) *The percentages pool together the responses "Very much" and "Fairly".*

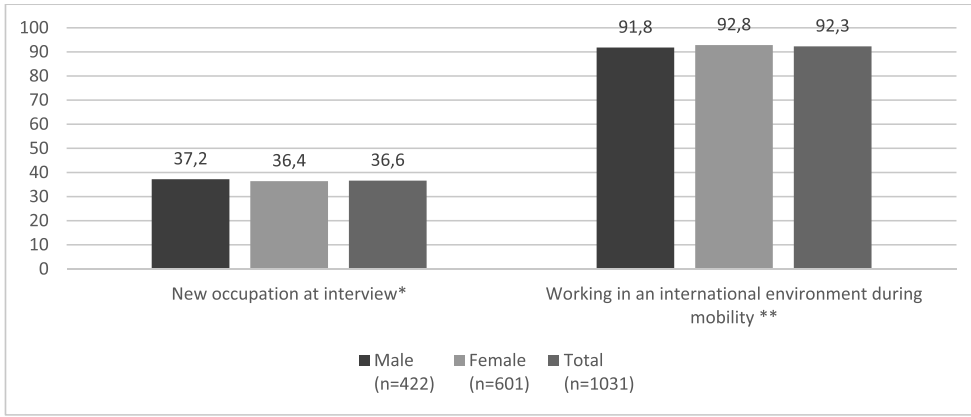
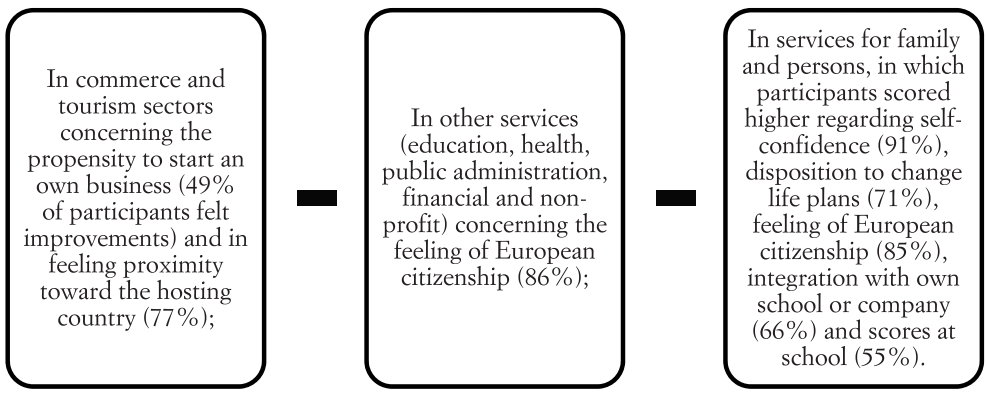


Figure 4.10. Per cent rate of improvement of participant's working status, by gender *(The rate includes those who did not work before mobility and then worked at interview. It includes the frequency of participants answering "absolutely yes" and "just partially").*

Table 4.5. Per cent rate of improvement in occupational and social opportunities perceived by participants thanks to mobility, by country of origin and type of opportunity.

Opportunities	Germany (n=245)	Italy (n=355)	Portugal (n=178)	Spain (n=251)
Finding a job	72.7	80.3	83.7	81.3
Start an own business	41.2	50.1	45.5	39.8
Self-confidence	76.3	91.0	83.2	87.7
Get a long term contract	22.9	38.9	56.2	55.4
Improve career chances	76.7	69.6	85.4	69.7
Change life plans	58.4	62.8	62.9	69.3
Improve degree score	56.7	46.8	38.2	49.8
European citizenship	73.1	84.5	84.3	75.3
Follow other countries	58.8	78.6	65.2	72.9
Integrate country origin	39.6	60.3	65.2	62.2
Integrated with school	45.7	60.6	60.1	68.9
Willing to work abroad	87.4	85.9	78.7	84.1

Regarding the business sector in which the participant operated during mobility (Figure 4.11), it can be observed an increase:



Definitely, people working in business services stated they obtained better chances to improve their personal and professional opportunities, while the same chance was milder, though significant, in the sectors of industry and services for industry.

What the mobility experience did not develop at the same significant level was the commitment to the participant's company or school. This will be a matter for analysis later on.

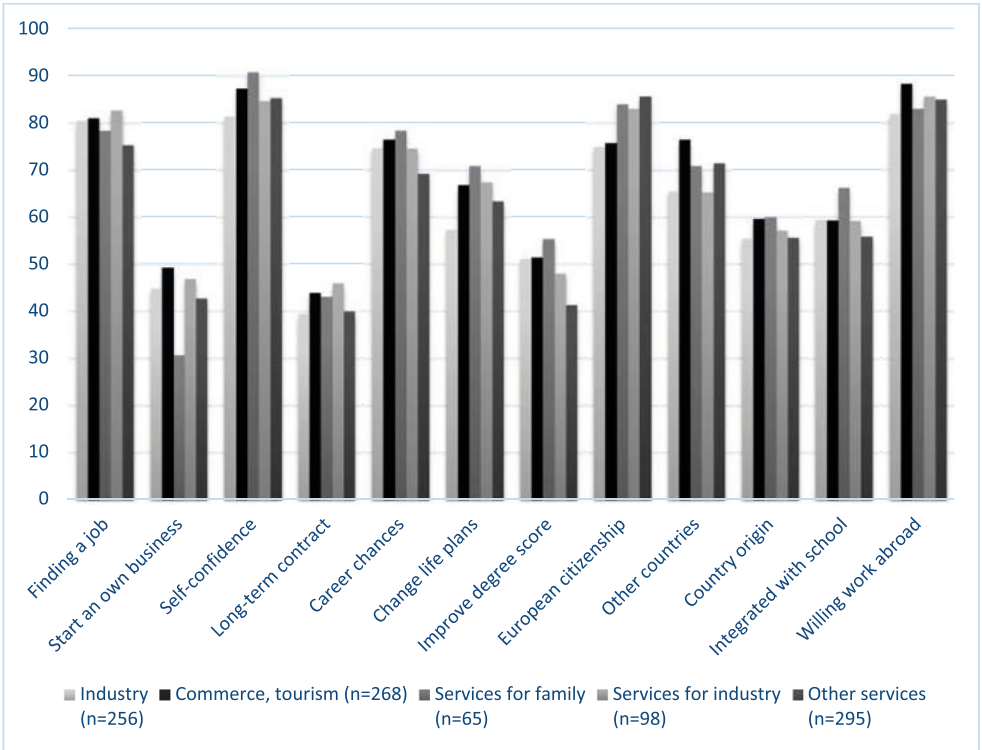


Figure 4.11. Per cent rate of improvement in occupational and social opportunities perceived by participants thanks to mobility, by activity sector during mobility.

If we cross the duration of the experience with the perception of improvements in social and occupational opportunities (Table 4.6), we can highlight that, although the progression is not linear, there is a tendency for participants to perceive a higher probability of finding a job, of getting a longer-term contract and of improving their career chances as a consequence of mobility duration. Also the change in life plans, which includes the participant's willingness to work abroad, significantly increases and the feeling of European citizenship slightly increase as the length of mobility increases. Instead, the expected degree score decreases as time abroad increases.

All this mirrors the consistency of the psychological benefit for participants, who feel themselves stronger after mobility with respect to labour and for the possibility given to them to master their own future, either in their country or elsewhere. They are aware that not only mobility was a nice period of their life, but also that their effort was an investment proportional to the expected returns. Even to the detriment of a temporary, lower scholastic score.

Table 4.6. Per cent rate of improvement in occupational and social opportunities perceived by participants as a consequence of mobility, by length of mobility experience (in weeks).

Opportunities	1-4 (n=336)	5-8 (n=208)	9-12 (n=306)	13-16 (n=124)	17 & more (n=29)
Finding a job	72.6	79.3	86.0	83.1	89.7
Start an own business	47.6	49.0	37.9	45.2	55.2
Self-confidence	80.4	88.0	88.9	87.9	79.3
Long term contract	33.0	36.5	50.3	55.7	48.3
Career chances	73.5	67.8	76.1	79.0	89.7
Change life plans	57.1	61.5	67.7	69.4	86.2
Improve degree score	56.6	48.1	45.4	36.3	48.3
European citizenship	75.9	80.8	81.4	86.3	79.3
Other countries	68.5	66.8	73.9	74.2	65.5
Country origin	54.5	51.9	59.2	65.3	62.1
Integrated with school	59.2	56.3	59.8	64.5	51.7
Will to work abroad	83.9	82.7	87.6	83.9	89.7

4.2.4. *Eliciting soft skills through the best-worst technique*

Soft skills developed by participants during mobility were elicited asking them to select two skills they perceived have improved the most as an effect of mobility and then to select the skill that improved the least. This measurement procedure, called 'best-worst' technique, makes it is possible to construct a 'dominance matrix' in which all the pairwise relationships between soft skills that improved during mobility are ordered and then estimate the position on a continuum of the eight skills (see methodological details in Section A.1).

Figure 4.12 represents the estimate of the positions, according to participants, of each soft skill improvement at the end of the mobility process. From this figure we can draw the following comments:

a. Participants perceived a larger improvement on intercultural skills, on those skills related to initiative (responsibility, professional autonomy, self-management, professional self-confidence) and, far back, on conventional soft skills (problem-solving, team-working, flexibility).
b. The period abroad was not related at all with the commitment to the sending school or company.

This clearly indicates that participants considered the realised internship as an investment mainly for themselves, e.g., for personal empowerment that sooner or later can make the most. The possible use of the competencies achieved during mobility for work was also in their minds, but in the background. The transfer of mobility outcomes to their own sending organisation was definitely left in the rear.

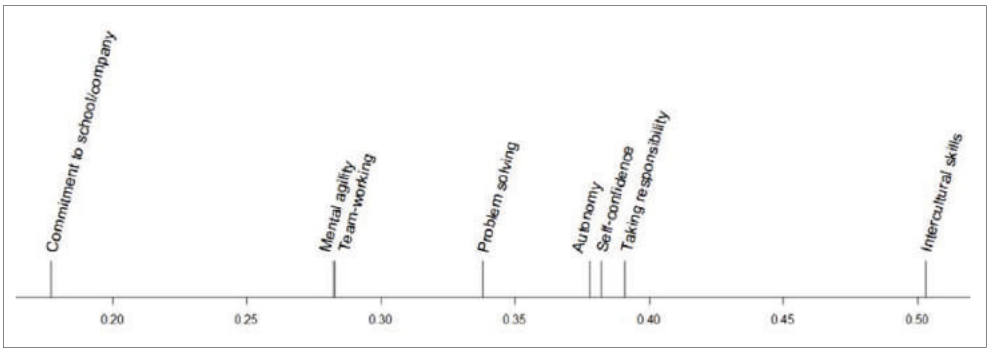


Figure 4.12. Estimates of soft skills improvements as a consequence of mobility, according to participants' dominance analysis (see Table A.1).

4.2.5. *Eliciting relationships among positive factors through factor analysis*

The benefits obtained by participants from mobility include all those listed above under the headings: Personality improvement; Professional skills improvement; and Occupational and social opportunity raising. A total of 21 items were factor-analysed with a principal component criterion. A first analysis showed the existence of a general factor pervading almost all beneficial aspects. Thus, to better understand the between-item relations, the initial factor solution was followed by an oblique rotation of the first three factors[6]. A summary of the results is presented in Table A.8 and in Figure 4.13.

The factor analysis solution of participants' benefits shows what follows:

– The first factor refers to the set of opportunities benefitting from mobility, which includes both the improvement of technical competencies and the raising of opportunities for the scholastic career, for job finding and for career development, as perceived by participants. We can call this factor '*opportunities raising*'.
– The second factor represents the improvements in personality traits. All six investigated traits form this factor: the three most relevant traits are the improvement in sociability and the mastering of both own actions and emotions. These abilities may mirror what is commonly termed as *locus of control*, that is the one's capacity of mastering own future with own resources, without relying on luck or other external forces. This second factor is a more qualified personality

[6] As it is explained in Section A.2, if we extract a single factor, all items would correlate with this general factor. This allows to conjecture that, in participants minds, all benefits belong to a general 'improvement' factor that is composed of at least three categories of improvements, each one corresponding to a factor.

descriptor than that deriving from the 'big five' traits. We can call this second factor '*internal locus of control*'.

– The third factor gathers the improvements in both personal and interpersonal capacities relevant for employment and social life. Even the improvement in foreign languages and the propensity to work abroad pertain to this factor. This identifies a mental trait that youngsters develop in particular if exposed to international stimuli and can be released just after a direct experience and through the demolition of language barriers. This does not mean that during the few weeks of mobility participants learnt a foreign language, but that they understood that language is no longer a barrier to them. This awareness, together with other interpersonal attitudes, is intended as a capacity that can be progressively fine-tuned to communicate with persons in every context. So, we can call this factor '*propensity to live and work in an international context*'.

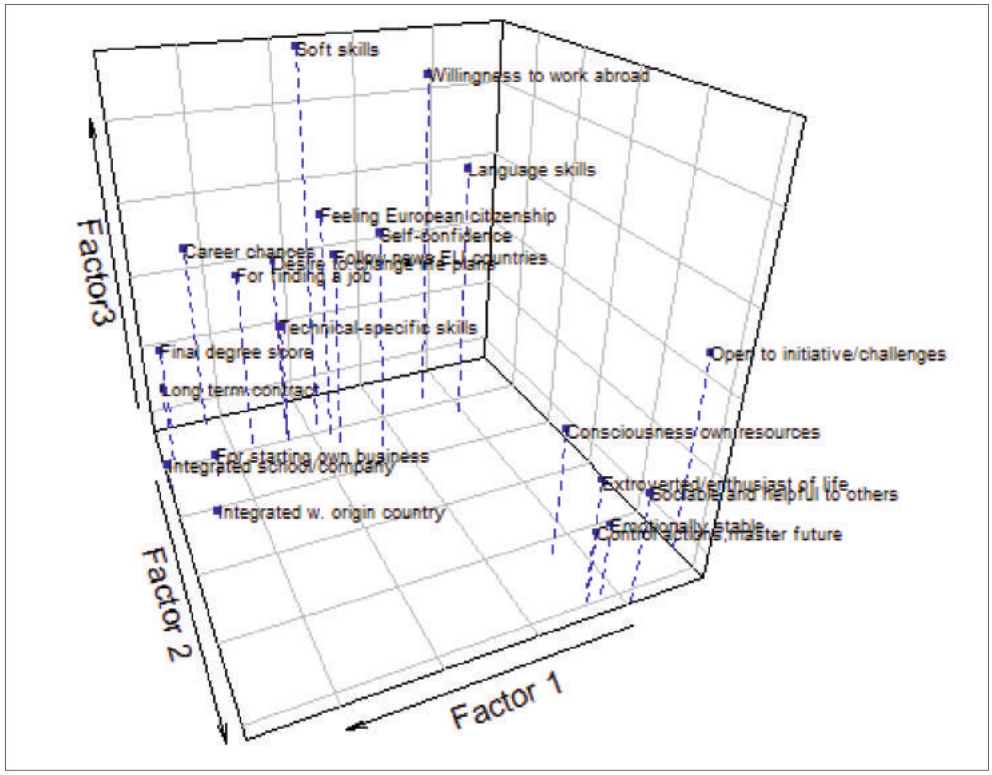


Figure 4.13. Estimates of the first three factors obtained through factor analysis of participants' perception of mobility positive aspects (see Table A.2).

4.3. Benefits schools and training centres can get from mobility

The question on benefits schools can get from mobility was submitted to the attention of schools' representatives. The question was posed in a similar format to both sending and hosting schools. The question referred to schools' own experience and not to a generic 'ear witness' opinion. The frequencies of the beneficial aspects endorsed by schools are presented in Tables 4.7 and 4.8 and Figure 4.14.

Table 4.7. Per cent endorsement of benefits from mobility perceived by sending schools and training centres*, by country.

Improvements	Germany (n=29)	Italy (n=38)	Portugal (n=92)	Spain (n=61)
Language skills**	48.3	63.2	35.2	67.2
Teamwork efficiency**	3.5	7.9	3.3	4.9
ICT, innovation skills	3.5	7.9	7.6	4.9
Motivation to learning**	75.9	39.5	80.4	50.8
Intergeneration exchange	27.6	29.0	15.2	11.5
Assess promising participant	6.9	5.3	5.4	3.3
Internal cohesion	10.3	2.6	7.6	4.9
Attract potential talents	37.9	7.9	1.1	1.6
Staff management skills	0.0	7.9	10.9	4.9
European tools use	3.5	7.9	7.6	8.2
Innovating teaching, labour	6.9	21.1	26.1	18.0
Broadening mind-set	13.8	55.3	14.1	60.7
Reputation brand	24.1	10.5	29.4	27.9
International collaboration	37.9	34.2	26.1	35.2

(*) *Respondents could give up to three responses. So, the per cent endorsement does not add 100.*
(**) *Reference is to participants.*

Table 4.8. Per cent endorsement of benefits from mobility perceived by hosting schools and training centres*, by country.

Improvements	Germany (n=13)	Italy (n=19)	Portugal (n=62)	Spain (n=30)
Language skills**	30.8	31.6	21.0	56.7
Teamwork efficiency**	38.5	21.1	6.5	0.0
ICT, innovation skills	0.0	5.3	1.6	0.0
Motivation to learning**	23.1	17.8	25.8	20.0
Intergeneration exchange**	53.9	26.3	41.9	26.7
Internal cohesion	7.7	15.8	1.6	0.0
Attract potential talents	15.4	0.0	1.6	0.0
Staff management skills	0.0	21.1	6.5	6.7

continue

continue

European tools use	7.7	5.3	9.7	0.0
Innovating teaching, labour	23.1	31.6	21.0	16.7
Broadening mind-set	23.1	42.1	32.3	50.0
Reputation brand	30.8	21.1	37.1	46.7
International collaboration	46.2	47.4	54.8	56.7
Local stakeholders	0.0	15.8	38.7	20.0

(*) *Respondents could give up to three responses. So, the per cent endorsement does not add 100.*
(**) *Reference is to participants.*

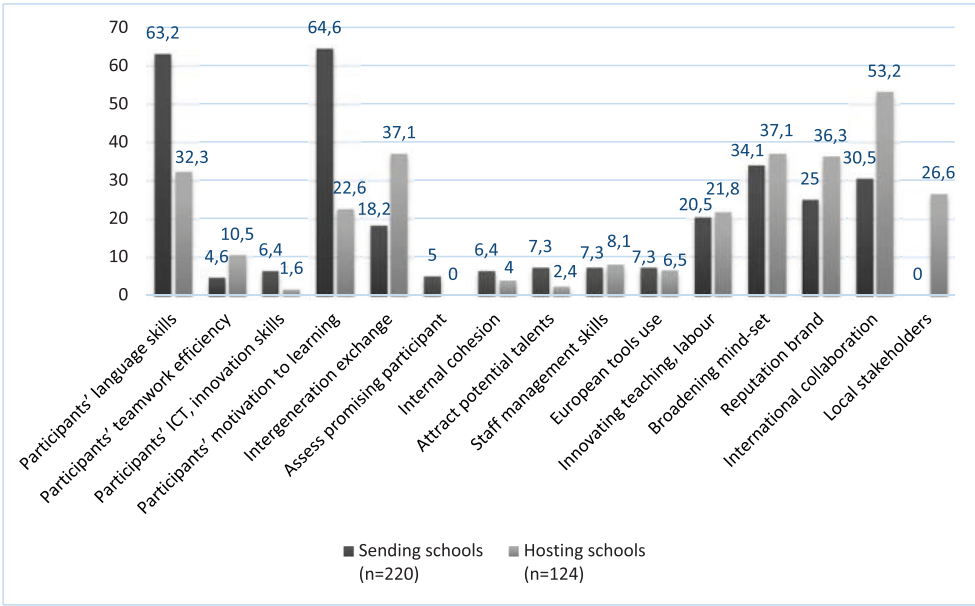


Figure 4.14. Per cent endorsement of benefits from mobility perceived by schools and training centres, by type of activity of schools and training centres *(Respondents could give up to three responses. So, the per cent endorsement does not add 100).*

Regarding the aspects perceived as beneficial, there are differences between the sending and the hosting schools. The sending schools – sending being a role that almost all schools take on – perceive that the largest benefits from mobility are to be allocated to the following outcomes:

– Motivation to learning and language skills of participants. Sending schools state that their students are by far the major recipients of benefits from VET mobility and that the increase of motivation to learning and improvement of language skills are the aspects that any schools ascertains at their return. Also, motivation to learning, improving self-consciousness, perseverance and intergenerational exchange skills show improvements. Instead, technical skills are considered difficult to develop in such short times. This is very similar to what participants themselves highlighted at the end of their experience.
– Sending schools feel themselves as secondary recipients of benefits: they feel a certain broadening of mind-set and a fair increase of their brand reputation due to the admission to the exclusive group of schools having an international prospect. The fresh air of international collaboration and contamination with the dynamic realm of student exchange may stem also innovation in teaching activities.
– With reference to countries that sent participants, there are indeed differences: German and Portuguese schools highlight in particular that participants benefitted much more of the increase in motivation to learning, while Italian and Spanish schools perceive as prevalent the increase of language competency of participants and the broadening of the staff's mind-set.

The hosting schools – which, it is necessary to specify, are not necessarily the final destination of foreign participants but are in many cases those that reallocate the participants to companies, public bodies and organisations of their environment – feel instead that:

– The largest beneficiaries are themselves and the hosting units to which the participants are redirected. The reason for this type of benefit is again the halo of internationality implied by the collaboration with the sending units and the reputation in their own context given by the protagonist role they carry out. Also, the broadening of the mind-set, the necessary matching of the learning programmes with labour market needs and the indirect push for a productivity increase from staff and teachers that derive from this pivoting role are an outcome. In other words, the international mobility of students and apprentices pushes such a large flow of energies through schools and the surrounding environment to put a school in a niche position that makes it visible externally, in particular by local stakeholders, and proud internally, and this enhances its reputation.
– Also participants are recipients of benefits, but in a lower proportion than hosting units. Schools perceive that participants' relational skills are those that can improve as a direct consequence of international mobility. Thus, intergenerational exchange and language skills are those that can benefit the most from

mobility. According to hosting schools the benefits for them prevail on those for participants in all hosting countries.

Even for schools, the ROI-MOB questionnaire was designed so to limit the response error and adequately 'prepare' the final evaluation of schools' experience. In what follows, we present the elicitation of positive factors to the question on benefits of mobility with two multivariate approaches: the dominance analysis (Section 4.3.1) and the factor analysis (Section 4.3.2).

4.3.1. *Eliciting positive factors through dominance analysis*

The list of possible benefits as perceived by schools included 14 items, administered in random order, among which the respondents had to choose a fixed quota according to the 'best-worst' technique. The possible benefits were analysed through the dominance analysis methodology (see Section A.1 for both the presentation of the best-worst and the dominance analysis methodologies).

The positions of benefits on a continuum, as estimated through the dominance analysis, are presented in Figure 4.15 with reference to sending schools and in Figure 4.16 to hosting schools.

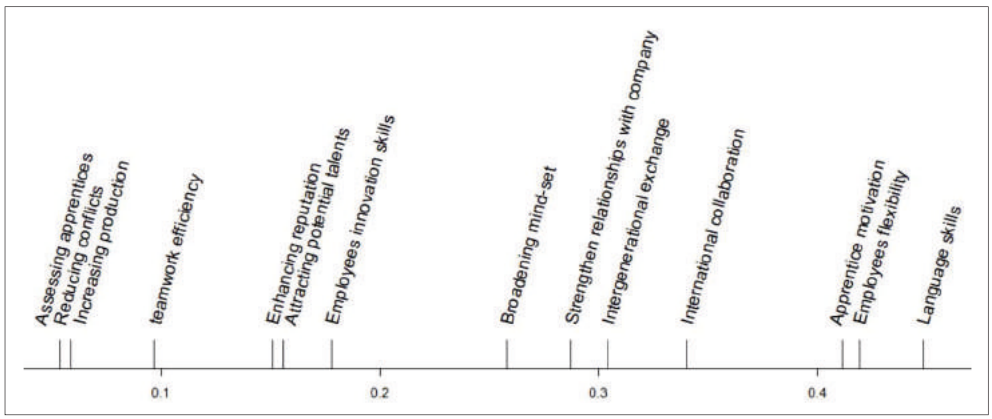


Figure 4.15. Benefits sending schools perceived as a consequence of mobility estimated with dominance analysis (see Table A.3).

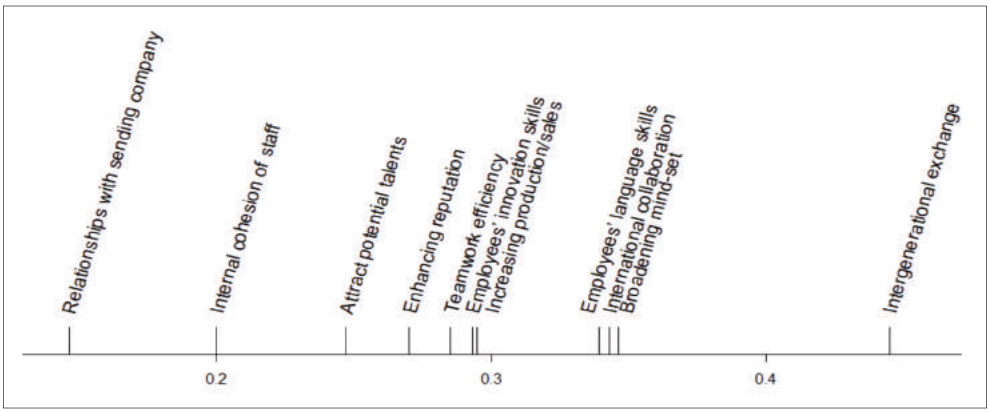


Figure 4.16. Benefits hosting schools perceived as a consequence of mobility estimated with dominance analysis (see Table A.4).

For both sending and hosting schools, the analysis of perceived benefits shows the existence of a dominant factor. This outcome allows interpreting this factor as the basic continuum in respondents' mind while judging the beneficial aspects of mobility.[7] It is to be highlighted that this result – which one could wrongly consider a mere repetition of the previously commented analysis of frequencies – shows the collected data in a new, multivariate perspective.

The first factors from both sending and hosting schools' analysis show that the dominant benefit is the feeling of belonging to an international collaboration sphere. In fact, regarding sending schools, the largest benefits perceived by schools are the chance for participants to improve their language skills and motivation to learning. At some distance, follow the intangible benefits for schools of broadening the internal mind-set, improving its international collaboration, enhancing own reputation, matching experiences with other schools and companies so to possibly innovating teaching or training methods, as well as encouraging intergenerational exchange and culture sharing. Other utilitarian aspects, such as the improvement of hard or soft skills of participants or of own staff's management skills, are considered as lesser relevant by schools' supervisors.

Regarding hosting schools, the international dimension is motivated mainly by the ideal target of broadening the internal mind-set, sharing culture with foreign institutions and enhancing own reputation through international collaboration. The improvement of own participants' skills and motivation is at stake, but in a second line. Also, the collaboration with local stakeholders is important, but it seems a mirror image of the pivotal position each school would like to cover locally.

[7] The signs of the eigenvectors of both analyses, that of sending and hosting schools, have been reversed, so to analyse them in their natural direction.

What does not fit with these factors concerns the internal cohesion of school staff, the possibility to strengthen the relationships with students' families and that of attracting potential talents by observing their behaviour during mobility. The latter possibility may be a particular concern of the German schools, which imagine that, through the mastering of the 'supply chain' of mobility, it could be possible to pinpoint the best-performing participants for recruitment purposes. Indeed, 38% of the sending schools and 15% of the hosting ones guess that attracting talents is a possible target of VET mobility.

Finally, the international dimension that pervades the schools' choices involves all aspects of schools active in mobility processes. Schools expect from their mobility effort to be able to receive a kind of imprinting, allowing them to improve their social image, and thus motivate staff and teachers, attract the best students, being a privileged interlocutor at the local level and feeling part of an international elite group.

4.3.2. *Eliciting relationships through factor analysis*

A factor analysis model was applied to the collected data separately for sending and hosting schools, in order to understand from a different perspective the factors hidden in the preferences expressed by schools' representatives. After an initial solution, an oblique rotation was applied. The between-factor correlation is mild: it means that choices of schools on mobility benefits do not contain a dominant factor but a plurality of almost independent factors. Both analyses, that of sending and that of hosting schools, explain a similar quota of variance. The factor analysis estimates are presented in Table A.9 and Figures 4.17 and 4.18.

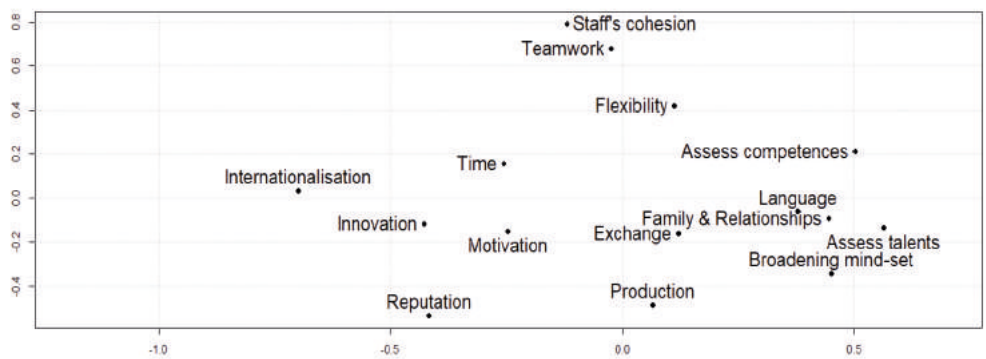


Figure 4.17. Factor analysis of the benefits sending schools perceive from mobility (*Factor 1 in abscissa, Factor 2 in ordinate*).

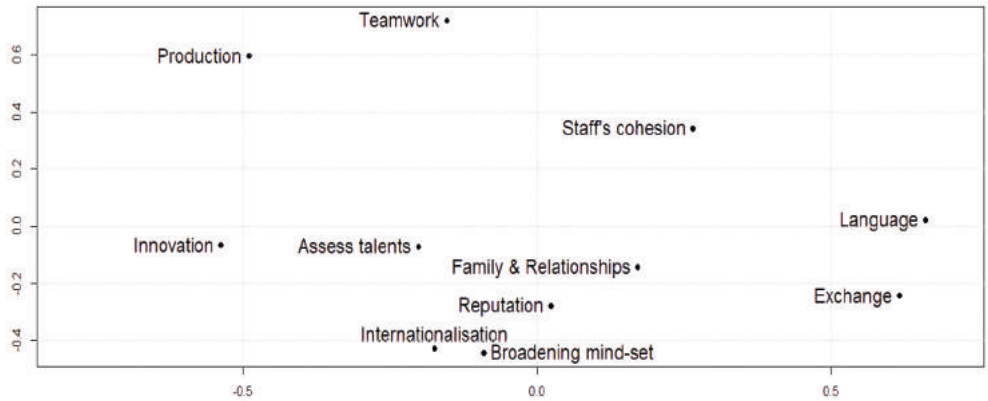


Figure 4.18. Factor analysis of the benefits hosting schools perceive from mobility (*Factor 1 in abscissa, Factor 2 in ordinate*).

The (rotated) factor analysis highlights what follows:

– The first factor of both analyses clearly distinguishes the benefits of mobility pertaining to schools from those pertaining to participants. The improvement of participants' competencies (language, interpersonal skills), culture and learning motivation, as opposed to the possible advantages for schools as a consequence of international collaboration, defines the first factor. So, it can be named "*schools vs. students as beneficiaries*".
– The second dimension of both analyses juxtaposes the innovative, managerial aspects to the external activity of schools. Innovative issues relate to learning how managing EU tools (e.g. Europass, Ecvet, etc.), renewing programmes and teaching methods, broadening the staff mind-set and introducing innovative practices with the help of technology and project management. The improvement of school external activity refers in particular to the chances mobility give to attract potential talents and ease enrolment. So, the second factor can be named "*internal vs. external benefits*".

Thus, according to school supervisors, VET international mobility is relevant to schools as it is to their students, though schools juxtapose the possible consequences for themselves with respect to those for their students.

4.4. Benefits to companies

Company questionnaires were structured in a similar way as school ones and followed the data quality principles mentioned in Section 4.3. It is worth saying that various companies from three of the four participating countries both sent and hosted participants. Italy did not administer questionnaires to companies.

The list of possible benefits administered to sending companies included 15 items and that to hosting companies 11 items. Such lists were administered to respondents in a random fashion, and the respondent had to choose a fixed number of possible benefits according to the 'best-worst' technique. The reader is addressed to Section A.1 for a more detailed description of the administration procedure of the questions. The frequency analysis of the possible benefits from mobility is presented in Tables 4.9 and 4.10 and Figure 4.19.

The analysis of the benefits companies perceive as important brings about the following comments:

- Both sending and hosting companies perceive as highly valuable for themselves and for others the international collaboration realised through VET international mobility. Value is added to them through new business ideas, the gust for innovative practices, the humus for intergenerational exchange and the progressive broadening of internal mind-set. All this is aimed at improving the productivity of own personnel.
- The attitudes of sending companies differ from those of the hosting ones in what concerns the order of the beneficiaries: the sending companies see more the possible effects on the apprentices (foreign language and motivation improvements) than the consequences on themselves of sending apprentices abroad. Apprentices are valued as a sort of 'catalyst' that can transfer the achieved mind-set to the older generations at work. But the whole mobility process is (advertised and) possibly perceived internally as a way to innovating and competing in the global market. So, sending companies expect a short-term effect on staff directly involved in mobility in terms of new administration capacity and a longer-term effect on production and sales thanks to the transfer of international experience and perspective.
- The attitudes of the hosting companies are clearer than those just sending apprentices abroad. Basically, hosting companies 'import' the examples of dynamic youth that, through an inter-generational exchange, ought to broaden the staff mind-set, arouse the linguistic competence of personnel, and innovate both technical and communication skills. So, even an increase in production or sales is expected from the presence of foreign apprentices. The hosting companies do not hide their intent to use mobility as a window to recruit potential talents. In other words, hosting companies are expecting more concrete opportunities from this type of investment than the sending ones.
- Hosting units have markedly different policies regarding the acceptation of foreign interns: roughly, every three hosting companies, one accepts less than 50% of applicants, another between 50 and 99% and the third accepts all applicants. Companies accepting all applicants are more concerned with achieving, through VET international mobility, internal cohesion, intergenerational exchange and widespread international mind-set, and good relations with the sending units. All this may determine the improvement of staff's intellectual

capital and the values that should pervade the strategic activities and prospects of the company, while they are less interested in more practical effects, such as enhancement of staff linguistic and innovation skills, attraction of potential talents and production increase. On the other hand, companies that are more selective, in particular those that accept no more than 25% applicants, are more concerned with immediate returns, such as the innovation of staff skills and mind-set and finally an increase in production or sales, according to their business. The companies in the middle are concerned with both the interpenetration of foreign cultures and activities into the firm practices and also with the policy of attracting potential talents through internships. All companies believe that the contamination with outer ideas and practices can produce higher linguistic skills in own personnel and also increase production and/or sales.

Table 4.9. Per cent endorsement of benefits from mobility as perceived by companies, by type of activity of companies*.

Improvements	Sending companies (n=51)	Hosting companies (n=262)
Language skills**	58.8	33.6
Motivation to working**	51.0	NA
Assess promising participant	2.0	NA
Attract potential talents	7.8	19.8
Innovation skills, ICT	9.8	25.6
Intergenerational exchange	27.5	54.6
Teamwork efficiency	3.9	24.4
Staff management skills, flexibility	51.0	NA
Within company cohesion	23.5	14.5
Relation with the sending company	NA	9.5
Reducing extra time work	0.0	NA
Reducing internal conflicts	2.0	NA
Broadening mind-set	19.6	34.7
Increasing production/sales	2.0	26.0
International collaboration	33.3	34.0
Reputation brand	7.8	22.5

NA: Not Administered. (*) Respondents could give up to three responses: so, the per cent endorsement does not add 100. (**) For sending companies the question referred to own apprentices sent abroad, that for hosting companies to own staff.

Table 4.10. Per cent endorsement of benefits from mobility as perceived by hosting companies, by rate of acceptance of foreign participants*.

Benefits	≤ 25% (n=66)	26-50% (n=23)	51-75% (n=36)	76-99% (n=60)	100% (n=69)
Language skills, staff	34.9	34.8	38.9	38.3	27.5
Innovation skills, staff	31.8	30.4	25.0	25.0	20.3
Attract potential talents	21.2	39.1	19.4	21.7	11.6
Intergenerational exchange	56.1	39.1	44.4	58.3	62.3
Teamwork efficiency	25.8	21.7	25.0	25.0	26.1
Within company cohesion	10.6	8.7	11.1	13.3	23.2
Relation sending company	6.1	4.4	8.3	8.3	15.9
Increasing production/sales	27.3	30.4	30.6	28.3	18.8
Broadening mind-set	31.8	34.8	27.8	31.7	42.0
International collaboration	27.3	30.4	41.7	35.0	31.9
Reputation brand	24.2	26.1	27.8	15.0	20.3

(*) Respondents could give up to three responses. So, the per cent endorsement does not add 100.

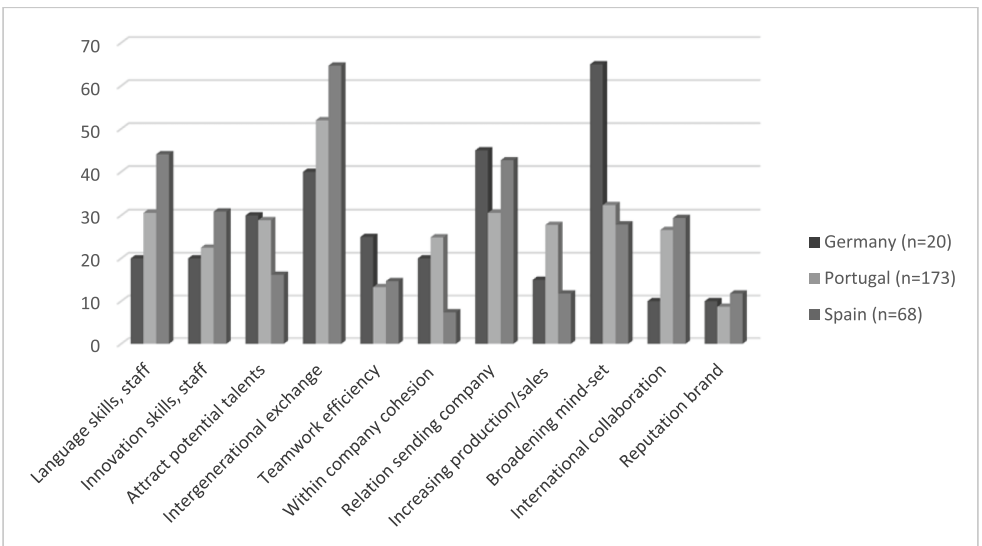


Figure 4.19. Per cent endorsement of benefits from mobility as perceived by hosting companies, by hosting country *(Respondents could give up to three responses. So, the per cent endorsement does not add 100).*

In what follows, we present two ways of processing the obtained responses in a multivariate fashion. With dominance analysis[8] (Section 4.4.1), we elicited the

[8] The dominance analysis, as applied to companies, was realised after the exclusion of item 10 (Reducing extra time work), which showed null frequency of dominance and could so interfere with the accuracy of estimates.

hidden preferences of company supervisors regarding the positivity of the mobility process. With factor analysis (Section 4.4.2), we analysed the correlations between positive aspects of mobility in order to highlight the mental map underlying the responses obtained from companies' supervisors.

4.4.1. *Eliciting positive factors through dominance analysis*

Positive factors of mobility as envisaged by company representatives were analysed through dominance analysis. The main results of the analysis of data from sending and hosting companies are described in Tables A.6 and A.7 and presented in Figures 4.20 and 4.21, respectively.

From the benefits that people in charge of representing companies chose as relevant we can draw the following inferences:

– The analyses of the dominance matrices confirm that sending companies conceive the abroad mobility of apprentices as an early occasion for them to master a foreign language, in particular English, increasing their motivation to learn and also for staff to achieve flexibility through an inter-generational exchange. Hence, by means of growth in reputation and the sharing of culture, the international mobility of apprentices can be an occasion for own employees to renew some technical competencies and for the company to enhance its reputation and brand. Sending companies have no view on concrete purposes such as increasing production or sales, achieving higher efficiency, reducing internal conflicts or assessing promising participants.
– Hosting companies have a more utilitarian view of youth mobility. They tend to involve the trainees in productive and social activities and 'use' them as a trigger to achieve various benefits at the staff level. In particular, through an inter-generational exchange, employees of the hosting company are expected to benefit from the transfer of the situational enthusiasm from participants. Indeed, young participants from a foreign country are an occasion to exchange business ideas, test new solutions, renew communication to customers, this way broadening the mind-set of the whole firm, from managers to employees, and enhancing the company's innovation capacity.

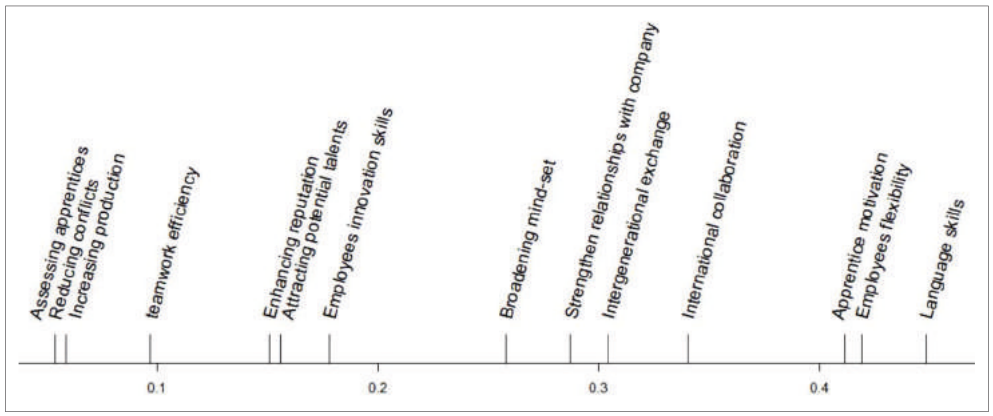


Figure 4.20. Benefits the sending companies perceived as a consequence of mobility estimated with dominance analysis (see Table A.6).

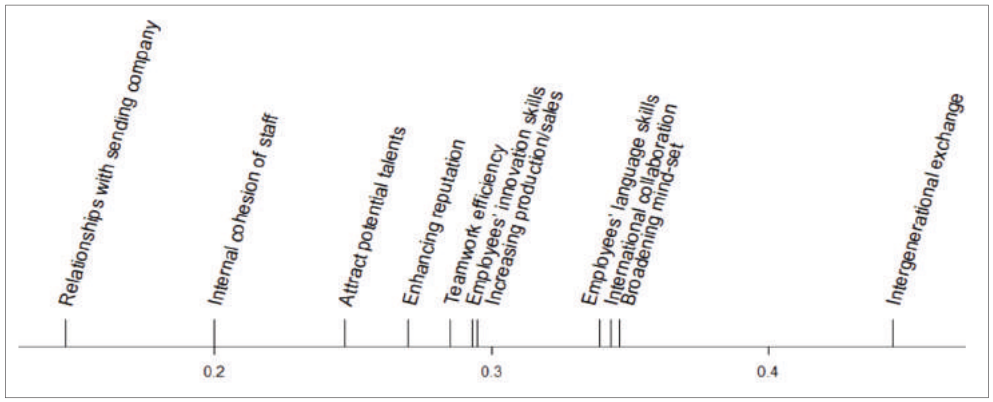


Figure 4.21. Benefits hosting companies perceived as a consequence of mobility estimated with dominance analysis (see Table A.7).

4.4.2. *Eliciting relationships through factor analysis*

The benefits companies may obtain from international mobility have been analysed also with the factor analysis method. The results of a factor analysis with oblique rotation are summarised in Table A.10 for both sending and hosting companies and in Figures 4.22 and 4.23 for sending and hosting companies, respectively.

The analysis shows the existence of no more than two principal factors, regarding both the sending and the hosting units. The first two factors of each analysis are almost uncorrelated with each other and explain a total of about 50% of the

deviance of the observed variables. Nonetheless, for a better fit, the factors have been rotated with an oblique technique.

The factor analysis of the benefits perceived by companies shows latent structures that are similar to those stemming from the analysis of the schools' data. In fact:

– The first factors of the benefits, in both the analyses, tend to juxtapose variables related to benefits for participants from international mobility to possible benefits for the company.[9] So, we can state that, according to company's perception, two actors mainly benefit from mobility: the participants and the companies themselves. In terms of gains for themselves, the sending units perceive positive effects on own personnel, which, thanks to the international collaboration, is bound to achieve new flexibility and managerial competence and is forced to innovate both in mentality and praxis. Sending companies perceive also that the outgoing apprentices can improve their linguistic skills and also gain employability.
– The second factor is a sort of contrast between internal-to-company efficiency and external outcomes. The external outcomes are expressed by increments in reputation, international activities, and opportunities of catching business ideas from the activity of trainees inserted in production or sales. The internal outcomes are the likely improvement in staff cohesion, teamwork efficiency, and staff flexibility.

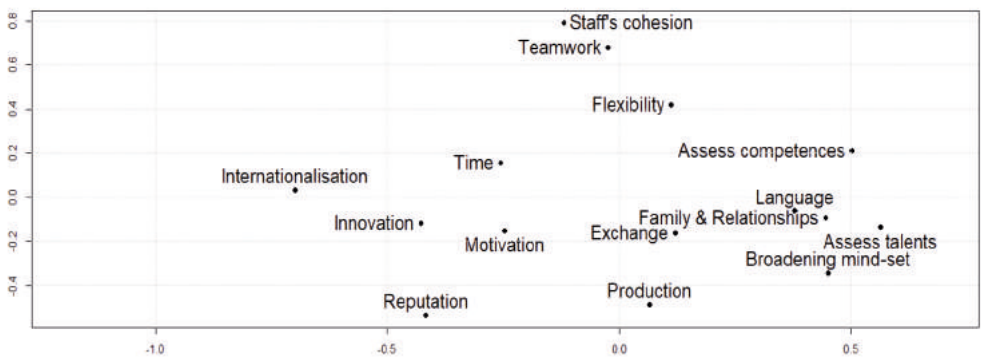


Figure 4.22. Factor analysis of the benefits sending companies perceive as a consequence of mobility (*Factor 1 in abscissa, Factor 2 in ordinate*).

[9] The juxtaposition of benefits for participants and those for companies is clearer in the analysis of sending companies' data than in the hosting ones. The uncertain picture emerging from the factor analysis of data obtained from hosting companies may depend on the fact that the number of items analysed is low and points are scattered in the plane.

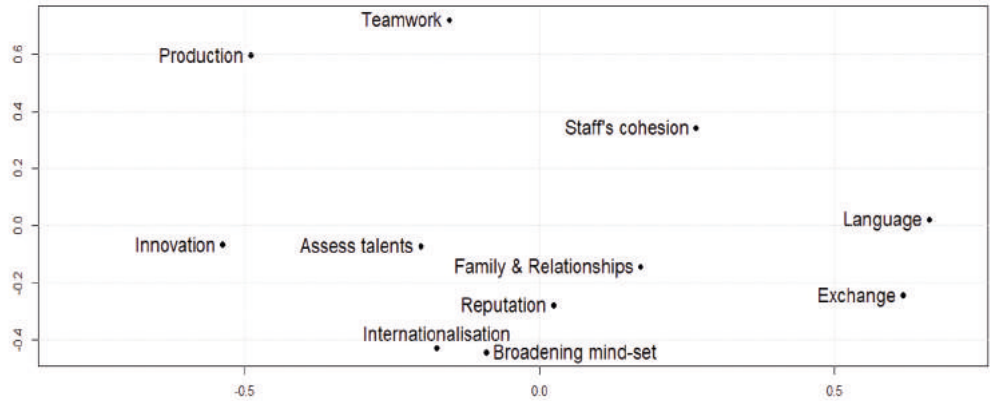


Figure 4.23. Factor analysis of the benefits hosting companies perceived as a consequence of mobility (*Factor 1 in abscissa, Factor 2 in ordinate*).

4.5. Partial conclusions

The common thread of the analysis of benefits is the achievement of an international dimension for all actors: participants, schools, and companies involved in the surveys. In analysing international mobility, internationality could be considered a superfluous word, all frameworks and experiences being international. Instead, if we consider mobility as an occasion for youth to achieve both human and social capital, the international dimension is not only an additional cognitive resource, but also something giving sense to, and empowering all other achievements.

In obviously different perspectives, this happens for all personal, social and institutional achievements, for all actors of VET mobility, e.g. schools and companies, and is open to future developments.

Participants gain from international mobility as cognitive, non-cognitive, professional and social skills are concerned. Let us analyse how the achievement of an international dimension may affect skills.

Personality traits are those in which, in the end, participants feel much stronger. Internationality improves especially the openness to experience, by soliciting general interest in new things and the ability to think outside one's sphere of experience. Moreover, it strengthens the capacity of persisting in duties, the resilience and adaptation in an environment initially perceived as challenging and the self-confidence that improves as soon as non-trivial difficulties are overcome. The improvement in the big-five personality traits was expected if we consider the evaluation steps of educational processes as described in Watkins *et al.* (1998) and Kirkpatrick and Kirkpatrick (2006). On the possible influence of personality skills for both employment and life outcomes, the reader is addressed, among others, to Heckman *et al.* (2006), Heckman and Kautz (2012), Kautz *et al.* (2014) and Fabbris and Fornea (2019).

In addition, CIMO (2014) suggests that international mobility raises also the trait of curiosity, that involves interest in the world and ability to understand the systemic change that is affecting the entire field of business, a hidden trait that CIMO considers a forward-looking capacity for workers to be able to anticipate times and make up professional avant-gardes. It is evident that this concept of internationality includes also the cognitive skill of understanding the world of global business and, in particular, the knowledge of peoples, cultures, languages, labour and education systems, and other differences that are relevant for working and living purposes. Thus, intercultural skills are an aspect of human capital that convolutes with the (non-cognitive) propensity to elaborate comparisons, orient attitudes, solve problems and adapt behaviours (see also: Jacobone and Moro, 2014; European Commission, 2014a).

From the technical-professional viewpoint, both hard and soft skills are involved and evolve with internationality. Let us leave aside the job-specific skills that often follow the local market framework, even though creativity and new abilities may be learnt during a work placement. Two skills are strictly related to international experiences: language improvement and the availability to travel for business. The foreign language skill is often given for granted at recruitment, but it may be a matter for career advancement later on when the global dimension of business might discriminate those who are able to face with it.

Other soft skills relating to an international outlook are the ability to handle information through global media and that of cooperating with a multiplicity of people, regardless of their language and location. And also the awareness of own limits and potentiality is made clearer after an international placement experience, but we can consider this type of awareness what Jacobone and Moro (2010) name 'general self-efficacy'[10]. Believing to be self-effective (Schwarzer, 1993; Bandura, 1982, 1994, 1997; Stajkovic and Luthans, 1998) means being able to generate action to a particular purpose, a skill produced by a cognitive processing of the information obtained through direct experience, social hints and the dynamic elaboration of emotional states and physiological processes one went through. It is easy to see that the achievement of an international dimension can push all these abilities far from those of people who did not move, and improve the interns' employability. As Bridger (2015) states, there may be an increase of intercultural skills also to colleagues of participants from their mixing at work and at school.

This research showed that the abroad experience developed a European identity and a socialising attitude with other Europeans, in particular with those of the hosting country. This is as expected and well documented in the literature (De Wit,

[10] The general self-efficacy factor is also termed 'psychological capital', or 'positive psychological capital', which is an individual psychological state of development capable of providing a competitive advantage (Luthans and Youssef, 2004; Sackett *et al.*, 2006; Sridevi and Srinivasan, 2012; Luthans and Youssef-Morgan, 2017).

2002; Van Mol, 2014; European Commission, 2014a). Though, not all experiences led to a better understanding. For instance, Sigalas (2010), analysing the Erasmus experience of university students, argue that not only the European identity was not enhanced, but in some cases mobility had an adverse effect on it. Our findings suggest that many young people, as a result of their abroad interaction, adopted Europe as a personal project in which the social predominates over the political, but the political feeling is still positive. From another perspective, Jacobone and Moro (2014) showed that the difference in European identity feeling measured before and after the experience was significant, while the national identity significantly lowers. Instead, the socio-cultural aspects (values, religion) do not change as a consequence of international mobility. In other words, whilst own values remain the same, the relevance of the EU as a political subject increases, compared to the home country.

Following CIMO (2014), we can say that the achievement of an international dimension is having the ability t*o think out of the b*ox, e.g., to perceive things outside one's living environment. The perception we derived from what participants stated at the end of their mobility experience is that international skills and competencies are a personal asset useful for their working lives. Let us quote CIMO (2014) for that: *"Today, an international outlook is part of everyday life. It includes being active on the Internet, watching football or downhill skiing, sharing pictures and videos and stories, or talking with peers online about various topics, and leisure entertainment. The global media provides outlets for people to live, read and experience events across the globe from the comfort of their home. Experiences, not location, shape our identities."*

All this said, it is easy to understand why participants, in a large majority, stated their mobility experience raised the value to the existing competencies in order to get a job in shorter times or, in case they already had a job, to enhance their career chances. Two are the purposes specific of the experience: (a) more chances to work abroad, a possibility that is no longer to be considered—or, at least, to be considered less than before—an escape but an equal-level opportunity than working in the home country, and (b) more chances to start an own business, which is countertrend to a worldwide tendency to work as an employee. Even if the possibility to start own business is easier said than done and still remains below 50% of chances of participants, it is important that a certain proportion of participants considered it as a possibility. In terms of propensity, this was shown also in larger surveys than ours: Di Pietro (2012) and Fellinger *et al.* (2013) state that mobile students have more specific ideas than stayers regarding working abroad and some of them considered also the possibility to set up an own business. Though, it must be said that, if questioned in depth, just a minority of mobile students considers the possibility to start their own business realistic.

An intense desire to work abroad signs female participants. It is the only opportunity envisaged in a larger proportion by girls than boys. It could be that boys are still a bit further than girls regarding the exploitation of international mobility for working purposes. Though, the increase of girls' desire to work abroad is very relevant because it is well known that the feminine action-ray within which job is searched, all over Europe, is shorter than that of male counterpart because women seek the first job in a shorter distance from home than men, in particular if private life events (childbirth and family care) interfere with work (see also Joyce and Keiller, 2018). Definitely, we can state that the personal maturation speed attributable to international mobility affects both boys and girls, but has a more profound effect on the latter.

Suppose we put in a causal chain the short-term effect of Erasmus mobility that is possible to ascertain right after the experience, and the medium-to-long term effects: the short term ones are the improvement in foreign language, intercultural traits, self-efficacy and employability, while the longer term effects are the progressive growth of a European and a national identity.

We have found a correlation between the attendance to a mobility programme and occupation. Though, we do not have a control group that would prove the effectiveness of that correlation. Nor the observational period was large enough to make an accurate inference. Even the literature admits that it is not clear how employability relates to Erasmus+ mobility. Among others, King et *al.* (2010) argue that, at least for the U.K., a definite relationship between mobility and employability is missing. They show the evidence that students *think* that studying abroad gave them an edge in the employment stakes. Though, the authors state, this enthusiasm may depend on the enhancement of psychological and professional skills that almost all participants perceive after the provisional placement.

We can conclude that abroad mobility is not a transient phenomenon that young students and apprentices carried out for the sole purpose of trying a novelty, but an investment to improve their career, either in the host country or in another country. And it is easy to guess that a higher motivation is strong leverage for both occupation and life improvements. The likelihood of this hypothesis is documented in Parey and Waldinger (2011) for German students and in Alfranseder et *al.* (2012) for all European Erasmus students and apprentices.

At the end of this reasoning around participants' benefits from international mobility, we could state that most outcomes to participants could be obtained at work even in absence of VET mobility, the workplace being the training ground that concretely shapes the personality traits of workers, together with family interactions and other duty-related training. Even travelling abroad alone could help to refine soft skills and then improve social and personal opportunities. Our analysis showed, indeed, that the international experience anticipated these effects on VET mobility participants and accelerated their maturation toward adulthood.

From a socio-psychological perspective, it may be conjectured that an earlier shaping of youth personality was not only easier to young participants but could have been more effective than maturation at later ages. This is what, among others, Kautz et *al.* (2014) stated after meta-analysing several studies on the learning of non-cognitive skills: the earlier the shaping of basic personality skills, the more effective its benefit at later ages. Moreover, many young people in vocational education or early employed as apprentices may have missed the discipline and mentoring that successful families give their children for the purpose of acquiring work-relevant skills and address for life. The acceleration to growth given by international mobility could back families in this social role. Definitely, an early workplace-based programme, such as VET international mobility, seems to be effective for youngsters to mature.

Hence, from a personality improvement perspective, if the question was: suppose that with a given budget we had to decide to send abroad either a certain amount of young people for, let us say, an eight-week experience, or half that amount of people for a sixteen-week experience. The more value-producing decision for positive effects on youth is certainly that of sending abroad as many people as possible.

Regarding schools and training centres, the ROI-MOB research showed that the role of a sending unit is not determinant in the work placement process, unless the sending unit is an abroad branch of a multinational company. In fact, the success of each experience depends on the quality of interns, their mastering of the language, their professional skills and, in particular, their autonomy and creativity in duty performing. All these skills are initially weak, as it is easy to understand.

So, the sending unit should shift its concern from candidate filtering and trip organisation to the more proactive one of promoting the advance support of families and civil society to this type of experiences, and of prefiguring the relevance of the experience to students for future occupation, career and life strategies. This advance activity toward the local society may give results also in terms of fundraising for international mobility. The fundamental role of sending units' staff in promoting mobility was evidenced also by Bridger (2015) with reference to Erasmus exchanges at the university level.

The ROI-MOB research has shown that the role of hosting schools is much more dynamic than sending ones. They are active in distributing the incoming interns in their economic environment. Reminding that the business sectors in which internships are realised concern most industrial, commercial and service sectors, the capacity of placing all interns implies a good understanding of the local society. Some participants complained that something was not as they expected at destination (see also Section 6.3.1) and this is to be kept in the due consideration by hosting units. Though, the role of hosting schools and training centres should be more favoured for them to be effective in their difficult but precious role.

Regarding companies, the research showed that their role is relevant but their ideas are still on the move. Sending companies believe that mobility helps hosting units to raise production and sales. On the other side, many hosting companies effectively employ interns as a source of possible increase in production or sales as well as in internal efficiency. Also, they consider interns as potential candidates for recruitment. This means that companies can take advantages of transnational internships. This differs from the literature (among others, King et *al.,* 2010; Diamond et al, 2011; CIMO, 2014; Eurashe, 2019: https://www.eurashe.eu/page-tag/sprint/) in which employers magnify international work placement as a concept but do not use it as an added value at the recruitment stage.

One composed word captured our attention while analysing the hosting units' responses: *inter-generational exchange*. It came into the discourse of the positive effects of international mobility with reference to both school and company benefits: all hosting units considered the insertion of a young participant from a foreign country into the production chain as a benefit not only for his or her direct outcomes in productive terms, but also as a stimulus for more mature generations of workers to redirect their habits, and assume an international concept. In other words, it seems that the inoculation of a novelty element into a routine mechanism can activate a tendency to innovate culture and practice within that system. In the case the novelty is a young trainee, the innovation follows a direction from younger to older generations and from bottom to top positions within the system. Of course, the quality of the stimulus is crucial for this innovation to start.

Crossing our results with the literature, it appears that employers have something to say about the quality of participants to mobility. Some of them complain also that the duration of the experience is not enough to balance their hosting effort. Employers insist on the necessity for interns to possess soft skills (team-working, communication, etc.) that are difficult to show at the recruitment stage. Multilingualism is considered, together with computer science skills, a necessary requirement, not only an added value for recruitment. Of course, the value employers put on candidates' skills depends on how the candidates articulate what they achieved, if any, during mobility. This asymmetric attitude of employers deserves further insight because the international experience is relevant to all lines of work and all industries, and youth's international dimension should develop beyond traditional social structures, such as the school system, and single countries.

Chapter 5

Obstacles to VET mobility

5.1. Monetary and non-monetary costs for mobility actors

In this chapter, we first examine the frequency of negative aspects of mobility and then the balance between positive and negative aspects in order to explain the final evaluation scores given by mobility actors.

In the ROI-MOB questionnaires, the questions on costs and problems encountered by mobility actors were asked right before the positive aspects, so that respondents could juxtapose in their minds the negative and the positive aspects before giving their final evaluation. This way, it is likely that the complaisance error that could creep into the evaluation of the actors' experience was restricted to a minimum (see also Section 3.2.1).

The presentation will follow the sequence adopted also in Chapter 4: first we examine the participant opinions (Section 5.2), then the school representatives' ones (Section 5.3), the company representatives' ones (Section 5.4) and, finally, the problems signalled by other stakeholders (Section 5.5). Section 5.6 concludes.

5.2. Sacrifices and problems encountered by participants

The burden and problems that mobility caused to participants and their families were partitioned into the following broad categories:

- Monetary costs to realise the experience.
- Time dedicated by participants to prepare the experience.
- Existential aspects sacrificed by participants in order to attend mobility. In the ROI-MOB questionnaire, the following aspects were made explicit: the personal comfort zone, personal relationships (family, friends, other relationships) and job opportunities (attended job, job opportunities).
- The language used by participants abroad, either at and outside their workplaces.

The monetary costs for participants and their families specifically caused by the Erasmus+ experience were commented in Section 2.2.1. The frequency distributions related to the sacrifices participants stood to realise their VET international mobility are presented in Figures 5.1 and 5.2 and Table 5.1 and the time dedicated to preparing their experience in Tables 5.2 to 5.4. The effort of using another language than the mother tongue at work or at home is presented in Figure 5.3 and Table 5.5.

As far as sacrifices are concerned, it is interesting that about 10% of participants stated they did not sacrifice anything. This percentage derived from spontaneous responses, inserted by participants among "other sacrifices". This might mean that, although the only proof of it stays in a consolidated survey experience (Sudman and Bradburn, 1982), the real quota of participants who did not sacrifice anything is much larger than 10%.

Regarding the type of sacrificed links, the largest proportion of participants stated they had to give up their comfort zone (31%), the family (25%), friends and other personal relationships (18%). All the mentioned aspects can be summed up to define a *comfort environment*, so we are allowed to state that the toughest sacrifice stood by participants is a temporary detachment from their life customs and social environments. From an educational viewpoint, it is difficult to say if homesickness is to be considered a penalty or the anticipation of an opportunity.

Another 11% of participants stated they had to give up to their job or the opportunities related to job continuity. This loss is a bit higher for learners in a dual track (15%) and apprentices (13%), but it is not null even for students (7%). This could mean that some people preferred affording an abroad experience of work placement than starting a new job or continuing their work duties in their home country.

The homesickness perceived by apprentices was much less than that of students. No difference was found between genders. Instead, the entity of perceived sacrifice from abroad mobility is inversely correlated to the duration of the experience: the quota of long staying participants (e.g., more than four months) stating they felt no sacrifice at all was about half than those who stayed abroad at most one month.

Moreover, just 4% of long-term participants stated they sacrificed a job opportunity *versus* 11% of the other participants. Recalling that people who stayed longer abroad are also higher in age, the longer duration seems to identify a peculiar category of participants, likely composed of people who have little to lose in their home country and whose expectations from an abroad experience were higher in terms of employment and social life than short-term participants.

This could also be related to age and maturity, as short mobilities are usually a way to introduce to mobility younger groups.

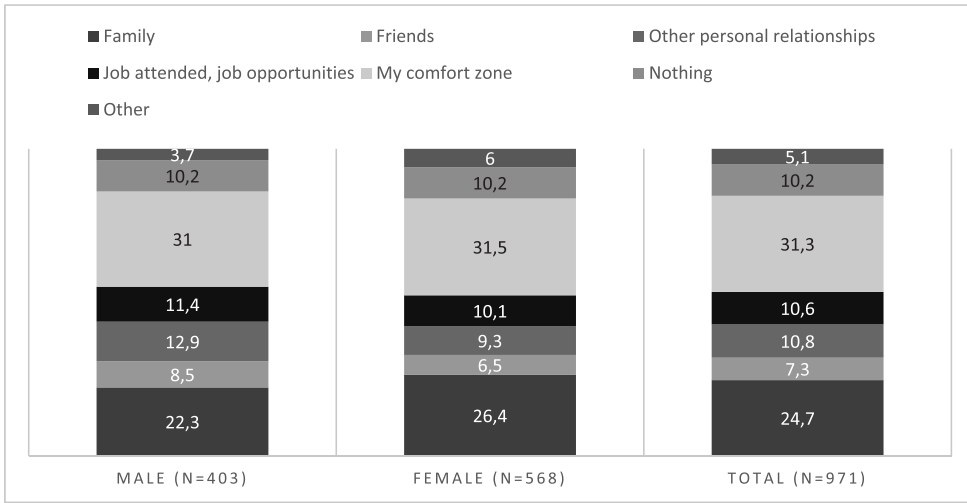


Figure 5.1. Per cent distribution of "sacrifices" participants stood to realise their VET Erasmus+ mobility, by gender.

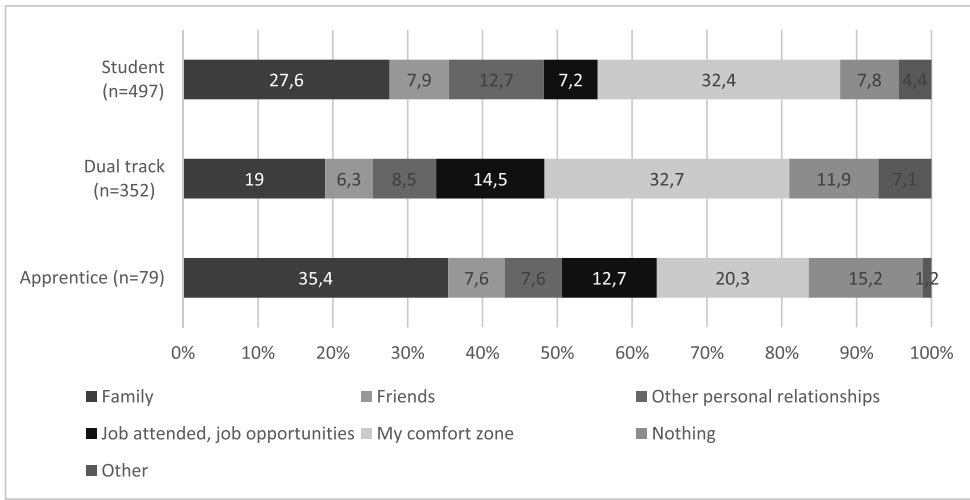


Figure 5.2. Per cent distribution of "sacrifices" participants stood to realise their VET Erasmus+ mobility, by activity previous to mobility.

Table 5.1. Per cent distribution of "sacrifices" participants stood to realise their VET Erasmus+ mobility, by length of mobility experience.

"Sacrifice"	≤ 4 (n=318)	5-8 (n=201)	9-12 (n=294)	13-16 (n=122)	≥ 17 (n=29)
Family	21.1	25.9	26.5	30.3	27.6
Friends	8.2	8.5	5.8	5.7	10.3
Other relationships	10.7	8.5	10.9	15.6	6.9
Job opportunities	8.2	12.4	13.3	9.8	3.5
My comfort zone	30.5	30.9	31.0	29.5	41.4
Nothing	14.2	10.4	7.4	7.4	6.9
Other	7.1	3.4	5.1	1.7	3.4
Total	100.0	100.0	100.0	100.0	100.0

Time taken to prepare VET mobility is short. On average, it is 17 days, namely two and a half weeks, but the median time is just 10 days. In this case, the median is more representative than the mean because of the long tail at the right of the duration distribution. Say, the large majority of participants took a short time to get ready for the experience and few of them, instead, took some weeks. Women seem to require some days more than men (19 *vs.* 14.6), but the median time to prepare the experience is about the same. Small is also the time difference regarding the activites participants were in before mobility.

Crossing the time taken to prepare the abroad stay with the duration of the stay, we found, as expected, that shorter durations (in this case, till two months) took about one week and the longer ones (from three months on) took about two weeks to prepare, in median terms. This means that time taken to prepare mobility somewhat depends but is not proportional on the duration of the stay. In fact, the standard deviation is about 20 days whatever the duration. This means that various personal and situational aspects influence the preparation time, above and beyond the duration of the experience.

Table 5.2. Time taken (in days) to participants to prepare their VET Erasmus+ mobility, by gender.

	Male (n=386)	Female (n=543)	Total (n=934)
Mean time	*14.6*	*19.0*	*17.2*
Median time	*9.2*	*10.1*	*9.8*
Standard deviation	*17.2*	*21.6*	*20.0*

Table 5.3. Time taken (in days) to participants to prepare their VET Erasmus+ mobility, by activity previous to mobility.

	Student (n=465)	Dual track (n=346)	Apprentice (n=79)
Mean time	*18.2*	*21.8*	*13.7*
Median time	*11.1*	*8.3*	*9.6*
Standard deviation	*17.9*	*21.2*	*18.3*

Table 5.4. Time taken (in days) to participants to prepare their VET Erasmus+ mobility, by length of mobility experience.

	≤ 4 (n=314)	5-8 (n=197)	9-12 (n=270)	13-16 (n=119)	≥17 (n=28)
Mean time	*14.7*	*16.8*	*18.4*	*21.2*	*21.0*
Median time	*7.7*	*5.3*	*12.2*	*13.7*	*14.3*
Standard deviation	*20.8*	*21.1*	*16.8*	*21.8*	*20.6*

Regarding the language used at work, participants stated they prevalently used English (53%) or the language of the hosting country (38%). Only 5% of participants could use their mother tongue at work: this may be the case of international holdings that sent their young apprentices to a branch in another country or the case of students who, before moving, were attending classes in a foreign country and realised their internship in their home country.

When not at work, instead, the relative majority of participants (40%) used their mother tongue, because either they lived alone or they had the chance to live in apartments or hostels together with people from the same country. At home, English was the first foreign language (36%), but there is a significant 21% of participants who used to speak at home the language of the host country.

Definitely, the very large majority of interns adopted a language different from their mother tongue both at work and elsewhere. We could imagine that this challenge was considered by participants as a burden. Instead, as we shall see in the following, many of those who spoke in their mother tongue at home complained that their environment was not fully international.

Regarding the language used by participants during the internship, there are differences according to the hosting country. If we consider the rate of English usage at work as an indicator of a propensity to internationalisation, Germany scores 68% and Portugal 62%, the top rates. If we consider, instead, the use of another language but the participant's mother tongue as an indicator of the effort in language adaptation, we see that, in our sample, Spanish is the most diffused language (23% spoke it at home and 54% at work) and German is the least diffused (12% at home and 25% at work). Portuguese and Italian languages stay in the middle: Portuguese is close to the German diffusion rate and Italian to the Spanish one).

Suppose we consider participants not using their mother tongue at home (that is, in mobility, but not in the time they were at their workplace) as a rate of internationalisation of participants living together. Out of the four project countries, Spain is the lowest (42%) and Germany the highest (68%) country in which participants had to use a foreign language. This effort is both a challenge and a learning opportunity for participants. An internationalisation rate measures both the level of challenge posed to interns by the hosting country language and the chances given to participants to make the most from his or her international experience.

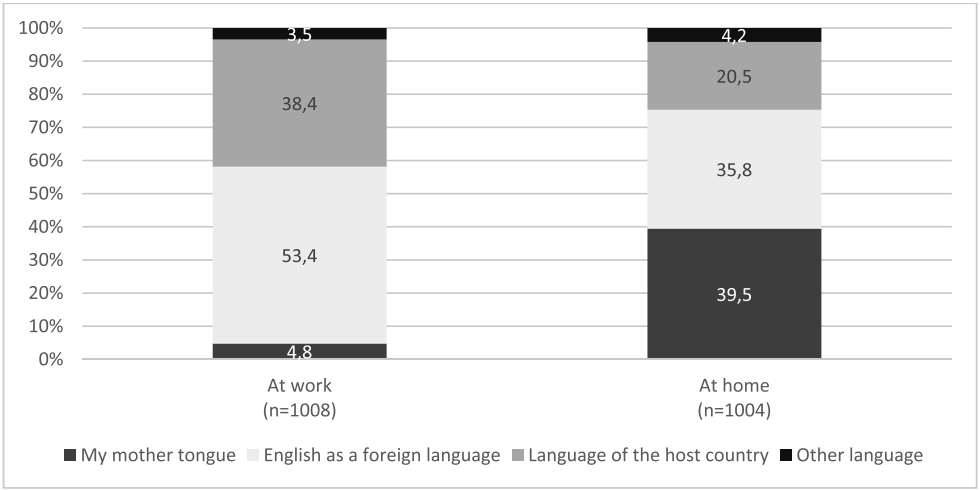


Figure 5.3. Per cent distribution of languages used by participants during their VET Erasmus+ mobility, by social context in which language was used.

Table 5.5. Per cent distribution of languages used by participants during their VET Erasmus+ mobility, by social context and host country in which language was used.

Language used	Germany		Italy		Spain		Portugal	
	Work (n=238)	Home (n=237)	Work (n=346)	Home (n=345)	Work (n=246)	Home (n=245)	Work (n=177)	Home (n=176)
Mother tongue	5.9	32.1	2.9	35.9	9.3	57.6	2.3	39.2
English	68.1	55.3	53.5	32.5	32.9	17.1	61.6	41.5
Host country	25.2	12.2	40.4	28.1	54.1	22.9	33.9	15.3
Other	0.8	0.4	3.2	2.5	3.7	2.4	2.2	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.2.1. *Negative factors of participants' experience*

Costs and problems for participants were factor-analysed to measure the correlation level among the negativities described in Section 5.2 and understand if there are common factors underlying the obtained responses. A summary of the results from the application of a factor analysis technique is presented in Table A.11 and Figure 5.4. Details on factor analysis are presented in Section A.2.

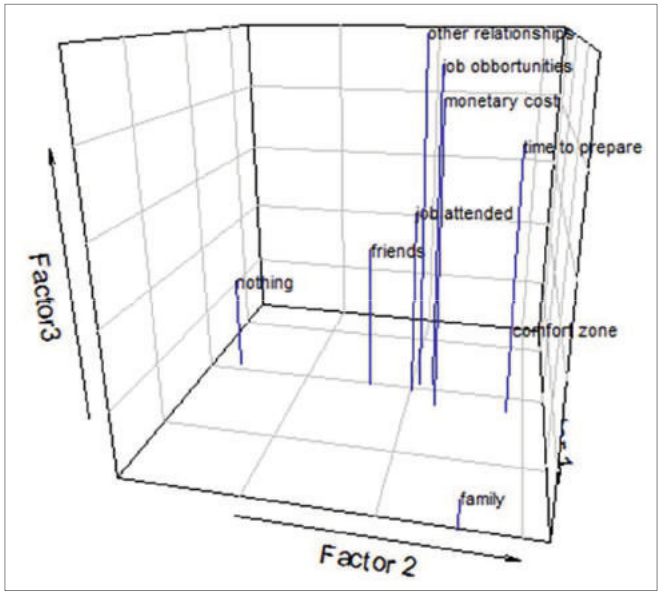
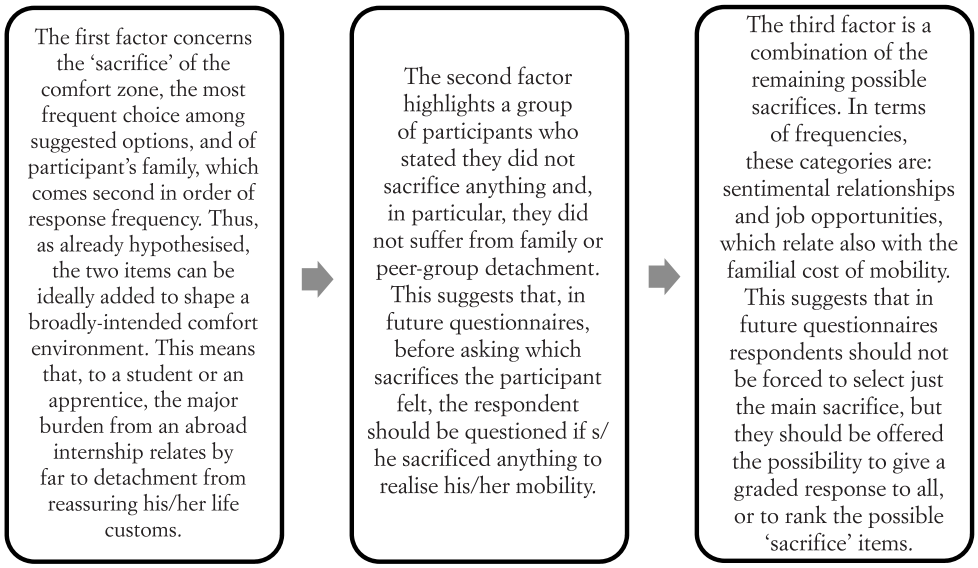


Figure 5.4. Factors extracted with factor analysis of the negativities from Erasmus+ mobility as perceived by participants (see Table A.11)

The results of the factor analysis of participants' negativities show that:



Summing up the factor analytic results, the negative aspects related to participants' mobility experience are very diversified. First, the monetary cost borne by families shows independence to the sacrifices borne by participants. Second, even the sacrifices borne by participants in order to attend mobility are so different to each other that three factors include just the relevant sources of variability in responses: there are many participants who did not feel any relevant sacrifice and, among those who felt they sacrificed something, the very large majority stated they had to temporarily interrupt their familial and social relationships, namely they encountered a physiological change in personal relationships in order to realise an internship abroad. One in four participants had to choose between concrete job opportunities offered at the local level and similar but unknown ones implied by the international experience.

5.2.2. *Compensation between positive and negative factors met by participants*

The relationship between the final evaluation given by participants to their VET mobility experience and the set of positive and negative aspects that led participants to express that judgement is analysed through regression analysis.

The criterion variable is the 1-to-10 evaluation given by participants to counterpoise their mobility experience. The analytical model, sketched in Figure 5.5,

is composed of some control variables and two sets of possible predictors, one composed of the salient characteristics of the experience and the other of the positive and negative aspects that describe individual mobility. Control variables were forced into, and kept within the model independent of their significance. Predictors were selected if significant at least at 10% level.

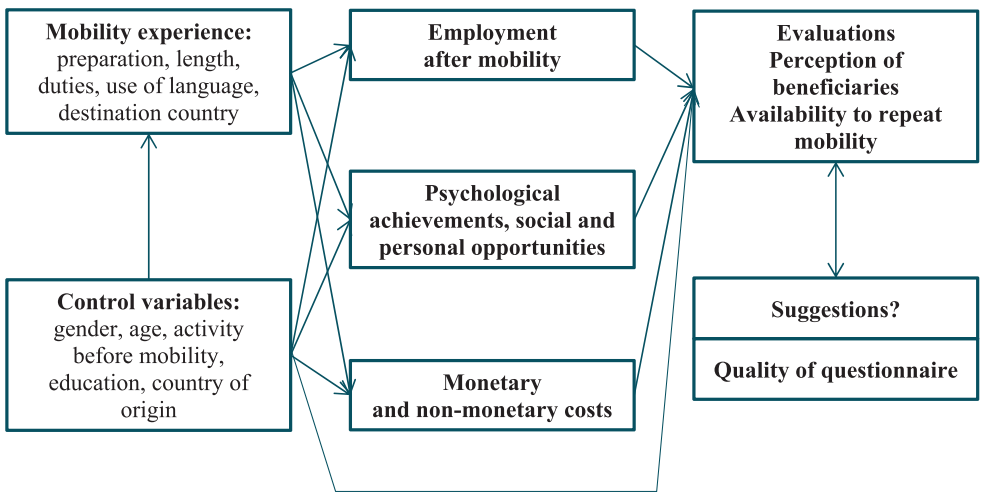


Figure 5.5. Model for the analysis of own mobility evaluations as expressed by participants.

Three nested models were estimated: Model 1, which is a basic model including just the intercept and the control variables and their interactions, explains 2.4% of the deviance of evaluations; Model 2, which contains also characteristics of mobility and of their two-way interactions[1], raises the explained deviance to 16.9%; and Model 3, which includes also the positive and negative aspects that influence the evaluations given by participants, further raised the explained deviance of evaluations to a significant 43.6%. A more detailed presentation of the methodology can be found in Section A.3 and the full presentation of estimates in Table A.15.

Model 1 shows that the significant variables were gender, alone and in various combinations with other criterion variables, and age. Females tended to rate their experience lower than their male counterparts; if women attended a dual track programme, evaluation scores were even lower. Older participants tended to rate lower their experience, while older female participants tended to evaluate mobility particularly high. German participants tended to rate their experience lower than

[1] A two-way interaction is the joint effect of two possible predictors upon the criterion variable. We can state that two quantitative or dichotomous predictors interact to each other if the variable obtained from their product is statistically significant.

participants from other countries: this kind of 'severity' of German participants towards their mobility experiences was already mentioned in previous analyses.

Model 2 raised significantly the explained deviance. This means that the features of the mobility process fairly predict the final evaluation given by participants. The new relevant predictors are as follows:

– Realised duties. It is to be highlighted that participants, whatever they did during the internship, were inclined to evaluate very positively their experience. Of course, this feeling ideally compared with secondary duties or no specific activity at all, which constituted the bottom level. This is absolutely relevant since participants manifested positive attitudes any time they perceived their internship was useful. The intermediate level of usefulness was the one they could have in their origin country; the top one was doing new and creative activities.
– Working in an international environment. The feeling of appreciation from participants for having had the opportunity to realise their work placement in an international environment is at the same level of relevance as the realised duties. The internationality of the work environment is a fundamental pillar for participant satisfaction. Indeed, participants working in such an environment rated very high their experience for they could practice foreign languages and meet people willing to feel cosmopolitan as themselves. The internationality of the environment interacted with the participant's age, in the sense that more aged participants doing an international internship evaluated their experience better than the younger ones. The willingness to improve in at least one foreign language is relevant, as witnessed by the high demand for countries, like the UK, Ireland or France: as a matter of fact, practical knowedge of English and French greatly accounts when taking a language exam in one's country of origin. In addition, having been able to use at work the language of the host country raised the appreciation for the experience. Though, living in an international environment is much more than that and goes beyond the working contest: in particular for youth, an international environment is a 'melting pot' where you can meet people with different cultures but with a common mentality and similar expectations. It is not unusual that, in this context, participants engage in long-term stable relationships.
– Instead, adopting either own mother tongue or English at work was significantly and negatively correlated with the final evaluation. The negativity of using own language at work was significantly deprecated by participants, the positivity being the use of the foreign country native language. The commonality of language is the ground upon which a community may develop into a *koinè*[2]. Though, in case of an abroad internship, the use of the same-as-home language

[2] *Koinè* is a Greek word originally meant as common language of ancient Attican origin. In a metaphorical sense, it means the linguistic, socio-cultural, religious or similar type of sharing among peoples.

assumes the totally different meaning of an underground-connected-island within the host country. Participants did not like it at all: the international taste of the internship was threatened. What is counter-intuitive is instead the negative judgement for the use of English at work, all other things remaining the same. This negative relationship is significant if both the characteristics of the mobility process and those of personal achievements are accounted for. It may mean that the prevalent use of English did not favour communication and mutual understanding of interns within the firms, as it happened instead whenever the hosting country language was used. This depends on the insufficient English level of either participants, or of staff working with them, or both. Definitely, this evidence provides food for thought for policy making.

– Being an apprentice. Apprentices of our sample scored their experience much lower than students. The apprentices judged negatively the use of their mother tongue at work, the fact that mobility was organised by their own company and, in particular, moving from Spain. Many of those people were likely apprentices sent to an abroad branch of an international holding they worked for: they indirectly said they would have more appreciated being sent to another firm in which they could have openly lived a more challenging internship. We cannot state that an internship abroad within the same company is negative, but that, in many cases, it does not allow deploying in full the participant's expectations of an abroad mobility experience.

Model 3 raised the explained deviance of evaluations to 43.6%. It means that attitudinal and personality variables both alone and in interaction with other personal characteristics highly determined the success of the participants' experience. These characteristics outperformed the control and process variables altogether in the explanation of the final evaluations. Model 3 showed, in particular, what follows:

– Some process descriptors did not influence significantly the participants' satisfaction: the destination country, the duration of the internship, and the possible multiplicity of mobility experiences, are all subrogated by the participants' perception of improvements in personal abilities and in social and occupational opportunities. Had these psychological outcomes been ignored in the regression analysis, the process descriptors would have been much less significant.
– Age is positively correlated with satisfaction regarding mobility: the higher the age, the more valued the experience. The participant's age is significant even if other personal and process-related variables are considered. In particular, the more aged participants felt their career opportunities and the possibility to work abroad raised significantly after the mobility. Though, they complain they used their mother tongue at work. In our sample, these participants in their thirties are a small group who left their home country having nothing to lose there and grasped the second chance represented by the abroad internship. Age interacted also with gender in the sense that women in their higher ages (in this

case, their thirties) evaluated their experience even higher than average. Age relates also with having had more than one experience of mobility: as a matter of fact, those who experienced other mobilities evaluated their experience lower than others. This may mean that outcomes do not depend on the number of attempts but on the intensity of motivation for mobility.

– If socio-psychological variables are considered, being a female is no longer a significant predictor. The role of gender in Model 3 is subrogated by a set of interactions involving the business sector and the environment in which the internship was realised, the participant's age at mobility and the effects of the experience. In particular, these women, who were mainly learners in a dual track and conducted their internship in commerce, tourism or services for industry sectors, complained they acted in an international environment. This means that there is a group of female students in a dual track who are less inclined to realise new and challenging tasks in their internships abroad. This model shows that, after the isolation of these particular groups of women, the distance between women and men in terms of appreciation of mobility are no longer significant. Indeed, so many women were happy with mobility because they had the opportunity to raise their own self-confidence and could use English at home, setting relationships with mates from other countries. It is hard to imagine the variety of expectations in the background. Though, the group of unmotivated women identify a cultural trait that may make the difference. It mirrors the tendency to be happy for minimal duties and thus for sufficient outcomes and not to look for higher outcomes that require a glimmer of hope, a bit of adventure and risk, and some additional strain. This group of women is one to circumscribe to improve the outcomes of mobility.
– People doing nothing (not in education nor in training nor working) in their home country, ceteris paribus, evaluated more negatively than average the realisation of fair and/or new duties. It is hard to imagine why this counter-intuitive phenomenon happened, since all other people who had the opportunity to do something new and challenging considered it pleasant. We imagine that those people were discouraged because they did not leave job opportunities in their home country and were annoyed from being offered unexpected or engaging duties abroad. Also, they could feel inadequate for the new tasks assigned during the internship. Indeed, this issue requires more investigation.
– Working as an apprentice. Apprentices complain they did not improve their career chances, nor their European citizenship and used their mother tongue at work, because, in many cases, their mobility was organised by their own company. Apprentices are unsatisfied because the shielded circularity of mobility practice they experienced did not allow them to live in an effective international environment that might have developed their linguistic and socio-cultural skills. This topic was commented with reference to international holdings, but the lack of satisfaction of apprentices seems more general, at least in compari-

son with students. There was a decrease in European feeling and the sensation of irrelevance for career caused by all this. It remains unclear why many apprentices moving from Spain were unsatisfied and many students in a dual track from Italy were instead satisfied.

– Psychological traits. The sensation of strength in psychological traits parallels that of success in internship. Though, the only traits that remain into the multivariate model are self-confidence and extroversion of participants. Mobility developed self-confidence and extroversion together with the mastering of at least another language and the positive effects of either travelling abroad, being active in a new workplace and conducting a cosmopolitan lifestyle. Self-confidence improved in particular in females. To both males and females, extroversion and self-confidence are a direct consequence of having worked in an international context, in the sense that such a living way, together with a bit of hard working, improves in participants a juvenile, growing sensation that stars are the only limit to them. What is contrary to expected is the capacity to control of actions and master own future, which, ceteris paribus, correlates negatively with evaluation scores. This may depend on the fact that this item is more a consequence than an additional aspect of psychological empowerment and should not be listed as a personality trait[3].
– Skills improvement. The improvement in foreign languages and technical skills determines the success of the experience. While the former was already commented, the feeling of having strengthened one's technical abilities points out that, if interns were inserted in a production or sale line, whatever their real return for the firm, they felt part of a whole and compared their abilities with those of other people in the business area; so, not only were they made aware that everything can be learned, but they could also teach some things to others.
– Opportunities improvement. The main opportunities correlated with participant satisfaction were working abroad and the addition of chances to career concerning the more aged participants. In addition, dual track students perceived they achieved opportunities for employment. The feeling of involvement in the host country's life progressively grew in everybody's mind. All those opportunities highlight that participants realised mobility was an investment, whose effects develop in the medium-to-long term. Say, it is a *strategic investment*. This result is consistent with the finding in Zaiceva and Zimmermann (2008) that having lived abroad significantly increases the intention to move abroad in the future. It can be added that people who worked abroad, and so improved their professionalism, are more likely to both finding a job in their home country and moving abroad for work in the future.

[3] As already mentioned, this item could be removed in future repetitions of the survey.

– Costs and sacrifices almost vanish from the analysis once positive aspects enter the model. All participants sacrificed steady life and personal relations, some of them also job opportunities. This latter occurrence happened in particular for participants in a dual track. Nevertheless, sacrifices are for most participants easily compensated by improvements of various kind that determined however a positive final evaluation of the experience. Even real sacrifices lost their weight in defining an overall judgement. Likely, personal sacrifices are given for granted, a natural price to pay to start an experience.

5.2.3. *Determinants of participants' perception of mobility beneficiaries*

A multinomial logistic model (see Section A.3 for the presentation of the model) was applied to highlight the relationships between the beneficiaries of mobility as perceived by participants and the way the participants carried their experience out. The criterion variable is the set of ranks participants assigned to four categories of possible beneficiaries from mobility: (i) the participants; (ii) the schools and training centres; (iii) the companies (sending or hosting); (iv) the labour market and the EU as an institution.

The possible predictors and the estimated models were the same as in the regression analysis described in Section 5.1.3: a basic one (Model 1) containing just the intercept, the control variables and their interactions, a second model (Model 2) including also a selection of the descriptors of the mobility process and then a third model (Model 3) adding a selection of the positive and negative factors characterising the participant's experience. Predictors were selected if significant at least at 10% level in the explanation of the criterion variable. The quantitative results of the final model are presented in Table A.16. The models highlight what follows.

In general, the control variables that mostly correlated with the judgement expressed by participants are gender and the activity participants were in before mobility. Considering the other conditions as constant, the descriptors of the mobility experience mostly correlated with participants' choices are the entities organising mobility and the tasks performed during the internship. Another variable related to judgements is the duration of the experience, but it is relevant only in interaction with other variables. Instead, the cost borne by the participant's family did not influence the rankings given by participants. The psychological variables singly relevant to judgements were the feeling of having sacrificed something in their comfort zone, that to become more integrated with their home country and to start their own business.

Gender is significant in what concerns the higher ranks assigned by female participants to companies and participants and, mildly, to schools. Symmetrically, the labour market and the EU as an institution were ranked lower than average.

Females, though, inverted their preferences in case of longer mobilities. Moreover, females whose destination was an EU country other than the four of the project ranked companies lower and those whose destination was Portugal ranked schools lower than other participants did. The country of origin was mildly significant for females, too: participants from Spain tended to rank schools and companies lower while those from Italy[4] ranked companies and participants higher. Also, females who improved their teamwork skills rated higher the schools and those who improved their responsibility-taking ability rated lower the participants as a category.

Age is significant, in the sense that more aged people ranked participants and the schools lower than younger ones (data not shown). If other descriptors of the mobility experience are added, this outcome almost vanishes: only ranks obtained by companies are a bit lower than average if participants believed that mobility improved their chances to work abroad. This slightly modifies the more general model in which participants and companies were ranked higher than average in case the mobility experience was conceived as an occasion for improving the chances to work abroad. Moreover, the more aged participants with destination Portugal ranked themselves lower than people moving to other countries. Also, the more aged participants who realised their internship in the industry sector considered themselves as more benefitting from mobility than other actors. This may mean that the more mature participants highly valued the novelty implicit in an internship realised in a foreign industrial firm.

Apprentices ranked schools lower than students did. This happens if we keep aside apprentices who realised their internship in Portugal, who ranked schools much higher than the average. If we pool all apprentices together, their ranks for schools get close to average.

Higher ranks to schools were assigned by apprentices who felt they left a comfort zone while moving to realise their experience and by those who improved their initiative-taking skills during it. Instead, apprentices hypothesised lower benefits to schools in case the experience lasted longer than average. Companies and participants were supposed to gain from mobility if apprentices developed their internship in the commercial and tourism sector. Moreover, apprentices starting their experience from Portugal tended to rank all direct actors of mobility lower than average and, on the opposite, those who realised their experience in Portugal stated that all direct actors benefited from mobility. Trying to clarify this jumble of intersecting results, we can say that, in determining which institution benefits from mobility, apprentices tended to put schools and companies toward the top of the ranking if they found a favourable ground for outcomes at destination, and penal-

[4] A supplementary analysis was carried out in order to understand if the country of origin masked some peculiar characteristics of the sampled participants. This analysis did not give noteworthy results: predictors were about the same as those in Table A.16 with an even lower pseudo-R2 (2.7%). Thus, we will not comment these latter results.

ised schools if their internship was too long to them. It remains to understand why apprentices from Portugal and those who were interns in Portugal showed such a diverse orientation.

People doing nothing at home ranked significantly higher than other participants both the operative units (schools and companies) and participants as benefit-recipient categories. In particular, the category of participants was ranked higher, at the detriment of schools, as recipients of benefits if they improved their language skills. Companies were ranked lower to the advantage of schools if these interns improved, in particular, their mental agility. Also, schools and training centres were given higher ranks by the unemployed participants whose mobility was organised by a training centre, but much lower ones if their internship duties were related to their (previous) educational programme and in part also if they could use their mother tongue at home during mobility. Other subgroups of the unoccupied who ranked all mobility actors much lower than the average were those who felt more emotionally stable and resistant to frustration than the other unemployed. All this highlights that people who were not engaged in educational activities nor had a job before starting their internship showed positivity towards the whole mobility system they experienced: indeed, they showed irrefutable enthusiasm towards VET international mobility, but those of them who accomplished just formal, similar-to-educational duties, and then improved during their internship just secondary psychological skills, showed scepticism toward the mobility system. The achievement of a higher language ability seems fundamental to assign to participants a top-ranking benefit from mobility.

Participants who felt that mobility increased their desire to start their own business ranked participants and companies higher than other mobility actors. No doubt that, for a youngster, the increase in the desire to start an autonomous business activity is a matter of awareness of his/her own expectations. The fact that this feeling prizes participants and companies indirectly highlights that interns and companies interact in generating mutual benefits from VET international internships.

Also, participants who, after the internship, felt more integrated and participative with their country of origin ranked participants and companies higher than other participants did. The possible explanation for this feeling is that participants recognise that their internship was fruitful and this helped them to consolidate their citizenship toward institutions and, more generally, toward the country that made their internship possible.

Finally, sacrifices participants had to go through because of their mobility experience concern primarily job opportunities and personal/sentimental relationships they left at home. The former variable contributed to raising the ranking of companies as beneficiaries and the latter one to lower the position of schools and participants in the ranking. If we consider how the question on beneficiaries was put, both variables highlight that schools and participants obtain lower ranks if people

had to interrupt personal relationships or sacrifice local job opportunities to realise their abroad experience. It may be interesting that the perception of sacrifices is chiefly related to the working situation participants were in before leaving, which could mean that the more people feel involved in local ties, the lesser the chances to fully release the effects of their international experience.

5.3. Problems in mobility processes as envisaged by schools

The problems schools directly faced because of international mobility and the obstacles that could discourage youth to undertake mobility included:

Discouraging obstacles. The question was posed to understand schools' viewpoints on international mobility processes and included a list of 17 possible obstacles to be pinpointed by respondents and the possibility to add more obstacles whether appropriate. The possible answers were juxtaposed in the questionnaire, one at the left-hand side and the other one at the right-hand side of the item list, so that representatives could better discriminate the sending processes from the hosting ones. The list of obstacles was administered in a random order to eliminate the possible 'order effect' on estimates. The frequencies of the main obstacles that could discourage youth international mobility are presented in Table 5.6.

Burden caused to schools by mobility processes. The categories made explicit in the ROI-MOB questionnaire are: organisational costs; direct staff costs (e.g. salaries, allowances, etc.); indirect staff costs (for tutorship, training, social activities, etc.); loss in teaching times; costs and time of dedicated structures; cost of providing externally dedicated services; and other possible costs to be specified. The computed frequencies for the sending and the hosting schools are presented in Table 5.7.

The estimates highlight that, as regards mobility, the sending schools represent quite a different viewpoint than the hosting ones. Though, the main obstacles to be removed in favour of higher efficiency of their mobility activities according to the former are about the same pinpointed by the latter.

A very large number of schools consider the administrative burden the main obstacle to the Erasmus+ international mobility. Another structural element that may compel the diffusion of international mobility is the heavy cost of the process to both sending and hosting schools (third obstacle for sending and fourth for hosting schools, respectively), the limited number of available grants with respect to the number of candidacies (relevant just for the sending activities), the insuffi-

cient number of available hosting units and networks (fifth main obstacle for both types of school activities) and the lack of financial benefits for the hosting units (third main obstacle for the hosting schools). All these structural factors deserve attention from the policy makers.

The linguistic barriers are considered by schools of any type the second main obstacle to mobility. The problem concerns both participants, the staff and tutors devoted to mobility. A large effort to train candidates and staff in order to make mobility a more efficient and effective process is required by schools.

The other relevant issues highlighted by schools concern their social environment: the sending schools have to face the opposition of families to the international mobility of their kinships and the recognition of the achieved competencies by the labour market (both issues are a concern of 15% of schools). The hosting schools, instead, are concerned with the difficulty of locally accommodating the participants (11% of schools). It is to be pointed out that schools put the difficulties inherent to their local activities below those caused by structural and linguistic obstacles. In other words, it is as if they stated that it is uneasy to manage mobility at the local level, though an excess of bureaucratic duties, shortage of resources and poor linguistic skills are much more limiting.

Table 5.6. Per cent proportion of schools highlighting obstacles to Erasmus+ international mobility processes, by school activity*.

Problems	Schools: sending (n=220)	Schools: hosting (n=121)
Language barriers	37.7	34.7
Insufficient number of candidates	10.9	3.3
Inadequate professional standard of candidates	5.0	8.3
Opposition of families	14.5	8.3
Inadequate personal/interpersonal	12.7	8.3
Inadequacy of tutors	4.5	7.4
Number hosting partners	17.7	14.9
Too short length of stay	8.6	5.0
Heavy costs of the process	30.9	19.8
Hosting units no financial benefit	9.1	33.9
Lack of grants with respect to demand	26.8	7.4
Unbalance of genders	1.4	0.0
Inadequate accommodation	7.7	10.7
Administrative burden	50.9	38.8
Lack recognition of advantages	11.4	1.7
Recognition labour market	15.0	4.1
Mistrust previous experience	1.9	5.8

(*) *Respondents could give up to three responses. So, the per cent endorsement does not add 100.*

Schools perceive that the less relevant obstacles are the unbalance of genders, the mistrust of previous experience, the professional (low) standards of tutors and participants. The hosting schools pinpoint as irrelevant also the insufficient number of candidates and, unexpectedly, the length of internships.

Table 5.7. Per cent proportion of schools highlighting that Erasmus+ international mobility causes costs and burden to schools, by school activity.

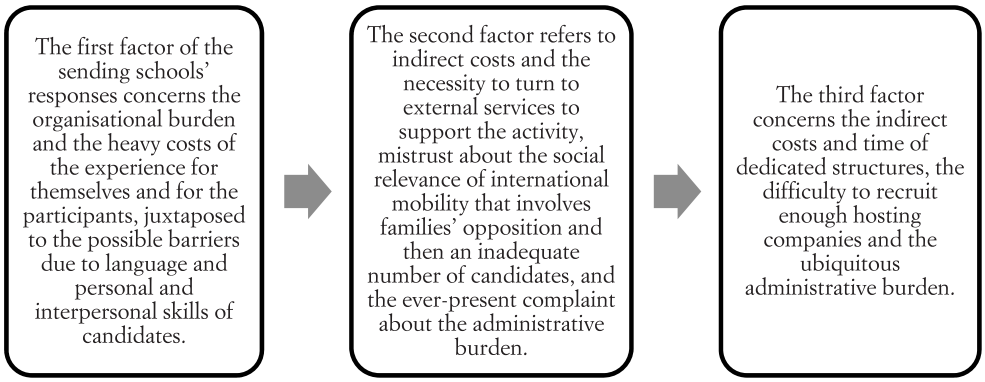
Asta and Burden to schools	Schools: sending (n=207)	Schools: hosting (n=123)
Organisational costs	36.6	29.4
Direct staff costs	9.2	6.7
Indirect staff costs	11.6	16.8
Loss in teaching times	8.7	6.7
Costs and time of dedicated structures	21.3	29.4
Cost of providing externally dedicated structures	4.8	5.0
School engaged in tutorship or training	47.4	43.9
" social activities	0.0	13.8
" language training	5.2	0.0
" related activities	32.9	28.5

The types of costs relating to mobility for the sending schools not only are similar to those of the hosting ones, but also the type of engagement of the school structures is similar: the main engagement relates to the organisational effort (36.6% for sending *vs*. 29.4% for hosting), then participants involve costs and times of dedicated structures (21.3% and 29.4%, respectively) and then indirect staff costs (11.6% and 16.8%, respectively). Even the proportion of schools requiring externally dedicated structures is about 5% for both schools' activities.

The engagement of schools in dedicated activities is primarily dedicated to tutorship or training and to administrative activities for both types of schools. Only language training of participants, which is specific of sending units (only 5.2%), and the management of social activities related to interns, which is specific of hosting schools (13.8%), differentiate the type of engagement of the sending from the hosting schools.

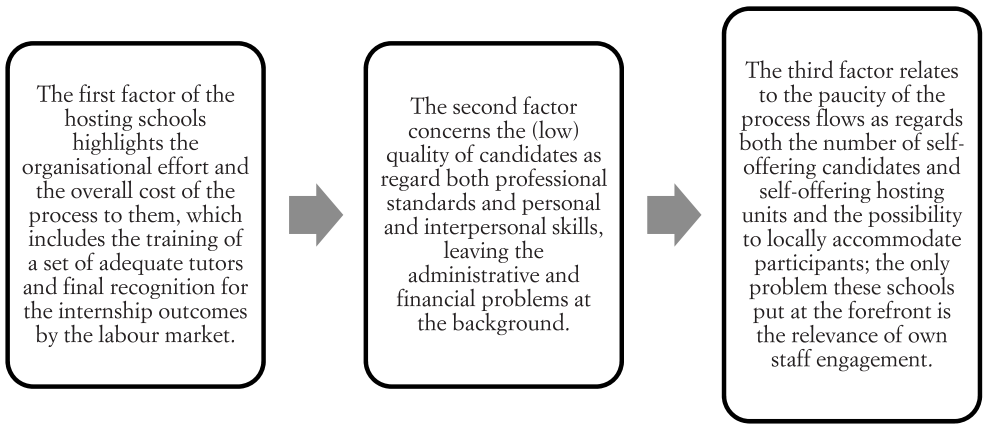
5.3.1. *Negative factors from mobility according to schools*

We applied a factor analysis of the costs and obstacles the schools met during their international mobility. The results of the analyses are summarised in Table A.12 with reference to sending and hosting schools. The analyses of costs and obstacles highlight what follows.



The three factors identify three levels of maturation of sending schools: the first is that of schools that already overcome, thanks to their experience or size, the communication and relation problems and are left with (just) functional ones, among which internal organisation, budget and logistics. The second is that of schools that are still solving local context problems and looking for organisational forms that enable mobility. The last is that of novice schools that are in trouble because the mobility activities interfere with their everyday work.

The factors obtained as factor solutions from the hosting schools' responses mirror a specific view of these schools that juxtaposes the problems of hosting organisations to those of mobility promoters: the former being more worried about a fruitful insertion of participants in their environments, the latter seeming more concerned to improve the flow of participants. In detail:



5.3.2. *Compensation of positive and negative factors met by schools*

The relationship between the final evaluation given by schools to their VET mobility experience and the set of positive and negative aspects that led school representatives to express that judgement is analysed with regression models. A linear regression model (see Section A.3) was applied to highlight the determinants of the performance evaluation.

In the school questionnaire, the identification of the negative aspects was asked before the possible benefits from mobility. This way, the respondent had the possibility to make up his or her mind before giving own final evaluations. Both questions on the burden and on obstacles were asked in the same way to the sending and the hosting schools, though the lists of items were different to account for their specific activities.

The criterion variable is the 1-to-10 evaluation given by school supervisors as a result of their experiences in mobility activities. The analytical model, sketched in Figure 5.6, is composed of a set of control variables and two sets of possible predictors, one composed of the salient characteristics of the experience and the other of positive and negative aspects of mobility as presented in Sections 4.3 and 5.3, respectively.

Control variables were: type and size of the school, experience in sending or hosting participants, duration of the experience, internal organisation for managing mobility, and residence country. Also the respondent's gender, age and role regarding mobility could have been used as control variables, though in this analysis they were ignored. Control variables were forced into, and kept within the model whatever their significance. Predictors, instead, were selected according to their significance in the explanation of the criterion variable.

Models were estimated in a stepwise fashion: Model 1 is the basic model that includes the intercept and the control variables; Model 2 adds a stepwise selection of characteristics of mobility processes and of their two-way interactions; Model 3 adds the positive and negative aspects that might influence the evaluations given by schools' supervisors. The results of the data analyses are presented in Tables A.17 and A.18 for the sending and hosting schools, respectively. The analysis of the models highlights the following.

The explained deviance of the most inclusive model for the hosting schools is 33.7% and that for the sending ones is 17.6%. So, the evaluations given by the representatives of the hosting schools are explained in a larger proportion than sending schools by the predictive capacity of the selected predictors. Moreover, for both analyses, no descriptors of the mobility process (type of organisation for mobility; criteria of candidates' selection; recourse to non-EU funds; types of investment for mobility; proportion of accepted applications; participants integrated into on-going activities) entered the model. This means that the final evaluation of schools derived just from control and judgemental attributes and not from the ways schools operated for mobility.

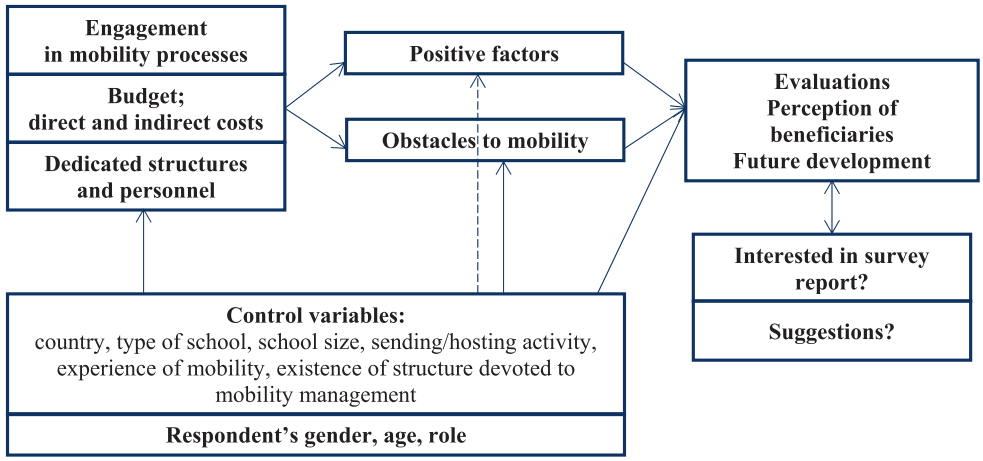


Figure 5.6. Model for the analysis of school evaluations.

Regarding the hosting schools, their structure is an important issue for mobility. All types of schools gave higher recognition to mobility than training centres and other bodies: vocational schools showed the highest level of enthusiasm, the lower secondary schools somewhat less but still high. The upper secondary schools were instead at the same (low) level as the training centres. Neither the school size nor the number of hosted participants correlated with the evaluation of the effort given by the hosting schools. Ceteris paribus, Spanish schools gave significantly better evaluations than other schools, in particular the German ones.

More positive evaluations of the effects of their hosting efforts were given by schools that considered mobility a tool to innovate their educational and training methods and programmes, and by those that purchased external dedicated services and reduced their teaching times to favour the hosting activity. Even if one could think that devolving teaching time and resorting to external services to manage internships imply a harder effort to schools, we can state that the schools that have chosen to invest this way considered their effort much more bearable than schools which invested other ways. Moreover, some Italian schools—which considered an obstacle to youth international mobility the difficulty to find adequate accommodations for incoming candidates—considered less worth their hospitality effort.

The length of the experience of the hosting schools in the mobility business correlates negatively with their evaluation of the effort done for that. The same type of correlation is shown by the sending schools. It is not easy to say why this happens: it may depend on them having become more demanding and this, on its turn, may

depend either on the perception of a lack of recognition of their hosting activity or on a growth of quality expectations from mobilities. Since we do not possess specific elements to clear up this issue, it could be a matter for further analyses.

Regarding the sending schools, the evaluations differ significantly by country: Spanish schools, especially the higher secondary ones, showed a very high appreciation of their activities related to mobility, and also the Italian and the Portuguese schools, as compared with the German ones. School size is not significant alone. Though, the more experienced among the large schools evaluate more positively the returns of their organisational effort.

The flow of outgoing participants does not correlate with the schools' evaluation of their experience. Though, vocational schools perceive that their effort in sending many students abroad is not worth the effort. If we keep aside the vocational schools, the other sending units evaluate much more positively their custom to send large numbers of participants to VET international internships.

The schools that sent many participants abroad and considered mobility as a benefit because it may encourage intergenerational exchange and culture sharing evaluated positively their efforts in this field. If these active schools are dropped from the analysis, the other school representatives who believed that mobility improved the intergenerational exchange evaluated their efforts as less worth than other representatives did. One could wonder why some school representatives possess this belief. Indeed, this issue deserves further studies.

Also, schools which believe that the lack of recognition of periods spent abroad is an obstacle to youth international mobility consider their efforts less fecund than other schools. This loss of motivation of schools may be a matter for policies concerning how to assess and then recognise international internships as parts of national and/or international curricula.

5.4. Problems envisaged by companies in mobility processes

The problems companies envisaged in international mobility processes and the obstacles that companies believe could discourage youth to undertake mobility included:

Discouraging obstacles. The question was posed to understand companies' viewpoints on international mobility processes and included a list of 14 possible obstacles to be pinpointed by respondents and the possibility to add more obstacles whether appropriate. The list of obstacles was administered in a random fashion to eliminate a possible 'order effect' on estimates. The list was presented to respondents side by side for the respondent to be able to discriminate, if appropriate, the sending from the hosting problems. A summary of results is presented in Table 5.8.

Burden mobility causes to companies. The burden categories made explicit in the companies' questionnaire are the same submitted also to schools: organizational costs; direct staff costs (e.g. salaries, allowances, etc.); indirect staff costs (for tutorship, training, in particular language training, social and other related activities); loss in production times or quantities; cost and time of dedicated structures; cost of providing externally dedicated services; and other possible costs to be specified. A synthesis of estimates is presented in Table 5.9.

Also in company questionnaires, the negative aspects of the mobility experience were asked right before the positive ones, for respondents to be able to reflect on all aspects of VET mobility before giving their final judgements. The estimates of the negative aspects as envisaged by companies show the following.

Both the relevant and the irrelevant variables highlighted by companies as obstacles to youth mobility are about the same as school ones, but the attitudes of company representatives differ significantly according to the company activity. In fact, sending companies highlight in particular the heaviness of bureaucratic compliance, the scarceness of resources and the difficulty to recruit candidates, while the hosting ones highlight primarily the inadequacy of participants from both the linguistic, professional and interpersonal viewpoints.

Regarding the candidates, the distinction between sending and hosting companies is relevant: the former complained about the scarce quantity of candidates, the latter about their quality. This is very relevant in case a new policy would be applied: the companies which are oriented to host participants would select only the most prepared candidates both on professional and personal aspects, or would like the candidates to be better prepared for the internship, while the sending companies would like their apprentices to candidate themselves more easily for international mobility and fear that the scarceness of self-candidacies could threaten their projects.

Hosting companies complain also they do not have any direct benefit from VET international mobility. This is a refrain that we highlight and deliver to decision makers.

As schools, also companies consider irrelevant for internships success the possible unbalance between genders, the number of untrustworthy partners and the adequacy of tutors.

Table 5.8. Per cent proportion of companies highlighting obstacles to Erasmus+ international mobility processes*, by companies' activity.

Problems	Companies: sending (n=48)	Companies: hosting (n=237)
Language barriers	20.8	58.5
Insufficient number of candidates	22.9	10.2
Inadequate professional standards	6.3	38.9
Opposition of families	12.5	0.4
Inadequate personal/interpersonal skills	18.8	23.3
Inadequacy of possible tutors	4.2	8.5
Number trustworthy partners	4.2	4.2
Heavy costs	52.1	8.1
Hosting units no financial benefit	6.3	36.4
Lack of grants with respect to demand	25.0	11.0
Unbalance of genders	0.0	2.5
Inadequate accommodation	4.2	9.3
Administrative burden	35.4	19.9
Lack recognition of advantages	14.6	13.6

(*) *Respondents could give up to three responses. That is why the per cent endorsement does not add 100.*

Table 5.9. Per cent proportion of companies highlighting costs and burden caused to them by Erasmus+ international mobility, by companies' activity.

Burden to companies	Companies: sending (n=49)	Companies: hosting (n=237)
Organisational costs	22.9	18.6
Direct staff costs	35.4	14.8
Indirect staff costs	8.3	32.9
Loss in teaching times	6.3	6.3
Costs and time of dedicated structures	14.6	23.2
Cost providing externally dedicated structures	6.3	1.3
Company engaged in tutorship or training	6.1	65.9
" social activities	0.0	2.3
" language training	4.1	0.0
" related activities	32.7	6.2

Regarding direct and indirect costs generated by engaging in mobility activities, the sending companies, which are involved in activities for advertising the possibility to move abroad on a grant, selecting the candidates, preparing the selected participants from the linguistic viewpoint and filling administrative documents, use their own resources of personnel and structures and insert this activity into the running organisation of production. In a ranking of the involved costs, the staff is the most engaged (35.4% of cases), then the organisational structure (another 22.9%) and the dedicated structures (14.6%). Only in 6.3% of cases companies stated that resorting to external supporting structures was the main problem from VET international mobility.

Instead, the companies that take care of participants at destination – which are expected to insert them in their production or sales lines and this requires tutorship, training and possible social activities – go through costs of dedicating to interns already-existing personnel (32.9% direct and 14.8% direct), structures (23.2%) and indirectly organisational activity (18.6%). Hosting companies do not require the addition of external services but in few cases (1.3%).

5.4.1. *Negative factors of company experience*

We applied a factor analysis of investments and obstacles the companies perceived they met while realising their international mobility. The results of the analyses, summarised in Table A.13, show the existence of three main factors in the sending companies data. These factors explain just 33% of the variance and those in the hosting ones even less (24%). This shows that the responses obtained by companies are very dispersed.

The factor analysis of costs and obstacles met by companies highlights what follows[5]:

– The first factor stemming from the sending companies data relates with administrative burden, cost and time of dedicated structures and the weight of the activity costs for companies. Companies recognise that the process is well structured in terms of both flows of candidates and relevance of the outcomes, but highlight the heaviness of the process for themselves and the hosting companies.
– The second factor concerns basically not direct costs but organisational inconveniences related to the selection and sending of apprentices, losses in production or sales times and quantities, problems posed by language difficulties and by the sufficiency of candidates' competencies.

[5] A *cahier de doléances* was a list of grievances drawn up in France in 1789, the year the French Revolution began, for the so called Third Estate to express their hopes and grievances directly to the King. Metaphorically speaking, it is a list of negativities complained by a social group with the intent to communicate its hopes to decision makers.

– The third factor is a *cahier de doléances* describing all possible problems that may hit companies which are starting their mobility process and have to convince themselves, the apprentices and their families of the relevance of the experience, and are worried about the accommodation at destination and the sufficiency of grants for participants.

Also in this case, as seen for schools, it is possible to arrange the units according to their scores on the three factors from the top ones, that possess a perfectly oiled mechanism for mobility management, to the bottom ones that represent a more initial situation.

Instead, the hosting companies – that, in our sample, belong mostly to Germany and Portugal – highlighted what follows:

– The first factor relates to flows of candidates who are good in terms of both linguistic as well as professional and relational skills and the structural problems correlated with these flows, say: heavy costs for the system, limited grants and accommodation difficulties.
– The second factor relates to indirect staff costs (for tutorship, training, other dedicated activities) that a large flow of participants may reverberate over the hosting companies in terms of professional and training needs.
– The third factor relates to the necessity to dedicate time and internal structures to participants and to form tutors to host participants who are sometimes of low standard from the professional, personal and interpersonal viewpoints. Moreover, all hosting companies complain that they do not get any money for that.

5.4.2. *Compensation of positive and negative factors met by companies*

The relationship between the final judgement given by companies to their recent VET mobility experience and positive and negative aspects that led them to express that judgement is analysed through regression models. The analysis follows the same paths as schools' one: the criterion variable is the 1-to-10 evaluation given by company supervisor as a result of his or her experience in mobility activities. Three models were estimated: each model, as sketched in Figure 5.7, is determined by a set of control variables and two sets of possible predictors, one composed of the salient characteristics of the experience and the other of positive and negative aspects of mobility, as shown in Sections 4.4 and 5.4, respectively.

Control variables were: the company business sector and size, experience in sending or hosting participants, duration of the experience, and residence country. Control variables were forced into, and kept within the model whatever their significance. Predictors were instead selected according to their significance in the explanation of the criterion variable. Details of the analysis are presented in Tables A.19 and A.20 for sending and hosting companies, respectively.

Regarding the hosting companies, we observe that those from Portugal and Spain evaluate higher than others their efforts in VET international mobility. As a

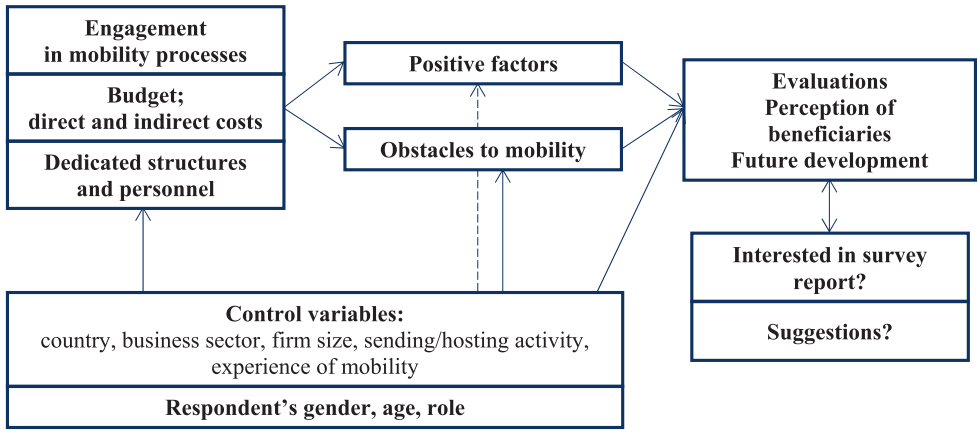


Figure 5.7. Model for the analysis of companies evaluations.

partial modification of this relationship, large size companies in Portugal consider much less fruitful their efforts. On the opposite, the Portuguese sending companies evaluate the effects of their work much less than others. We will not comment on these results because they may be effects of (random) sampling variability.

The number of hosted participants induced companies to a higher evaluation of their endeavour in mobility: the higher the number of hosted participants, the more fruitful companies evaluated their effort. On the opposite, the relationship between evaluations and the number of participants was negative in case of sending companies. Both relations may be reasonable if we consider that having been able to host many interns can be a matter for pride to a productive organisation, while sending abroad a large number of own apprentices may threaten its productive structure.

The business sector in which internships have been realised and the size of the hosting firm show no relation with the company judgements. We could extrapolate the set of more experienced companies in the service sector which gave better judgements of their mobility experience. Moreover, some sending companies pointed out that duties in the service sector were more positive and others in the commerce sector somewhat less positive than in other sectors. Though, it is to be remembered that the sample size of sending companies is right sufficient for this type of analysis.

A feature of the hosting companies leading to higher evaluations is the regularity of the mobility activities they were involved in: *regularity*, which is an indicator of both experience and the embedding of mobility practices in company mechanisms, indicates that the firm is so accustomed to practicing mobility that interrupting it may even upset the internal equilibriums.

Other aspects influence the company judgements: the perception of mobility as a tool for improving teamwork efficiency and the inadequacy of the provided accommodation to participants, which correlate positively with judgements, and the aim of attracting potential talents which correlates negatively with judgements. The

adequacy of accommodations may be considered an expression of the awareness of companies that the task of providing good accommodations is hard. Instead, it is a matter for discussion why the aim of attracting potential talents through mobility induces the hosting companies to less positive evaluations.

Hosting companies which pointed out that a possible unbalance of genders could threaten the process gave higher marks to their efforts. This is the only case in which this rarely selected aspect becomes significant to explain the actors' judgements. We checked why this happened: once this variable enters the regression model, the number of hosted participants, the regularity of the hosting activity and the improvement in teamwork efficiency raised their positive significance and the inadequate professional standards lost significance of its negative relation with judgements. It is clear that a better equilibrium of genders, according to the company responses, may imply a more intense circulation of youngsters in Europe. Though, it is not possible to state in favour of which gender the equilibrium should be reached since it is not possible to know the gender prevalence of interns of the examined companies. So, the question of gender balance as posed by companies is unsolvable.

Regarding the sending companies, the way candidates were selected for mobility entered the model repeatedly: where the selection of candidates was carried out according to staff's certainty of usefulness of mobility for the apprentice, this correlated negatively with the self-evaluation of company organisational and economic efforts, unless the internship was in the service sector, whose marks were much higher than average. The criterion of selection based on professional curriculum correlated negatively with evaluation marks, too. Likely, the companies where these two selection criteria were adopted may be those in which centrally-devised, instead of meritocratic and expectation-caring criteria were adopted. Prescriptive selection criteria are likely adopted by novices that did not yet absorb the spirit of Erasmus+ mobility. If so, everything in order.

5.5. Benefits and problems according to "other stakeholders"

The "other stakeholders" stated they had been involved in mobility processes in 72.4% of cases, though all of them felt they were able to understand and discuss how a VET mobility process develops. This is why they accepted to voluntarily respond to the questionnaire.

In what follows, we produce a synthesis of the judgements from this group. The rationale behind the following analyses was as follows:

(i) *Were the "other stakeholders" able to reproduce the reality as described by direct actors of mobility, in particular the realm represented by schools and companies?* Said differently, we wished to check if these stakeholders were experts in mobility, e.g. if they were so knowledgeable that they could even subrogate the data collected at schools and companies.

(ii) *In what elements the sample of "other stakeholders" – who were asked to represent the same phenomena with the same scales as schools and companies – differ from those deriving from the much larger sample of schools and companies that effectively operated in recent mobility?* This is the same as saying that stakeholders' views can be added to those from the entities (schools and companies) directly experiencing mobility.

The benefits to schools and companies from VET international mobility, as perceived by the "other stakeholders", are summarised in Table 5.10 and the costs in Tables 5.11 and 5.12. Moreover, the obstacles to youth international mobility as perceived by the same group of people are described in synthesis in Table 5.13.

Table 5.10. Per cent benefits that schools and companies could obtain from Erasmus+ international mobility as highlighted by "other stakeholders", according to the activity of schools and companies*.

Sending	*Possible benefits*	*Hosting*
55.2	Improving participants and employees language skills	48.3
51.7	Motivating participants to learn and fulfil duties	3.5
0.0	Assessing the competencies of promising participants	0.0
13.8	Attracting potential talents at the recruitment stage	17.2
10.3	Improving participants and employees ICTs, innovation skills	0.0
34.5	Encouraging intergenerational exchange, culture sharing	48.3
3.5	Improving teamwork efficiency (excluding coaching costs)	17.2
37.9	Developing employees' flexibility, other professional skills	24.1
3.5	Strengthening employees' relationships sending/hosting unit	3.5
3.5	Reducing extra-time work or improving time management	3.5
0.0	Smoothing process deployment, increasing production/sales	3.5
31.0	Broadening mindset and business ideas	44.8
0.0	Improving knowledge of EU tools (e.g. Europass, ECVET....)	3.5
44.8	Improving international collaboration between units	37.9
10.3	Enhancing the reputation/brand of collaborating units	31.0

(*) *Respondents could give up to three responses for sending activities and another three for hosting activities. That is why the per cent endorsement does not add 100.*

Table 5.11. Per cent costs schools may have from Erasmus+ international mobility as highlighted by "other stakeholders", according to schools' activities.

Sending	*Possible costs*	*Hosting*
44.8	Organizational costs	31.0
6.9	Direct staff costs (e.g. salaries, allowances, etc.)	0.0
24.1	Indirect staff costs (for tutorship, training, social activities….)	34.5
13.8	Loss in teaching times or quantities	6.9
6.9	Costs and time of dedicated structures	17.2
3.5	Cost of providing externally dedicated services	10.3
100.0	*Total*	*100.0*

Table 5.12. Per cent costs companies may have from Erasmus+ international mobility as highlighted by "other stakeholders", according to companies' activities.

Sending	*Possible costs*	*Hosting*
25.9	Organizational costs	6.9
22.2	Direct staff costs (e.g. salaries, allowances, etc.)	13.8
11.1	Indirect staff costs (for tutorship, training, social activities….)	37.9
25.9	Loss in production times or quantities	24.1
3.7	Costs and time of dedicated structures	10.3
0.0	Cost of providing externally dedicated services	6.9
11.1	Other (Please, specify:……..)	0.0
100.0	*Total*	*100.0*

Table 5.13. Per cent obstacles to youth international mobility as highlighted by "other stakeholders", according to schools' and companies' activities*.

Sending	*Possible obstacles*	*Hosting*
58.6	Language barriers	62.1
20.7	Insufficient number of candidates	6.9
6.9	Inadequate professional standards of candidates	24.1
6.9	Opposition of families to mobility	3.5
10.3	Inadequate candidates' personal or interpersonal competencies	17.2
13.8	Inadequacy of possible tutors	24.1
24.1	Insufficient number of trustworthy partners	0.0
27.6	Heavy costs (direct or indirect) of the whole process	10.3
0.0	Hosting organizations have no financial benefit	17.2
10.3	Lack of grants with respect to demand	3.5
0.0	Unbalanced distribution of the candidates' gender	0.0
0.0	Inadequate accommodation for candidates	3.5
51.7	Administrative burden of the processes	27.6
13.8	Lack of recognition of periods spent abroad at the sending unit	0.0
17.2	Lack of appreciation of mobility outcomes by labour market	17.2
0.0	Mistrust about mobility caused by previous experience	6.9
6.9	Too short length of stay	6.9

(*) *Respondents could give up to three responses for outgoing and for incoming mobilities. That is why the per cent endorsement does not add 100.*

According to the "other stakeholders", the benefits that can derive to mobility from VET international internships are effectively those described in Chapter 4, namely:

- *Improvement in language skills for all people involved in international mobility*, e.g. participants and employees operating in both sending and hosting activities. This is by far the main outcome of international mobility. We did not ask which vehicular language has improved, but it may be guessed that people were concerned with both the hosting country language and English as a back-up language.
- *Participants' motivation to learn and fulfil duties.* The significance of this benefit to participants was highlighted both in relation to the benefits felt by participants and those guessed by schools and companies sending their students and apprentices for a period abroad.
- *Brand reputation, a broader mind-set and other intangible outcomes* that could derive to schools and companies from international collaboration foster a halo of charisma and identity around the intermediary organisations of mobility that might have direct effects in all directions, e.g. within their own organisation, at the local level and to improve their business relations.
- Hosting units may benefit also from the *concrete chance of examining interns that could be recruited as employees* at a later stage. The attraction for potential talents derives both from the possibility to see interns in action but also from the attraction realised on interns by the international reputation halo of the hosting organisation.
- *Encouraging the intergenerational exchange and culture sharing* is another relevant benefit. This is guessed by "other stakeholders" as the top benefit for hosting units and the fifth for sending ones. As already mentioned commenting on the responses from schools and companies, the intergenerational exchange may be conceived as the development of positive between-generation contamination within a productive organisation that prearranges employees to change.
- The *flexibility of own employees* derives from the broadening of mind-set and the intergenerational exchange. Indeed, the insertion of novelties in the firm's organisation, that is: new practices, a new mentality and new and younger people in the workplace is bound to affect the whole organisation.

Cost and obstacles arising from international mobility processes are numerous and of variable impact on organisations. The other stakeholders highlighted that the main cost is the organisational burden caused by the recruitment, selection and insertion of participants in a continuous cycle, and that schools and companies, whose main mission is to do other but mobility, could suffer from high levels of bureaucracy. Mobility is a shock to schools and companies, at least initially, whatever their duties. Then it has to become part of normal duties. This is why the other stakeholders – in agreement with school and company representatives – believe that just a marginal proportion of schools and companies resort to externally dedicated services.

The only concrete cost envisaged by other stakeholders for sending companies is the production loss caused by the temporary absence of apprentices going

abroad for their internship. This was envisaged also by the sending companies. According to other stakeholders, hosting companies suffer a parallel cost because the interns are not as productive as skilled workers. Indeed, the hosting companies stated they were able to obtain results in terms of production or sale also from interns. This may be the only difference to highlight between the effective actors of mobility and the other stakeholders.

The possible obstacles to youth international mobility envisaged by the other stakeholders are partly a repetition of what already mentioned in our recent comments. Namely:

- *The gap between the current and the needed language skills* is by far the most cumbersome obstacle. The language weakness of participants and dedicated staff is hypothesised in relation to both sending and hosting activities.
- *The administrative burden imposed by operative procedures, accounting documentation and reports* is the second largest obstacle. This may discourage smaller units to provide internal structures able to manage such precise administration duties. This obstacle is seen by the other stakeholders mainly in relation to the sending activities. The time and effort dedicated to administrative fulfilment are perceived in a similar way by the operative units and experts, too.
- Obstacles to sending activities are also the *heavy costs of the process, the insufficient number of trustworthy partners* to which the applicants could be sent and *the insufficient number of candidates*. These obstacles envisaged by experts tightly reflects the ordering of obstacles given by the sending schools and companies.
- An obstacle to hosting activities is the *inadequacy of professional, personal and interpersonal skills possessed by participants*. This was already pinpointed by the hosting units. Other obstacles to mobility shared with the hosting units' representatives are the fact that *hosting units have no financial benefit from mobility* and *the lack of appreciation of the internship outcomes*.
- The other stakeholders envisaged that also the *adequacy of tutors* could be called into question. Instead, the hosting units did not envisage the adequacy of tutors as a problem. Though this issue may be a critical point, the other stakeholders wish to highlight to improve the hosting unit's responsibility as regards the compliance of tutor skills to VET international mobility needs.
- Also the *length of stay* was considered of lesser importance by both the operating units and the experts. This is unexpected because hosting units and experts converged in stating that quality parameters should lead the decisions related to mobility issues. Also, experts did not highlight *the lack of grants* as a possible obstacle to mobility. This may be another indicator of the orientation of the other stakeholders toward privileging quality over quantity of mobilities.
- Another difference between the opinions of the other stakeholders and that of the direct actors is the perception by the former of *lesser relevance of the accommodation issue* at the destination. This issue is not easy to understand, in

the sense that it is unclear if it is not really a problem or the experts' perception was inadequate.

In conclusion, we can state that the other stakeholders have really been able to reproduce what happens in the mobility business, highlighting the same elements considered as positive or negative also by the operative units and showing a higher view of the mobility process. So, we can consider them as *experts* of the process at stake.

Experts showed to be able to put themselves in the hosting units' shoes, complaining about the professional, personal and interpersonal skills of participants and the lack of appreciation of mobility outcomes to the labour market. Also, they endorsed the already-mentioned distress of hosting units caused by lack of financial benefits from mobility. Moreover, they highlighted, in agreement with the hosting units, the positive effects that could derive from the insertion of even small sets of selected interns in a productive environment: this might improve the possibility for the hosting unit to attract potential talents, improve teamwork efficiency and, much more, encourage intergenerational exchange. The experts highlighted also the brand reputation improvement that could stem from a publicly recognised collaboration with international partners to realise common projects.

5.6. Partial conclusions

The negative aspects met by both participants, schools and companies involved in our surveys relate to the initial veil of uncertainty that covers all new enterprises, to construct or update the relational network with partners and institutions, to the administrative burden for organising such a complex system, to the plurality of new costs for the operation, to the difficulty of organising a decent living environment for participants, and to face different languages and cultures. Indeed, international mobility requires complex machinery, specific expertise and good will of the involved people, a supplementary budget and a reliable, on-going network of relations.

As also the EIS survey witnesses (Alfrandeser *et al.*, 2012), while the hurdles for European mobility progressively lower, the organisation of abroad internships remains difficult. Obstacles for this type of mobility are personal ties, work commitments and budget in the home country from the side of participants and the sending units.

Indeed, those who realise soon after the end of their education or training programme that the local labour market does not offer them what they expected are those whose evaluation of the abroad experience is dramatically favourable. In fact, they are not leaving almost anything in the home country, so any well-done internship is a promise of occupation. To them – as to any other participants –, their internship was a "foretaste" of the labour market and the more similar to a

real job it was, the better they valued their experience. The other way round, these participants showed a very tough attitude against inadequate internships.

Symmetrically, those who already had a job or were close to it, such as apprentices, were often critical in the evaluation of an abroad experience. In particular, they were openly critical if the hosting company was a "long arm" of the mother company in which they used to operate. This evidence provides food for adjustment of sending rules.

Another obstacle highlighted by the ROI-MOB survey is sometimes the opposition of families to abroad mobility. This may relate to a general protection feeling of parents towards kinships, a feeling that may be stronger according to the young age of candidates. This is indirectly proved by the practical absence of minors in our sample. The family opposition issue contrasts with the recommendations of encouraging mobility as soon as possible, even before higher education studies (Alfrandeser *et al.*, 2012).

Moreover, NA-BIBB (2018) survey shows that, in Germany, the main reasons for inactivity of companies and schools in the field of mobility are: a supposed lack of interest for apprentices to spend time abroad and an expectation of irrelevant (positive) effects from mobility on apprentices. All this in absence of perceived costs for the sending unit. As shown in Section 2.4, the demand for mobility from apprentices exceeds the offer from companies. This may mean that, in addition to the worry of families, mobility has to overcome the scepticism of many sending companies.

We ascertained that the participants, the operative units and the experts did not pinpoint gender imbalance as an obstacle to VET mobility. Though, we found a minority of low-motivated women (but this could be extended to all groups of unmotivated people) who did not fully appreciate their experience and, in the future, should be followed up to improve the overall outcomes of mobility.

If we were asked to forestall some conclusions from the analysed data, we can state that it is eye-catching the different perspective of participants, schools and companies in giving their evaluation of the mobility process. As expected, each actor represents in his/her evaluations a personal viewpoint of the process and this confirms, if needed, that no single viewpoint can adequately represent the whole process and that pooling together the viewpoints of all the actors and that of experts in relation to mobility was a wise choice.

The set of consulted experts, although small in number, was indeed able to represent both the phenomena highlighted by the direct actors of VET international mobility and other aspects that mobility actors showed to perceive in a different way or measure. The relevance given by experts, in agreement with operative units, to the language gap and to the administrative burden highlights that these two issues are the main problems to be solved by policy makers.

Regarding the statement that applicants and trustworthy partners are less than it should be in order to select the best participants and the best hosting units, a

"marketing" effort for applicants and a commented data base of the completed experiences could relevantly help the work of the sending units.

There are many issues that we leave to future research because we did not find in our data hints for conclusive results. One concerns the internships developed in the services for the industry sector. This business sector showed a particular difficulty for internships. Since this sector is relevant for the employment of higher education graduates, it is unclear why this did not happen for high and vocational schools.

Other structural results that may involve further studies are the negative correlation between the mobility process evaluation and the number of years schools were involved in mobility, and the irrelevance to actors and experts of the internship duration. These results collide against those considered as positive, such as the learning effect due to experience duration for both sending units and participants. The former result could depend on some cycle of school interest that could reach a climax after some time and then decrease, the latter could depend on the propensity to have a certain number of qualitative – instead of a larger number of limited quality – internships. These unexpected results come along with the perception of vocational schools that their effort in sending many students abroad was not worth the effort.

We avoided commenting why in some analyses mobility actors from certain countries showed peculiar benefits or problems because this may be due to hidden peculiarities either of participants or of operative units. The only result to mention is the 'severity' of German actors towards their mobilities: German participants, schools and companies tended to rate their experiences significantly lower than other countries' actors. Since our data do not allow us to analyse all details about the possible origin of differences in evaluation, we postpone the possible causes to further research on VET mobility analysis.

Chapter 6

Towards a more effective mobility

6.1. Final evaluations and future trends

Either participants, schools and companies showed very high satisfaction with VET international mobility. As shown in Chapter 3, the average evaluation of participants, on a one-to-ten scale, is 8.57, that of sending schools is 9.25 and that of hosting schools is 8.59. The average evaluation of companies is about one point out of ten lower than schools, with the same gradient between sending and hosting ones, say 8.25 for sending companies and 7.54 for the hosting ones.

The evaluation scores of participants and the reasons for their evaluations are in line with analogous surveys held on the overall population of participants to VET international mobility. Unfortunately, to our knowledge, there are no surveys on schools and companies related to VET international mobility comparable to ours.

In the remaining part of this chapter, we will show that the positive outcomes of mobility and the analysis of what could be changed to make mobility more effective pushed all the actors of the process (participants, schools and companies) to disclose future activities by explicitly showing a more-active-than-in-the-past availability to take part to further mobility projects (Section 6.2) and delivering suggestions to improve the mobility process (Section 6.3). Other considerations and suggestions collected from stakeholders different than those directly investigated with the actors of the process are presented in Section 6.4. In Section 6.5, we summarise the recommendations of the mobility actors and experts as perceived from both own experience and reflecting on data results. Finally, in Section 6.6 we describe possible use and future development paths for the ROI-MOB model.

6.2. Future trends

6.2.1. *Propensity of participants to repeat the experience*

The propensity of participants to rejoin a possible opportunity of international mobility is of the order of 97% (Table 6.1). If this availability is projected in the

near future, it can be given for granted that the more grants will be offered, the larger the number of candidates who will take part in VET mobility. So, it is easy to forecast that no grant will be void.

Table 6.1. Per cent availability of participants to repeat a possible opportunity of international mobility, by gender and activity at interview.

	Male (n=417)	Female (n=594)	Student, dual track (n=499)	Apprentice (n=82)	Total (n=1019)
% availability	96.6	97.5	97.2	96.3	97.2

The availability to possibly repeat the experience is so close to the top that the differences by gender, activity and country of origin of participants are very low, if any (Table 6.2). We point out that participants from Germany and Portugal border on 100% availability to possibly repeat the experience.

Table 6.2. Per cent availability of participants to suggest a friend to start a mobility experience like theirs, by country of origin.

	Germany (n=241)	Italy (n=351)	Spain (n=249)	Portugal (n=177)
% availability	98.3	97.2	94.4	99.4

6.2.2. *Propensity of schools and companies to continue the experience*

Schools and companies, which were asked to estimate their availability to operate with Erasmus+ mobility in the future, stated they would, on average, put more effort than in the past (Figure 6.1).

The proportion of sending schools available to a more intense international activity was about 80%. The quota of hosting schools was similar (78%). A lower but still significant (about 70%) proportion was stated by hosting companies. The lowest proportion was that of sending companies (about 63%), and this attitude goes along with the difficulty to find such companies in the market. The category of sending companies deserves particular attention by decision makers.

The other way round, the proportion of schools stating that the number of participants may diminish in the near future is 0.5% of the sending schools and 3.8% of the hosting ones. The proportion of companies unavailable to repeat the experience, at least at the past rates, is 2.1% and 3.9% as regards, respectively, the sending and the hosting activities. The generalised enthusiasm shown in their responses by schools and companies rules out the possibility that this availability hides complaisance.

Concerning the proportion of schools and training centres available to continue their mobility experience (Table 6.3), it is evident that smaller schools, operating either as sending (85.3%) or hosting units (74.5%), and very large sending schools showed a larger availability to repeat their experience.

Also, smaller companies are more inclined than the larger ones to continue in the mobility business (Table 6.5). We do not have enough data to make statements for small sending companies, but micro and small hosting companies show the highest availability to continue the VET international mobility experience.

The data obtained by crossing the availability to continue with the country of headquarters are reported in Tables 6.4 and 6.6 for schools and companies, respectively. The most eye-catching results are the full availability (100% of the concerned units) of the Italian and the low one (50%) of the Spanish sending schools and the very high availability of the Spanish hosting companies (89.6%) to continue their mobility activity, compared to the very low one of the German ones (36.8%).

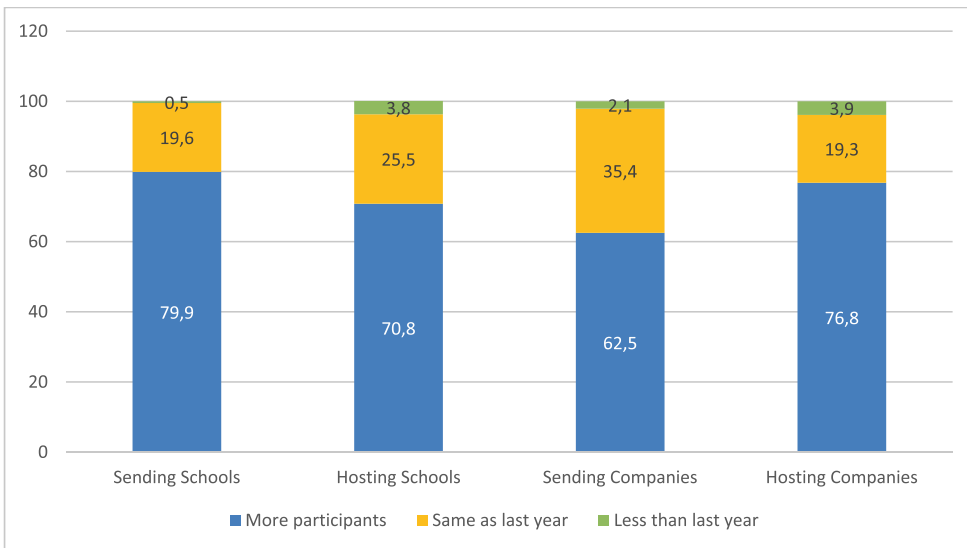


Figure 6.1. Per cent availability to send or host participants in the future by schools and companies involved in Erasmus+ international mobility processes, by type of activity of schools/companies.

Table 6.3. Per cent availability of schools to send or host more participants in the future, by school size and activity (sample size in brackets).

Size	Schools: sending	Schools: hosting
≤ 200	85.3 (102)	74.5 (55)
201-1000	65.4 (52)	66.7 (21)
> 1000	84.6 (52)	65.2 (23)

Table 6.4. Per cent availability of schools to send or host more participants in the future, by country (sample size in brackets).

	Germany	Italy	Spain	Portugal	Total
% availability (sending)	96.4 (28)	100.0 (35)	50.0 (56)	85.6 (90)	79.9 (209)
% availability (hosting)	NA	NA	57.7 (26)	78.2 (55)	70.8 (106)

NA: Not Applicable because of low sample size.

Table 6.5. Per cent availability of companies to send or host more participants in the future, by size and business activity (sample size in brackets).

Size	Companies: sending	Companies: hosting
1-49 (micro-small)	NA	81.1 (184)
50-250 (medium)	NA	71.8 (39)
> 250 (large)	66.7 (30)	58.6 (29)

NA: Not Applicable because of low sample size.

Table 6.6. Per cent availability of companies to send or host more participants in the future, by country (sample size in brackets).

	Germany	Spain	Portugal	Total
% availability (sending)	63.2 (38)	NA	NA	62.5 (48)
% availability (hosting)	36.8 (19)	89.6 (67)	76.6 (167)	(254)

NA: Not Applicable because of low sample size.

6.3. Suggestions from actors of mobility

While designing questionnaires for the surveys described in Chapter 1, project partners tried to find a suitable balance between closed and open questions, well aware that closed questions cannot always encompass all relevant answers and too many open questions could annoy respondents. The number of answers to open questions collected (Table 6.7) shows that mobility topics were well congenial to respondents. Indeed, the variety of obtained suggestions shows that respondents

offered a set of potentially fresh, individual, and often illuminating contributions to the analysis.

Most actors and all experts provided us with suggestions. Actually, experts provided a lot of suggestions (last row of Table 6.7). One reason for that can easily be found in the fact that their questionnaire was devised after the end of the survey involving other categories, and based on lessons learnt there.

Table 6.7. Number and percentage of respondents who provided at least one suggestion in answer to open questions in the questionnaire.

	Participants	Schools	Companies	Other stakeholders
Number of respondents providing at least one suggestion	293	81	57	29
% over all respondents		35.4	19.1	100.0
Number of obtained suggestions	248	104	60	506

As one may imagine, open answers are difficult to compare and group. Nuances and subtleties, from time to time coupled with references to other answers and with some loss of information inborn in translation from respondents' native languages, make the operation hard. That is why we decided to search for, and visually highlight in word-clouds, the most used keywords (couples of keywords, actually) appearing in respondents' answers.

It is to be highlighted what the word-clouds represent:

– A keyword is a composite word representing a set of keywords of similar meaning. For instance, the keyword "compensate teacher" represents also "fund teacher", "teacher career", "lack recognition", and "staff recognition", that were pooled together because of their similar meaning in different questionnaires.
– The size of keywords is proportional to the occurrence of that keyword.
– The vertical or horizontal disposition of keywords depends just on efficiency considerations of the figure.

In the following, such word-clouds are displayed and commented for each respondent category.

6.3.1. *Suggestions from participants*

Figure 6.1 visually represents participants' suggestions. Should we summarize hints provided for by learners in one sentence, we should say: "just do it: mobility is great, and it is worthwhile repeating the experience, provided that it is duly programmed as to hosting company and pre-departure preparation, funding is sufficient, and on-site support and logistics are properly planned".



Figure 6.1. Keyword word-cloud of verbatim suggestions written by participants: "just do it".

Not surprisingly, on the participants' side the most frequent occurrence is "do again". Mobility was a highly positive experience for the vast majority of the sample we interviewed. Apart from a few unsatisfied (by the way, mostly unsatisfied of logistic arrangements, or of tasks assigned, very seldom of the experience abroad itself), learners would be ready to pack up their cases and start again on mobility. With a higher degree of awareness on their second round, we would say.

In fact, the emotional wish for a new departure is immediately followed, in frequency, by suggestions regarding a closer control on hosting companies and on programming before departure. In other words, many learners underline the relevance of careful preparation to the mobility experience, either with regards to:

– assessing in due advance and state in the learning agreement the hosting companies' ability to offer tasks, assistance and support in line with participants' expectations, learning goals, skills and potential, and to;
– setting up all the "scaffolding" required to adequately support one's stay abroad.

Having set the preparation phase, suggestions move to financial issues. Higher grants, better support to participants, cheaper accommodation, including family hosting, a map of cheaper sites for getting meals/food are advisable for several respondents, even if this could depend on the way sending organisations fed the supporting money to participants (in our sample, different behaviours occurred: direct transfer to participants, payment or reimbursement by the sending organisation, or by the hosting organisation, or by intermediary bodies in the origin or destination country, or a mix of the above).

Two more keywords are noteworthy here, relating to the "environment" where the mobility experience takes place in: the first one is a better integration in the destination country, and the second one (which is also a possible answer to the for-

mer) is a more active hosting context. This is actually food for thought for hosting or intermediary organisations: a learner in VET mobility abroad lives some hours in a school, or some more in a company, but most of the day is spent outside the "planned" learning environment, which stands as a potential informal learning ground, too. Including opportunities for exploiting those hours as well – or at least a part of them – might greatly improve the attractiveness and the effectiveness of mobility. In the same streamline, we can read also suggestions regarding arranging accommodation near to the workplace.

Scrolling down the suggestion list, language issues come up, stressing the importance of language courses, not only English as the working idiom, but also the native language in the destination country. Indeed, many learners but also several company representatives pointed out that one should not take for granted at least one of the following:

– A sufficient knowledge of the working language by learners, which includes in particular English;
– A sufficient knowledge of the working language, be it English, more seldom French, and in a few cases German or other, by workers involved in the hosting organisations;[1]
– A sufficient knowledge of the destination country language by learners.

Hence, investing in language training at the pre-departure stage seems to pay off, in order to shorten the learning curve and consequently the "lead time" to full operation on-site. This offers more food for thought about the kind of language skills a learner can improve through mobility, too. Taking English as an example, and the case where mobility occurs in a non-native English speaking country, it would be interesting to investigate if the most rewarding choice on the sending organisation's and on the learner's side would be to improve proficiency in English or in the destination country language. In the former case, learner and hosting staff would communicate at a better level in a third language, introducing a double bias. In the latter, probably the learner could improve much faster his/her knowledge of the destination country language and of the job-related micro-vocabulary, plus getting an advantage for communicating in his/her spare time, too.

Similarly, an attentive manager in the hosting organisation – especially companies – could decide if running the experience in a third working language, thus improving for example staff's English skills, or in own language, requiring less effort by own staff but potentially reducing the efficiency of communication with the learner, at least in the first period of the stay.

[1] More in detail, hosting schools often devote language teachers to the hosting activities, thus somehow working this issue around. Companies, on the opposite, show a varied situation: more structured and big ones deploy people with good language skills at middle/low levels, too, while small/micro companies, unless they belong to high-tech or innovative sectors, often stay with their native languages, possibly having just one manager speaking another language.

Eventually, many participants suggested that a longer stay is advisable. This comes in strict correlation with the issues discussed in Chapter 2.

6.3.2. *Suggestions from schools*

Figure 6.2 visually represents suggestions from school representatives. Hints provided for by schools mostly focus on bureaucratic simplification, building up an affordable roster of sending/hosting companies and plan for effective work-related learning programme during mobility.



Figure 6.2. Keyword word-cloud of verbatim suggestions written by schools and training centres.

Simplification of procedures comes first in the suggestions from schools. An issue present in the Erasmus+ "founding fathers" for years, and still on its way, as Programme is still improving. Nevertheless, it remains a major concern for schools: in fact, open comments and suggestions are well in line with numeric results (Section 5.2.1). Approximately 1 out of 5 respondents suggested simplifying the required documentation, which rises up to about 1 out 3 if we aggregate also suggestions regarding the reduction of teachers' administrative and bureaucratic load relating to mobility.

It should be noted that one way to achieve such simplification is seen in outsourcing document preparation (either in the application process and in the management and reporting ones) to third parties (e.g. intermediary bodies or mobil-

ity providers, according to a recent proposal from EfVET[2]). The VET Charter is acknowledged as a good tool to simplification, but respondents called for a more flexible tool (e.g. regarding the set number of mobilities along all the Charter validity period, or the chance to achieve it even if not being the applicant to 3 projects, but just a partner, and so on).

Second most frequent suggestions relate to companies. Not always sending schools are able to find, test and select suitable hosting companies abroad. They could rely on possible partner schools in other countries, but – symmetrically – not always hosting schools are able to find, test and offer suitable hosting companies at home. So, again, that might be sorted out by relying on third parties (which would also reduce the organisational burden for schools).

At the end of the day, whatever the choice, what is relevant to sending schools is to decide whom they can trust for getting a good work-based learning experience, good support during the learners' stay abroad, good knowledge and skills assessment, and good "redemption" in terms of validation of learning outcomes.

On the other side, hosting schools need to decide whom they can trust for offering a good work-based learning experience, and how to train their own teachers and tutors to effectively support incoming students and favour their integration.

In both cases, some school representatives suggested creating a kind of open database of "good" companies, who proved to be able to comply with mobility requirements and are keen to welcome new learners. However, suggestions do not provide any clue about how to overcome some kind of "jealousy" deriving from "violations of ownership" of good companies. In other words, imagine a school who managed to build strong relationships with a "good" company, and is currently carrying out regular and satisfactory mobility activities with that firm. Disclosing features and contacts of the company to a world of potential competitors could not always be acceptable for the "owner" school, even if, in theory, the long-lasting relationships could be an advantage on the one side, and a "healthy" competition could turn into additional benefits to hosted learners and drive to a more demanding selection and preparation for being accepted.

One more set of suggestions in this category relates to the lack of resources by schools, to perform effective and efficient mobility. Indeed, most comments here do not provide for possible solutions: they rather highlight the problem, which is also, but not solely, a financial one. For sure, money for the provision of targeted additional services either to outgoing and to incoming learners is welcome. But very few suggestions on how to do that were provided, apart from increasing public funding and, in Italy, to consider EQF 5 training programmes under the VET umbrella, rather than under the HE one. Besides finance, teacher and tutor prepa-

[2] "A new generation of VET mobility programmes", EfVET, 2018. Available at https://www.efvet.org/wp-content/uploads/2018/09/V02.EfVET-VET-Mobility-paper-_good.pdf. Last successful access on May 16, 2019.

ration and satisfaction are pinpointed as a key factor here: identifying, appointing, training and certifying specific "mobility managers" in schools come for example among the suggestions. Those positions should be included in the school mobility strategy, and given the chance to devote enough time to mobility organisation and management, as well as to other teachers training.

Compared to participants' comments, language learning collected much less favour here, probably because schools believe they can stand language-related problems with their own resources/teachers.

6.3.3. *Suggestions from companies*

Figure 6.3 visually represents suggestions from company representatives. About one out of six comments relate to the preparation of participants, their profiles, their previous experience. Grouping these two comments with others relating to better communication either in English or in the hosting company native language and to be able to work in a multidisciplinary team, we can assume that the pre-departure phase is considered heavily relevant to the success of the mobility experience.

It might be interesting examining those data together with participants' and schools' suggestions: participants ask for a closer control on hosting companies (see Section 6.3.1), schools for "suitable" companies and more work-related learning (Section 6.3.2) and companies for better-prepared participants. Putting everything together, we could see those comments as a call to closer interaction



Figure 6.3. Keyword word-cloud of verbatim suggestions written by company representatives.

between sending organisations and hosting companies, in order to better define mutual offer and demand, and better match expectations and what participants can get in practice. The learning agreement should be the tool for that, and considering it as a true multi-stakeholder tool, it should guide mobility preparation. Borrowing wording from another context, growth in mobility cannot be anything else but a sustainable one, and all players should work in a 'win-win' mind-set.

In other words, one should never forget that there is a "shadow zone" lying in-between the wish for an always increasing number of people in mobility and the need for a quality mobility experience, and that the former cannot be achieved at the expenses of the latter, as this would make the process unsustainable in the long term, due to poor customer satisfaction (companies first, and participants right after).

We consider in the same streamline the second most frequent group of suggestions, about fostering the possibility for learners to access mobility, also coupled with the demand for simplified processes and a longer duration of stay. This is in good accordance with the availability of companies to host more participants in the future. All data show a kind of very 'reasonable' mind-set on the hosting company side, something like: "if you send us better-prepared students, for a period sufficient for them to learn as expected, and you simplify our bureaucratic burden, we are ready to welcome more".

Although 36% of hosting companies claimed for higher funding, the comments on the worthiness of mobility for trainees, highlight the awareness of the companies about the usefulness of mobility 'as such' for the firm, a chance to get in touch with learners bringing new ideas and potential future cooperation.

Last but not least, there is a meaningful number of suggestions related to improving the effective recognition of learning gained through mobility, not only in one's school pathway but also for the purpose of finding a job. Responding companies somehow witnessed that mobility achievements should be made more evident in participants' CVs. One could infer that the same companies would be ready to show higher appreciation for candidates showing mobility experiences in their CVs, but the question was not asked that directly, so this could be a matter for further investigation.

6.4. Considerations and suggestions from "other stakeholders"

Figure 6.4 visually represents suggestions from experts. This is a rich set of material. More than other categories, experts had the advantage to be able to look at the overall picture.

Unsurprisingly, all experts agree on the utility of mobility and quote a list of knowledge and skills brought by a period spent abroad, putting at first place the development of personal and life skills. Experts were keen to provide for sugges-



Figure 6.4. Keyword word-cloud of verbatim suggestions written by "other stakeholders".

tions for improvement, too. The largest quota of suggestions (37.5%) relate somehow to the preparation phase, paying exactly equal attention to participants and staff, with a special focus on language preparation and intercultural training. Also most experts believe that application and management procedures could/should be simplified.

The organisation process itself is carefully surveyed: a higher qualitative standard while choosing hosting organisations is often recalled, again with the option of giving a kind of true 'quality label' either to sending and hosting bodies. The VET Charter could be a tool for that, but is not considered to be that effective at present. At the same time, other experts point out that tools for improvement and good process management are already there, like the *learning agreement*, and the problem is just in training mobility players to use it properly: learning outcomes relating to profiles/qualifications; 'SMART'[3] objectives and indicators; the learning agreement as a document co-created by and shared among all actors; and so on.

Moreover, many experts claim a lack of monitoring, as if mobility was sometimes performed in a 'launch and forget' way, or if, anyway, mismatches between programmed and actually carried out activities were to be considered 'normal'. For precision's sake, experts do not pretend that mobilities should happen exactly

[3] SMART is an acronym and mnemonic summarizing criteria that should guide the definition of objectives. The possibly most common version stays for: Specific, Measurable, Achievable, Realistic, Time-related. The first-known use of the acronym occurs in Doran (1981).

as planned, with no problems, or no flexibility. They simply envisage a not always thorough preparation, insufficient monitoring, and a misunderstood concept of 'flexibility', leading sometimes to accept situations that are mediocre.

This need for continuous attention to mobility processes is clearly identified also by the number of suggestions supporting and recommending the choice of approaching mobility in a strategic way, something that cannot happen by chance or as a lucky bet. That includes the assessment of learning outcomes. It has been noted that sometimes (quote) *"To students it is enough knowing that mobility is equivalent to the internship they would carry out in their regular programme. Apart from that, they do not care about the kind of certificate they will get."* One might easily think that students should be trained to understand also the value of the formal certification they get. But besides that, sending and hosting organisations for sure *should* care not only about the kind of certificate, but also about what kind of assessment to perform. According to stakeholders, however, such assessment is still often way too far aspecific.

A good set of suggestions comes also regarding the post-mobility phase, about how to "reward" students and about further recognition of their achievements. Comments vary from wishing mobility became a full part of learning curricula, to granting additional points in the final diploma/qualification mark to mobile learners, or to even include some kind of salary benefit for job-seekers who successfully attained a mobility period, coupled with corresponding benefits to companies employing them, and, to be certain not to consume such an advantage, to directly include salary or tax reduction benefits in national labour contracts.

As it happened with participants and to a lesser extent with schools and companies, all experts agree on a need for increased mobility funding. Their comments often related to expectations towards the new programme, successor of Erasmus+, coming for the period 2021-2027. For them, the present funding should be increased also by complementing Erasmus+ grants with other sources, either public or private. For about one third of respondents, a specific organisational support should be foreseen for hosting organisations, too.

Finally, many experts consider that EU VET mobility deserves more marketing efforts. The "Erasmus" brand is extremely well known for HE, not yet as much for VET.

Even if it is not easy to sum up the richness of contributions provided for by stakeholders, one word underpins all their answers: quality. Mobility should not be an occasional activity for sending and even hosting organisations, it should not occur randomly for participants. Sending and hosting organisations should set a strategy on mobility – here comes an easy link with the requirements of the VET Charter and the ECHE –, devote resources and time, strive for being part of multi-stakeholder and transnational networks.

6.5. Towards a more effective mobility

The idea of ROI-MOB was launched in 2015, when Erasmus+ was a new-born, experiencing its second year of life. In two years from now, a new Erasmus Programme will be in place.

While carrying out project activities, partners were well aware that their work, mainly conducted bottom-up, could be doomed to remain a dead letter, face-to-face with a brand new, top-designed programme proposal. Today, comparing our findings and conclusions with the recent proposal adopted by the European Commission (2018b) for the successor of Erasmus+ for the period 2021-2027, we can see many common points.

At the end of this pathway, we try to summarise lessons we learnt in the following seven points. They are kept as individual topics for clearness' sake. Nevertheless, as one can easily understand when reading, they are all linked to each other.

I. *EU VET Mobility requires a strategic approach*. Individual EU VET mobility is an occurrence, for those taking it, no matter if learners or staff. However, for organisations who engage in Mobility (we use the capital initial on purpose), this should be considered as a choice and a project, structured as a macro-process, and, as such, carefully planned, carried out, assessed, disseminated, reviewed and improved. Mobility has been acknowledged by all respondents to our questionnaires as a tool for personal and professional development, as a pathway to qualification and employment, as a key to increasing European values, understanding, citizenship, sustainable growth. Whatever their nature, organisations who decide to engage themselves in Mobility should be aware of that. No insuperable mountain, but at the same time nothing to take lightly. For sure one can start slowly, without putting the cart before the horse, for example by partnering with more experienced organisations, or relying upon affordable mobility providers, and maybe with small projects – this should be even easier with the small-scale projects envisaged by the next Erasmus programme. Nevertheless, even the simplest test should be run having in mind the following issues, and with the purpose of creating a strategy for the future. Why are we entering mobility? What do we expect from that? What do we expect for our learners, our staff, our organisation? How much are we ready to invest in terms of time, labour, people, training, failures, ability to dialogue with different stakeholders, change of mind-set, change in the way we deliver our training programmes (at school, at the workplace, dual, whatever)?
Many stakeholders, answering our questions, focused on the profile of the mobility tutor, stressing his/her role. Some other suggested that a new role/profile should be defined and included in school and company organisational charts, the "*mobility manager*". Some other suggested embedding EU VET mobility experiences in curricula for learners and apprentices. Whatever the

choice, entering Mobility should be an act of will. And a proper structure should be set up, in order to deal with it. Internal staff should be trained, possibly at different levels, to deal with mobility: managers, teachers, trainers, tutors, administrative staff. A strategical operational plan should be drafted, in order to foresee investments and calculate the return. And so on. This immediately brings us to the next point.

II. *EU VET Mobility still requires promotion, information and training*. At many levels, starting from the European one and going down to the single organisations, Erasmus+ mobility has been advertised and promoted through the years. Despite that, the 'market' is still craving after information, templates, guidelines, supporting tools for all phases of mobility, from inception to planning, to application, to organisation, to reporting. More precisely, what our research pointed out is that '*people need to know that the information is there, and where it is*'.

Paradoxically, so many European tools are available to those aims and can be found on the websites of the European Union, the European Commission and their agencies. Many were delivered by the EU itself, and many as the output of EU projects. Organisations wishing to enter, or to reinforce their engagement in Mobility should be aware of them. This is still a weak point: very few organisations know and exploit them, apart from complying with required duties. ECVET – one for all – is still poorly known and under-exploited. So, the issue could be twofold: more information is required on the one side, and mobility players should be more pro-active in looking for existing information on the other side.

In the view of our experts, training could bridge this gap and bring all mobility players to a better knowledge and exploitation of existing information and tools. To be clear, not all mobility players are unaware of the available resources: those who are seriously approaching Mobility as a strategy know them very well and take advantage of them. But, if the European goals envisage tripling the number of participants in mobility activities, two possible scenarios come up:

– a few 'professional' players possess the skills to manage large amounts of grants, and act as 'service providers', by relieving schools and companies of the organisational burden;
– more organisations learn about Mobility, train their staff, exploit quality and management tools; if they do not feel strong enough to apply individually to mobility grants, they can group up in mobility consortia.

From the experts' point of view, the second choice is obviously the best: no matter being sending or hosting, being a school, a company or an intermediary organisation, the chance to deal with aware, trained and skilled people can favour better – that is, better responding to all involved players' needs – mobilities.

In conclusion, according to contributions collected:

- institutional bodies (the European Commission, the National Agencies, the National Ministries for Education, Labour and Youth, etc.) should continue and improve their information campaigns, targeting not only potential participants, but also new mobility players;
- experienced mobility players (schools, companies, intermediary organisations) should continue and improve their information and dissemination activities for potential participants and their families, but also stand as coordinators of mobility consortia, where less experienced members could get 'trained' on-the-job by them.

Let us remind here that the ROI-MOB indicator and tools are conceived to play a role in this scenario. In fact, being able to provide learners, families, companies with data demonstrating the value and usefulness of VET mobility is an asset in attracting more participants and in convincing entrepreneurs and managers that it is worthwhile investing in this activity. From this viewpoint, answers provided for by experts reassured us about the goodness of our choice.

III. *EU VET Mobility requires a balanced quality/quantity approach*. Mobility works, everybody knows. In our survey, 97.2% of participants would recommend a friend to take a similar experience. More, the current number of grants was rated among the most perceived obstacles to mobility by either sending schools and companies (see Chapter 5). The above-mentioned proposal of the European Commission for the successor of Erasmus+ supports those expectations, by envisaging twice more money (about 30 billion Euros for the period 2021-2027, compared to some 14.7 billion for the previous period) to fund three times more mobilities (12 million people, compared to some 4 million for the previous period). At the same time, the need for higher quality performance increases: once the 'basic' needs for an experience abroad and the novelty of exploring a new country and culture are fulfilled, participants demand rewarding VET experiences, not simply relating to their training curricula, but also matching their knowledge and skills, or even challenging them. Similarly, sending organisations require more curriculum- and work-related experiences, and hosting organisations more prepared incoming learners and more targeted learning agreements. Finding the right balance between quality and quantity is *the* task, in order to ensure the long-term sustainability of a Mobility approach and to correctly dimension one organisation's efforts and investment in Mobility itself. Defining this balance is crucial in order to put in practice a strategic approach to Mobility, and is strongly related to all subsequent points in this section.

For precision's sake, the balance should not be found just between quality and quantity. There is a third pole affecting this equilibrium, highlighted by some stakeholders, nevertheless relevant: innovation. Today, a qualitatively good mobility project that managed to be approved once, could be replicat-

ed many times, and always be successful. Experience proves that many such 'clones' exist and that in several cases preparing a new mobility project is just a 'copy-and-paste' exercise. Along time, this dilutes quality into quantity even though mobility recipients are different from year to year. On the other end, innovation brings freshness, novelty, room for experimentation and improvement. Obviously, innovation for innovation's sake is useless, and forcing applicants to search innovation at any cost would lead to a mere 'dexterity exercise'.

IV. *EU VET Mobility requires a 'win-win' multi-stakeholder approach*. Each player category highlighted some 'faults' attributable to one or more (other) categories. An obvious risk intrinsic to such an attitude is mutual mistrust, and consequently behaving 'against' other players. Moreover, answers to questionnaires showed that the less, or the later, players started co-operating, the worse the outcomes and everybody's satisfaction.

Experience shows that co-creation of mobility projects is a key to success. Partners and respondents acknowledge that, at present, a number of regulations and procedures are required for successful project design, and that often, struggling to comply with them, one could lose perspective. In VET Mobility, such a perspective is a correct and profitable relationship between education and work, aimed at improving learners' skills in favour of personal development *and* employment. Hence, learning agreements should be devised jointly – not just signed – by the sending and the hosting organisations and the participants, and should be completed before participants' departure, learning outcomes should be drafted in accordance with the individual progress, training pathway, with the sending organisation expectations and the hosting organisation possibilities and expectations. Suggestions by schools, companies and other stakeholders confirm that these issues are even more relevant than financial ones. Actually, when the debate between sending and hosting organisations stays at the financial level, very often it implies that mobility is seen as a consumable, a single-use product. On the opposite, when it moves to discuss goals, tools and solutions, it favours longer-term co-operation and more valuable benefits for all players. As our experts highlighted, every actor in this process has some assets to bargain.

V. *Funding plays a role in the 'Mobility game'*. Each respondent category asked for more funding. This is perhaps a natural drift, especially when money is generically expected by a third, institutional, public party. True it is that very few asked generically for more money: most indicated precisely where they would allocate it. The following came up:
   – There is no single type of mobility. Sending a whole classroom for two weeks in learning mobility at a VET school abroad, or a single learner at a work experience in a company for three months, or an apprentice at a foreign branch of the same company is a completely different business.

- Hence, money for organisational support is often not enough, especially for some kinds of mobility, and especially when compliance with the quality requirements set by the Erasmus+ calls and National Agencies must be assured. Easy reasoning shows that organisational funding for sending, monitoring, supporting 20 single learners to 20 companies in individual working experiences[4] is funded exactly like sending a classroom of 20 participants together at a hosting VET school abroad. The work required is definitely not comparable. And again, here comes the reasoning about the balance between quantity and quality, and questions arise, like: are individual work experiences less relevant than group learning activities? Obviously not, so perhaps different funding rates (and available total budget) could be foreseen for different types of mobility. The new Erasmus proposal somehow acknowledges this issue, even if the only explicitly quoted change in the amount of funding seems to relate to higher education, and to the allowance rates for participants.
- In any case, Mobility is not and should not be meant as a money-making activity: public funding is correctly and obviously targeted to offer participants the chance to have a mobility experience. Therefore, other funding sources should be searched and used, to complement the EU grant. This already happens in some cases: for example in Germany and in countries where a dual VET system is in place, companies are paying apprentices on their own, in addition to the EU grant; or, in other cases, some VET providers managed to involve local donors to supplement the Erasmus+ contribution. One suggestion coming from experts was, to try and devise some guidelines to ease this public-private partnership in favour of mobility fundraising.
- Erasmus+ introduced the unit cost budgeting system. This brought lights and shadows, and in our respondents' opinions, it is not clear if pros are more and more relevant than cons. Meant as a measure for simplification, unit costs again seem to go for quantity rather than for quality, and have not been updated along with the seven-year duration of the present Programme, while the cost of life did very much.

VI. *Assessment and certification of competences gained through Mobility are still an issue*. Experts from all partner countries claimed that assessment and certification of competences acquired or improved through mobility requires further attention. According to the majority of those who commented on this issue,

[4] Some experts highlighted that one specific occurrence of this problem relates to learners attending EQF 5 training programmes. VET mobility for EQF level 5 are financed under Higher Education, although the majority of the target group attend a VET school or training centre. This might create unjustified inequality among learners in the same training centre.

too often the emphasis is on the '*what*' and '*when*', rather than on the *'why'* and '*how*'. Participants often tend to look at mobility like an adventure. The younger they are, the more they seem not really to care about the outcomes of the mobility experience, rather to be interested in the occurrence itself. Sending organisations declare they are often very engaged in performing all tasks (duties) required by the financing procedures not to lose the grant: so, including substantial, reasoned, tailor-made learning outcomes in the learning agreement is sometimes pushed into the background. In addition, it is well known that learning agreements are often completed when the mobility experience is already running, for practical reasons. This does not encourage the hosting organisations to pay proper attention to the assessment phase. With a kind of 'domino' effect, evaluations are vague and do not provide for real measurement, the Mobility Certificate becomes just a compulsory document for the National Agencies' interest, Europass becomes void. Last but not least, the evaluation form on the Mobility Tool is still too generic to account for the mobility experience.

Recommendations coming from our experts are clear. Consistently with the above-mentioned 'win-win' multi-stakeholder approach, *learning agreements* should be prepared jointly by participants, sending organisations, hosting organisations. They should be looked at as a tool accompanying all phases of mobility, whether in the ECVET circle or not. Learning outcomes should be defined and agreed upon in due advance, expressed with terms relating to qualifications and job profiles, coming complete with indicators and ways to assess them. At the same time, hosting bodies should improve their ability to assess competences. Many experts remark, especially for companies, that proper competence assessment is challenging and time-demanding. More, for companies, it is often easier to assess and certify progress in technical, rather than in soft- or life-skills. According to our experts, two additional kinds of tools could be used to that aim:

– the very ROI-MOB questionnaires could support the whole process, and favour the reporting on the mobility experience, as they can measure the 'return on investment' for all actors involved;
– further, specific tools could/should be developed, in order to make it easier and faster to measure participants' achievements in soft-skills.

The above are in full accordance with the research results in CIMO (2014): *"We must make the competences resulting from international experiences visible. We need to recognise the learning outcomes of international mobility and describe them better. We should talk about broader learning outcomes that will cover other competences than the traditional language skills, intercultural competences or tolerance. This wider concept will also encompass productivity, resilience and curiosity. In particular, education institutions and authorities need to*

engage in a more thorough dialogue with employers in order to make the hidden competences visible and understood."[5]

VII. *Committed Intermediary Organisations can play a relevant role.* As discussed in Chapter 1, organisations involved in mobility often turn to their parties in order to manage mobility activities. This happens either by participating in a Mobility Consortium led by another member, or by resorting to an external 'service' provider. In the following, we will indicate such consortium leader or external body as *intermediary organisation or mobility provider* (see also Section 6.2.3). Respondents to our survey declared that schools and companies outsource services to mobility providers either because they are too inexperienced, or they have too few learners to send to reach a 'critical mass' for applying for funding alone, or due to the difficulty of finding enough suitable hosting organisations, especially when sending learners on individual mobility in companies abroad, or, to a lesser extent, for other reasons. At present, the attitude and behaviour of Erasmus+ National Agencies towards mobility providers greatly vary from country to country, ranging from encouragement and acceptance, to discouragement or in any case to the impossibility of act as applicants, except that they impart teachings/trainings in the field of KA102 actions. This point is strictly linked to what we discussed above about two possible scenarios regarding information and promotion. The experts' contributions acknowledge the existence and functioning of mobility providers as a matter of fact, and recommend to distinguish between 'committed' providers, that is, those delivering quality services, in line with the EU and Erasmus+ values and principles, supporting individual schools/companies, favouring sending and hosting organisations' staff capacity building, etc., and providers who are just looking for easy profitable business. Some experts recommend drafting some kind of quality label for mobility providers, an accreditation to be checked and updated on a regular basis.

[5] The above opens up the potential for a future further survey. What can an abroad internship offer to a student or an apprentice? Is it a "job for life" or is it a provisional step toward some undefined improvement of her/his CV? Indeed, there is a disproportion between the initial resources shown by participants at the candidate stage and resource used/developed during the experience. The internship is offered as an experience that brings to a specialisation, whilst it is for most students their first professional experience. Hence, duties can be no more than an initiation stage oriented to a job that the intern should perceive as representative of, and not the final duties of her/his job. Since those duties have to produce results also for the hosting company, the intern should be made aware that her/his initial skills imply just simple duties. What is obvious to an adult worker may not be the same to a young one who looks for the first time to labour from an ideal perspective, and projects on it her/his expectations independently they are realistic or not.

6.6. Use and possible future development for the ROI-MOB model

Through a three-year common work, partners of ROI-MOB investigated a number of issues regarding mobility and the measurement of its effects on participants, schools and companies. Besides a broader and deeper understanding of each other country systems for EU VET mobility and of the phenomenon itself, what did those efforts produce?

A first answer is *an indicator* to measure the balance between inbound resources and outbound benefits. Calculating that number requires, for a single mobility experience, a contribution by the three major actors involved: the participant, the sending organisation, and the hosting organisation. Each of them should take and complete the corresponding questionnaire. By feeding these three evaluations into the formula described in Chapter 1, a single number is calculated, in a range from 0 to 1, or 0% to 100%. Please note that:

– The evaluation by all three actors is required: in the event of one failing, the indicator cannot be correctly computed; this comes from the precise will of taking into account contributions coming by all subjects involved in a specific mobility experience;[6]
– Even if the number physically used in the formula for calculating the indicator corresponds to the answer to a specific question in each category questionnaire, simply detaching that question from the full sequence, answering to it, and feeding that value into the indicator formula will not lead to a correct result. As is intuitive, a judgement is the result of a series of reflections on correlated topics. Thus, judgements on the same issue may differ if the pathways that led to them differed. Indeed, each pathway sketches a mental map that may condition the judgement. In order to make the evaluations comparable in time and space, we propose to keep fixed as long as possible the pathways of the ROI-MOB questionnaires that led to judgements of participants, schools and companies.

The indicator itself is just a number. Whatever it is, is it a good, meaningful one, or not? To answer this question, we should recall that, as the word says, the indicator is a value *pointing* to something, and picturing – even if partially and approximately – a phenomenon. We suggest in the following some possible axes for investigation.

a) *Absolute value*. Given that 0 is the minimum and 1 the maximum possible value, one could assume that the higher the indicator, the better. This is generally true and could work as a thumb rule or as a starting point. It is very generic information, however, and still does not answer a set of questions, like: is this value representative of different situations? Alone, is it *enough*? Should I improve it? How?

[6] Also families are involved in the process, but we assume that their contribution is included in the participant's. See Section 3.2.7 for details.

b) *Time axis*. Suppose that my organisation's ROI-MOB indicator level is increasing this year, compared to last year: I can assume I am improving. Collecting and keeping data in time can show history and trends, and can help setting goals for the future. So, if we are coming from a low value, perhaps we can target a huge improvement for next time, and should do that by focussing on core issues. If, instead, we already show very high figures, besides not losing that standing, we could devote our efforts to fine-tuning processes. More broadly, collecting and analysing data through a time series could help us define what our target value can be or, in other words, could help us regularly review our mobility strategy. Of course, 10 is the maximum, but we can reasonably assume that random factors could prevent us from reaching it anyway. Or, considering our mobility strategy, we could decide that 8, or 7, or whatever is a good attainment for us at present or in the next short-, medium-, long-term. All in all, it is up to us to decide – according to our resources, needs, constraints, goals – what our target value should be.
c) *Promotional/advertising axis*. Survey data showed that mobility actors are always searching for information, assurance, reliability. The ROI-MOB indicator could be exploited to make one organisation's stakeholders aware of results achieved in mobility. Similarly to figures in a company Corporate Social Responsibility report, the indicator can advertise how good we are in performing mobility, by showing the satisfaction perceived by our 'customers'. This could also provide valuable data to substantiate one's competence and value, when submitting applications for new mobility projects.
d) *Competitiveness axis*. The ROI-MOB indicator is public. Any EU VET organisation involved in mobility can use it. If we imagine VET players displaying their yearly ROI-MOB indicator on their websites, one can easily compare own achievements with others'. When searching for a mobility partner, one could get a quick idea about the performance level of an organisation in mobility. Among co-operating organisations, for instance, belonging to the same mobility consortium, one could even imagine contests and awards for best-performing partners, based on the indicator.

In the above, we imagined to exploit the indicator 'as it is'. But, due to its nature of composite indicator, we can also take advantage of its composition, as follows:

e) *Partner choice*. As our database grows up, we can use the indicator for selecting best-performing partners or for encouraging low performing partners in improving their contributions. We could, for example, consider data relating to a specific sending or hosting organisation, or to a given set of participants (by year, by school, etc.).
f) *Enlarging the network of co-operating organisations*. In many partner experience, and also based on experts' contributions, convincing more companies to get involved in mobility is an issue. The ROI-MOB indicator could be used to demonstrate to potential new companies the added value of mobility recog-

nised by already engaged ones. In fact, expecially in small and medium sized enterprises, experience shows that a number of decisions are driven by a need either for imitation or for competitiveness. Exploiting data and conclusions coming from other companies – that is from peers – is likely to be a very effective tool to attract new players in the "mobility game".

g) *Quality improvement*. The indicator can be computed for a single mobility occasion, or for a set of homogeneous occasions. For instance, for a project, or for an year of activity of an organisation or a country. It may measure the quality of a sending or hosting organisation, detect its weaknesses, if any. The indicator and the data-collection pathway may help us discussing with them how we could improve our co-operation, by considering obstacles and points of strength. Or, we could consider a given time period and analyse data regarding mobilities managed by specific internal staff, to draw clues for improvement.

All the above could also be matched and crossed. For example, we could consider a time series for a given set of actors, answering questions like: which was the overall indicator of satisfaction of hosting companies we worked with, in the last 3 years?

Besides and beyond the indicator, our efforts produced a *set of questionnaires*. They are a valuable repository of information, offering plenty of possibilities: they can for instance be brought on-line, used on a regular basis, with their results collected automatically. Thanks to their detailed structure, they can provide for sound support to our mobility procedures, for example in checking our positioning against sections in the ECVET circle, quickly showing where further improvement can occur or is required. We consider the annexed version of questionnaires robust enough to be used on a broader scale. Nevertheless, as already mentioned in previous chapters, data analysis brought partners to suggest some improvements. This will be food for future work for us, and should be reminded by those wishing to take advantage from the ROI-MOB tools.

As described in Chapter 3, the indicator is flexible enough to be used through years. Nevertheless, due to project ROI-MOB constraints, it is based on a specific survey, carried out in specific target countries and in the context of the specific EU programme for mobility running in these specific years. To overcome these limits, and as a possible challenge for the future, one could imagine to enrich this database any time a new questionnaire is filled in and added. As a consequence, the weights used in the formula for calculating the indicator could be computed and updated for example every second or third year. The other way round, this could threaten the possibility to compare time series of data.

Though, once people agree on both the indicator structure and the computational process, the estimates evaluating the mobility experiences in different times and from different areas can be compared as if they had a common basis. Of course, this is a valid procedure if the questionnaire used for data collection contains at least the above suggested core questions.

We close our work as we started, posing questions. The following questions aim at starting a new research on a higher basis than those from which we started while drafting the ROI-MOB project:

1. How to modify regulations in order to limit the administrative burden placed by the European regulations to schools/training centres and companies?
2. Can schools and companies do more to make students and apprentices aware of how valuable working abroad is to them personally and professionally?
3. How could local bodies and economic foundations be more involved in order to raise schools' budget for VET mobility funding?
4. How convincing the families to attenuate their resistance to offspring mobility?

APPENDIX

Methodological notes and additional data

A.1 Analysis of dominance data

The analysis of dominance data is a multivariate technique referring to data organised in a dominance matrix, **P**, namely a matrix whose generic (*a, b*) cell contains the frequency with which respondents stated that item *a* dominates item *b*. We assume that *a* dominates *b* in a respondent's judgement if s/he either rated or ranked *a* before *b* or stated s/he preferred *a* instead of *b* for a given purpose.

The square matrix $\mathbf{P} = \{P_{ab}\ (a \neq b = 1, \ldots, A;\ P_{aa} = 0$ for all *a, b*$\}$ has cardinality *A*, number of items, and is skew-symmetric, that is $P_{ab} = 1 - P_{ba}\ (a \neq b = 1, \ldots, A)$. With reference to the estimates obtained through the method of dominance analysis in Chapters 3 and 4, the items are, respectively, the types of benefits and the types of problems experienced by the actors of mobility, e.g. participants, schools and companies.

Now let us show a different method to create a dominance matrix. Suppose a sample of *n* people, which was randomly and independently selected, expressed his or her preferences on a certain topic by ranking from 1 to *A* a set of *A* items. With reference to the estimates in Section 3.2.5, the items are the possible beneficiaries of mobility. The cell values of matrix **P** can be estimated with the following formula:

$$P^{*}_{ab} = \sum_{i=1}^{A-1} f(a > b | a = i)\, W_i \quad (a \neq b = 1, \ldots, A), \tag{A. 1}$$

where:

- $f(a > b|\ a = i)$ denotes the relative number of times beneficiary *a* is at rank *i* and beneficiary *b* is at a following rank, say from (*i*+1) to *A*; this frequency is relativised with the total number of comparisons between beneficiaries;
- W_i is a weight associated to the frequency of the comparisons between beneficiaries *a* and *b* when beneficiary *a* is at rank *i* (*i*=1, .., *A*-1).

P^*_{ab} requires the following refinement for it to become an element of the $\boldsymbol{P}$ matrix:

$$P_{ab} = P^*_{ab}/(P^*_{ab} + P^*_{ba}) \qquad (a \neq b = 1, \ldots, A)$$

so that $P_{ab} = 1 - P_{ab}$. This property makes matrix **P** skew-symmetric. If, in addition, $P_{aa} = 0$, matrix $\boldsymbol{P}$ is a dominance matrix.

The measure of preference for each one of the A items is a function of the right eigenvector associated to the largest positive eigenvalue of the dominance matrix. The first right eigenvector, $\boldsymbol{w}$, corresponding to the first positive eigenvalue, γ, of matrix **P** is estimated as follows:

$$\boldsymbol{Pw} = \gamma \boldsymbol{w}, \tag{A. 2}$$

subject to the constraint $\boldsymbol{w'w} = 1$. This eigenvector estimates simultaneously the importance of the A alternatives, given the n observed rankings. The estimates of the dominance matrix according to participants, schools and companies and of its eigenvector are presented in Table A.1, the estimates that include also the judgements expressed by "other stakeholders" (see Section 1.6.4 for a more detailed definition of this category) are presented in Table A.2. For each matrix, the estimates of the eigenvector are described in the row before the last of the corresponding table.

Finally, the estimates can be normalised to add up to one. Formally, the normalised estimate, w^*_a, is given by:

$$w^*_a = \frac{w_a}{\sum_j^A w_j} \quad (a = 1, \ldots, A).$$

These estimates of weights (last row of Tables A.1 and A.2) are to be attached to the average evaluations computed with the responses obtained from the mobility stakeholders.

The analysis of dominance was applied also to data on soft skills improvement as an effect of mobility collected at participants. Participants' improvements in soft skills were elicited asking them to select two out of eight skills they perceived have improved the most as an effect of mobility and then to select the skill that improved the least. Comparing in pairs all skills, it is possible to construct a 'dominance matrix' in which all the pairwise relationships between soft skills are ordered and then the position of the skills on a continuum is estimated by extracting the right eigenvector corresponding to the first eigenvalue, as described above (Formula A.2).

Table A.1. Dominance matrix and its decomposition between the possible beneficiaries of Erasmus+ VET mobility according to the main actors of mobility processes. The matrix is the average of the dominance matrices of participants, schools and companies.

	Participants	Schools & training c.	Companies	Labour market	EU as an institution
Participants	0	0.896	0.888	0.946	0.906
Schools, training	0.104	0	0.509	0.670	0.710
Companies	0.112	0.491	0	0.696	0.699
Labour market	0.054	0.330	0.304	0	0.581
EU as institution	0.094	0.290	0.301	0.419	0
Eigenvalues	*1.624*	*-0.496 +0.02i*	*-0.496 -0.02i*	*-0.398 +0.00i*	*-0.234 +0.00i*
First eigenvector	*0.738*	*0.396*	*0.398*	*0.272*	*0.257*
Weight estimates	*0.358*	*0.192*	*0.193*	*0.132*	*0.125*

Table A.2. Dominance matrix and its decomposition between the possible beneficiaries of Erasmus+ VET mobility according to the main actors of mobility processes. The matrix is the average of the dominance matrices of all mobility stakelolders.

	Participants	Schools & training c.s	Companies	Labour market	EU as an institution
Participants	0	0.922	0.916	0.960	0.929
Schools, training	0.078	0	0.513	0.637	0.725
Companies	0.084	0.487	0	0.647	0.681
Labour market	0.040	0.363	0.353	0	0.614
EU as institution	0.071	0.275	0.319	0.386	0
Eigenvalues	*1.592*	*-0.495 +0.03i*	*-0.495 -0.03i*	*-0.421 +0.00i*	*-0.181 +0.00i*
First eigenvector	*0.754*	*0.384*	*0.378*	*0.285*	*0.245*
Weight estimates	*0.369*	*0.188*	*0.185*	*0.139*	*0.120*

The dominance matrix and the main results of is analysis are presented in Table A.3. The estimates of the eigenvector are presented in the row before the last and those of weights in the last row of Table A.3.

Table A.3. Dominance matrix between soft skills of participants improved by mobility.

Skill	1	2	3	4	5	6	7	8	Total
1	0	0.509	0.348	0.351	0.395	0.400	0.668	0.192	2.863
2	0.491	0	0.360	0.369	0.416	0.341	0.678	0.211	2.866
3	0.652	0.640	0	0.508	0.571	0.478	0.778	0.324	3.951
4	0.649	0.631	0.492	0	0.563	0.472	0.775	0.322	3.904
5	0.605	0.584	0.429	0.437	0	0.419	0.759	0.263	3.496
6	0.600	0.659	0.522	0.528	0.581	0	0.801	0.347	4.038
7	0.332	0.322	0.222	0.225	0.241	0.199	0	0.115	1.656
8	0.808	0.789	0.676	0.678	0.737	0.653	0.885	0	5.226
E. value	*3.238*	*-0.272*	*-0.499+ +0.062i*	*-0.499- 0.062i*	*-0.478*	*-0.491*	*-0.500 + 0.001i*	*-0.500- -0.001i*	=
E. vector	*0.282*	*0.283*	*0.382*	*0.378*	*0.338*	*0.391*	*0.177*	*0.503*	=

1: Mental agility; 2: Team-working; 3: Self-confidence; 4: Autonomy, self-confidence; 5: Problem solving; 6: Taking responsibility; 7: Commitment to school/company; 8: Intercultural skills.
Source: Adapted from Zoccarato (2018).

The list of possible benefits as perceived by schools included 14 items, administered in random order. Benefits have been elicited with a stepwise best-worst technique structured in four steps. The procedure was as follows:

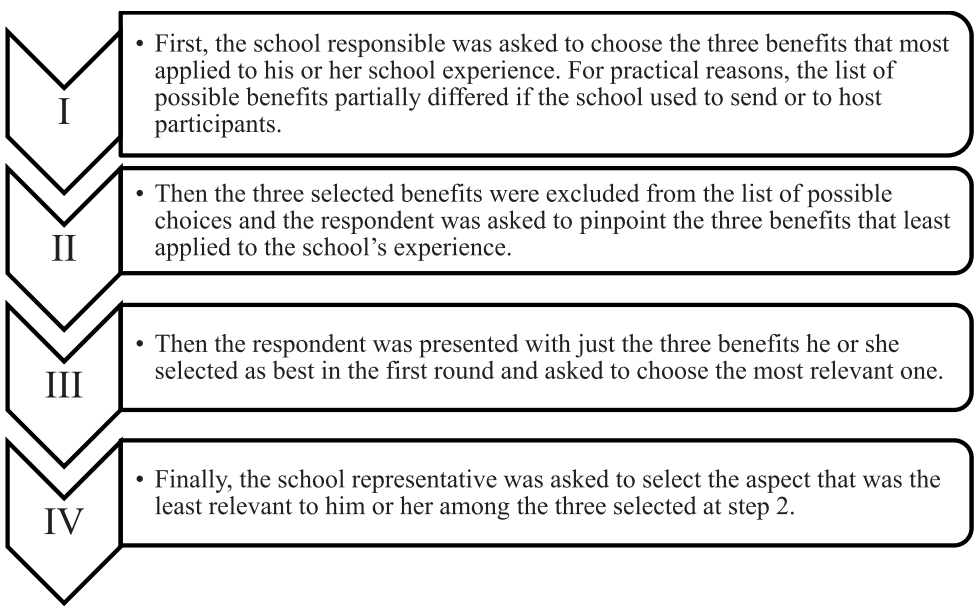


Table A.4. Dominance matrix and analysis of the possible benefits from mobility regarding sending schools and training centres.

Benefit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
1	0	0.978	0.950	0.485	0.837	0.964	0.931	0.930	0.936	0.956	0.836	0.767	0.804	0.740	11.114
2	0.022	0	0.409	0.054	0.159	0.476	0.409	0.385	0.385	0.375	0.182	0.089	0.131	0.130	3.206
3	0.050	0.591	0	0.049	0.259	0.571	0.500	0.464	0.464	0.467	0.196	0.133	0.203	0.165	4.112
4	0.515	0.946	0.951	0	0.859	0.958	0.951	0.970	0.950	0.938	0.849	0.731	0.837	0.755	11.210
5	0.163	0.841	0.741	0.141	0	0.784	0.760	0.722	0.722	0.731	0.467	0.308	0.412	0.333	7.125
6	0.036	0.524	0.429	0.042	0.216	0	0.435	0.400	0.400	0.391	0.196	0.110	0.167	0.122	3.468
7	0.069	0.591	0.500	0.049	0.240	0.565	0	0.467	0.467	0.464	0.208	0.133	0.175	0.156	4.084
8	0.070	0.615	0.536	0.030	0.278	0.600	0.533	0	0.500	0.500	0.262	0.161	0.200	0.141	4.426
9	0.064	0.615	0.536	0.050	0.278	0.600	0.533	0.500	0	0.500	0.262	0.161	0.190	0.141	4.430
10	0.044	0.625	0.533	0.062	0.269	0.609	0.536	0.500	0.500	0	0.236	0.161	0.209	0.185	4.469
11	0.164	0.818	0.804	0.151	0.533	0.804	0.792	0.738	0.738	0.764	0	0.353	0.440	0.375	7.474
12	0.233	0.911	0.867	0.269	0.692	0.890	0.867	0.839	0.839	0.839	0.647	0	0.589	0.539	9.021
13	0.196	0.869	0.797	0.163	0.588	0.833	0.825	0.800	0.810	0.791	0.560	0.411	0	0.439	8.082
14	0.260	0.870	0.835	0.245	0.667	0.878	0.844	0.859	0.859	0.815	0.625	0.461	0.561	0	8.779
E. value	5.218	0.591	-0.496 +0.075i	-0.496 -0.075i	-0.499 +0.041i	-0.499 -0.041i	-0.497 +0.049i	-0.497- 0.049i	-0.499	-0.498 +0.012i	-0.498 -0.012i	-0.491 +0.003i	-0.491 -0.003i	-0.343	=
E. vector	0.448	0.112	0.143	0.453	0.257	0.122	0.142	0.152	0.153	0.155	0.271	0.341	0.297	0.331	=

1: Participants' language skills; 2: Teamwork efficiency; 3: Participant's innovation skills; 4: Motivating to learning; 5: Intergenerational exchange; 6: Assessing competencies; 7: Strengthening relationships toward school; 8: Assessing potential talents; 9: Improving staff skills; 10: Knowledge of European tools; 11: Innovating teaching; 12: Broadening mind-set; 13: Enhancing reputation; 14: Improving international collaboration.

Table A.5. Dominance matrix and analysis of the possible benefits from mobility regarding hosting schools and training centres.

Skill	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
1	0	0.814	0.952	0.620	0.450	0.889	0.951	0.826	0.848	0.614	0.448	0.465	0.309	0.554	8.740
2	0.186	0	0.867	0.286	0.176	0.750	0.857	0.571	0.632	0.325	0.189	0.214	0.116	0.273	5.442
3	0.048	0.133	0	0.036	0.042	0.200	0.400	0.167	0.2	0.069	0.022	0.043	0.029	0.03	1.419
4	0.380	0.714	0.964	0	0.339	0.871	0.931	0.750	0.794	0.512	0.355	0.369	0.236	0.455	7.670
5	0.550	0.824	0.958	0.661	0	0.936	0.939	0.833	0.896	0.651	0.5	0.508	0.368	0.61	9.234
6	0.111	0.250	0.800	0.129	0.064	0	0.625	0.273	0.385	0.156	0.082	0.083	0.07	0.111	3.139
7	0.049	0.143	0.600	0.069	0.061	0.375	0	0.231	0.273	0.038	0.061	0.043	0.043	0.083	2.069
8	0.174	0.429	0.833	0.250	0.167	0.727	0.769	0	0.556	0.242	0.154	0.157	0.076	0.205	4.739
9	0.152	0.368	0.800	0.206	0.104	0.615	0.727	0.444	0	0.212	0.104	0.106	0.086	0.179	4.103
10	0.386	0.675	0.931	0.488	0.349	0.844	0.962	0.758	0.788	0	0.289	0.364	0.233	0.438	7.505
11	0.552	0.811	0.978	0.645	0.500	0.918	0.939	0.846	0.896	0.711	0	0.508	0.368	0.594	9.266
12	0.535	0.786	0.957	0.631	0.492	0.917	0.957	0.843	0.894	0.636	0.492	0	0.328	0.615	9.083
13	0.691	0.884	0.971	0.764	0.632	0.930	0.957	0.924	0.914	0.767	0.632	0.672	0	0.77	10.508
14	0.446	0.727	0.970	0.545	0.390	0.889	0.917	0.795	0.821	0.562	0.406	0.385	0.23	0	8.083
E. value	5.037	0.655	-0.492+ 0.108i	-0.492 -0.108i	-0.499+ 0.055i	-0.499- 0.055i	-0.499 +0.037i	-0.499- 0.037i	-0.499	-0.499 +0.012i	-0.499 -0.012i	-0.472 +0.054i	-0.472 -0.054i	-0.267	=
E. vector	0.333	0.177	0.044	0.278	0.359	0.093	0.060	0.149	0.126	0.270	0.360	0.351	0.430	0.298	=

1: Participants' language skills; 2: Teamwork efficiency; 3: Participant's innovation skills; 4: Motivating to learning; 5: Intergenerational exchange; 6: Strengthening relationships toward school; 7: Attracting potential talents; 8: Improving staff skills; 9: Knowledge of European tools; 10: Innovating teaching; 11: Broadening mind-set; 12: Enhancing reputation; 13: Improving international collaboration; 14: Collaboration with local stakeholders.

Table A.6. Dominance matrix and analysis of the possible benefits from mobility derived from preferences expressed by sending companies.

Skill	1	2	3	4	5	6	7	8	9	11	12	13	14	15	Total
1	0	0.600	0.968	0.906	0.879	0.767	0.938	0.567	0.821	0.968	0.833	1	0.697	0.882	10.826
2	0.400	0	0.963	0.893	0.862	0.676	0.962	0.500	0.733	0.963	0.75	1	0.68	0.923	10.305
3	0.032	0.037	0	0.200	0	0.067	0.333	0.037	0.077	0	0.091	0.5	0.056	0.2	1.630
4	0.094	0.107	0.800	0	0.444	0.188	0.750	0.077	0.214	0.8	0.25	0.8	0.19	0.5	5.214
5	0.121	0.138	1.000	0.556	0	0.263	0.714	0.138	0.267	1	0.333	0.833	0.071	0.556	5.990
6	0.233	0.324	0.933	0.812	0.737	0	0.875	0.227	0.542	0.933	0.625	0.933	0.444	0.812	8.430
7	0.062	0.038	0.667	0.250	0.286	0.125	0	0.038	0.143	0.667	0.167	0.667	0.059	0.333	3.502
8	0.433	0.500	0.963	0.923	0.862	0.773	0.962	0	0.719	0.963	0.786	0.963	0.655	0.923	10.425
9	0.179	0.267	0.923	0.786	0.733	0.458	0.857	0.281	0	0.923	0.571	0.923	0.4	0.786	8.087
11	0.032	0.037	0.000	0.200	0.000	0.067	0.333	0.037	0.077	0	0.091	0.5	0.056	0.2	1.630
12	0.167	0.25	0.909	0.750	0.667	0.375	0.833	0.214	0.429	0.909	0	0.909	0.37	0.714	7.496
13	0.000	0.000	0.500	0.200	0.167	0.067	0.333	0.037	0.077	0.5	0.091	0	0.056	0.2	2.228
14	0.303	0.32	0.944	0.810	0.929	0.556	0.941	0.345	0.600	0.944	0.63	0.944	0	0.882	9.148
15	0.118	0.077	0.800	0.500	0.444	0.188	0.667	0.077	0.214	0.8	0.286	0.8	0.118	0	5.089
E. value	4.674	0.732	-0.652	-0.514 +0.179i	-0.514 -0.179i	-0.500 +0.0844i	-0.500 -0.084i	-0.501 +0.014i	-0.501 -0.014i	-0.497 +0.043i	-0.497 -0.043i	-0.362 +0.132i	-0.362 -0.132i	0	=
E. vector	0.448	0.411	0.054	0.156	0.178	0.304	0.097	0.419	0.287	0.054	0.258	0.059	0.34	0.151	=

1: Language skills; 2: Apprentice motivation; 3: Assessing apprentices; 4: Attracting potential talents; 5; Employees innovation skills; 6: Intergenerational exchange; 7: teamwork efficiency; 8: Employees flexibility; 9: Strengthen relationships with company; 11: Reducing conflicts; 12: Broadening mind-set; 13: Increasing production; 14: International collaboration; 15: Enhancing reputation. (*) Benefit number 10 ('Reducing extra time work') was excluded because of null-dominance frequencies.

Table A.7. Dominance matrix and analysis of the possible benefits from mobility derived from preferences expressed by hosting companies.

Skill	1	2	3	4	5	6	7	8	9	10	11	Total
1	0	0.585	0.648	0.293	0.598	0.74	0.806	0.581	0.489	0.496	0.624	5.860
2	0.415	0	0.579	0.271	0.514	0.663	0.744	0.495	0.393	0.411	0.538	5.023
3	0.352	0.421	0	0.186	0.439	0.585	0.685	0.413	0.333	0.345	0.465	4.224
4	0.707	0.729	0.814	0	0.752	0.862	0.893	0.742	0.683	0.678	0.776	7.636
5	0.402	0.486	0.561	0.248	0	0.662	0.735	0.477	0.398	0.405	0.524	4.898
6	0.26	0.337	0.415	0.138	0.338	0	0.607	0.34	0.265	0.293	0.373	3.366
7	0.194	0.256	0.315	0.107	0.265	0.393	0	0.258	0.183	0.152	0.25	2.373
8	0.419	0.505	0.587	0.258	0.523	0.66	0.742	0	0.415	0.417	0.54	5.066
9	0.511	0.607	0.667	0.317	0.602	0.735	0.817	0.585	0	0.509	0.625	5.975
10	0.504	0.589	0.655	0.322	0.595	0.707	0.848	0.583	0.491	0	0.636	5.930
11	0.376	0.462	0.535	0.224	0.476	0.627	0.75	0.46	0.375	0.364	0	4.649
E. value	4.650	-0.499 +0.012i	-0.499 -0.012i	-0.496 +0.048i	-0.496 -0.048i	-0.498	-0.496 +0.022i	-0.496 -0.022i	-0.484 +0.03i	-0.484 -0.03i	-0.199	=
E. vector	0.339	0.293	0.247	0.445	0.285	0.200	0.146	0.295	0.346	0.343	0.270	=

1: Employees' language skills; 2: Employees' innovation skills; 3: Attract potential talents; 4: Intergenerational exchange; 5: Teamwork efficiency; 6: Internal cohesion of staff; 7: Relationships with sending company; 8: Increasing production/sales; 9: Broadening mind-set; 10: International collaboration; 11: Enhancing reputation.

This way we created 5 ordered classes of benefits: (i) the absolute best benefit; (ii) two more relevant benefits; (iii) an intermediate set of benefits; (iv) an irrelevant benefit; and (v) the absolutely irrelevant benefit. This data collection procedure belongs to the class of best-worst measurement techniques (Flynn *et al.*, 2007; Louviere *et al.*, 2009, 2013).

This allowed us to set a dominance matrix for the sending and another for the hosting schools, of which the first eigenvalue and the correspondent eigenvector was computed. The matrices referring to the sending and the hosting schools are described, respectively, in Tables A.4 and A.5 in which also the estimates of the relevance of each benefit according to schools are presented (last row of each table).

Regarding the guesses expressed by the sending and hosting companies about the possible benefits from mobility, Tables A.6 and A.7, respectively, include the dominance matrices and a synthesis of their statistical analyses.

A.2. Factor analysis of the possible benefits and negativities from mobility

Factor analysis is a multivariate statistical technique enabling to elicit multivariate linear relations among a set of observed variables through a number of unobserved variables called factors. The technique is based on the following procedure:

- A set of p variables is observed at a sample of n statistical units. In our case, the variables are, in one application, those describing positive aspects of mobility and in another one the negative ones. The units are: participants, schools and companies, in different datasets. Let us call y_{hi} the variable observed at unit h (h=1, …, n) for variable Y_i (i=1, …, p).
- The correlation matrix, **R**, between all possible couples of variables is computed. Then a number of k eigenvectors, $\mathbf{w}_j$, corresponding to the k largest eigenvalues, is extracted from **R** according to a given criterion. In our case, k was determined as a function of the maximum separation between subsequent eigenvalues.
- We call *factor j* (j=1, …, k) a linear combination of the observed variables with weights given by the jth eigenvector. Dropping for convenience the index of unit h, the factor score, f_j, is given by:

$$f_j = \sum_i^p y_i \, w_{ji} \quad (j = 1, \dots, k). \tag{A. 3}$$

- If the eigenvectors are estimated through the principal component criterion, a factor load, a_{ji}, measures the correlation between the observed variable Y_i and factor f_j. It is called also 'saturation' because it measures how much the factor variability saturates that of the variable. The higher the saturation, the stronger the relation between factor and variable. Its square value measures the share of

variance of the observed variable explained by the factor. Dropping the index of unit h, a variable Y_i relates to the extracted factors as follows:

$$Y_i = \sum_j^k f_j \, a_{ji} \quad (i = 1, \ldots, p). \tag{A. 4}$$

– The variance of the observed variables shared with the extracted factors, called communality, measures the relevance of the factors to that variable.

Factor analysis is widely applied in statistical analysis, that is why we referred to the basic literature (Bartholomew *et al.*, 2008). In the following tables we report only the essential results of the analyses, namely the factor loads, the eigenvalues and the explained variance.

In the ROI-MOB research, factor analysis was distinctly carried out on descriptors of both the possible benefits and the negative aspects from mobility. Regarding participants, a total of 21 variables were factor-analysed with a principal component criterion followed by an oblique (*Promax*) rotation.

A 3-factor solution, explaining 48% of the variability of the 21 items, was retained after an attempt with two and four factors. The three factors mutually correlate: all correlation coefficients score about 0.5 with each other, as an effect of the oblique rotation.

If we imposed the extraction of a single factor, all items would have belonged to this general factor, although with different loads than those shown in Table A.8. This allows to conjecture that all benefits belong to a general 'improvement' factor that is composed of at least three categories of improvements, each one corresponding to a factor.

For schools and companies, each analysis was performed on 15 possible benefits. A distinct analysis was carried out for the sending and hosting schools (Table A.9) and for the sending and hosting companies (Table A.10). In these four analyses only two factors were retained after attempts with one and three factors. For all solutions, factors were allowed to correlate with each other in force of the oblique rotation of factors. The correlation coefficients between factors are reported in tables' footnotes.

Tables A.11, A.12 and A.13 contain the factor-analytic solutions of the costs and burden caused by mobility to participants, schools, and companies, respectively. A total of nine variables collected at participants were factor-analysed with a principal component criterion followed by an oblique (*Promax*) rotation. Also in this case, the solution with three factors was retained for participants' data after an attempt with one, two and four factors.

In the factor analysis solution of participant data, the three rotated factors are so similar to the non-rotated ones that we can consider them almost independent to each other. This may be a consequence of how the question on sacrifices was posed, namely respondents were forced to select just the most 'sacrificed' items among those offered and this limits the between-sacrifice correlation.

Table A.8. Factor analysis of the benefits perceived by participants from Erasmus+ mobility.

Improvements	*Factor 1*	*Factor 2**	*Factor 3**	*Communality*
Soft skills (overall)	0.373	-0.039	0.756	0.441
Technical-specific skills	0.459	0.001	0.081	0.255
Language skills	0.008	0.063	0.455	0.242
For finding a job	0.549	-0.016	0.234	0.473
For starting own business	0.655	0.081	-0.206	0.380
Self-confidence	0.275	0.187	0.377	0.477
Long term contract	0.743	-0.036	-0.050	0.493
Career chances	0.637	-0.158	0.264	0.527
Desire to change life plans	0.460	-0.025	0.250	0.373
Final degree score	0.723	-0.177	-0.025	0.411
Feeling European citizenship	0.353	0.018	0.373	0.409
Follow news EU countries	0.341	0.067	0.286	0.342
Integrated w. origin country	0.684	0.211	-0.269	0.492
Integrated school/company	0.768	0.082	-0.198	0.531
Willingness to work abroad	0.065	-0.049	0.666	0.459
Consciousness own resources	0.059	0.643	0.078	0.513
Extroverted/enthusiast of life	0.046	0.759	0.025	0.633
Sociable and helpful to others	-0.013	0.829	0.027	0.698
Emotionally stable	0.032	0.784	-0.075	0.588
Open to initiative/challenges	-0.188	0.731	0.248	0.617
Control actions, master future	0.066	0.790	-0.078	0.625
*Eigenvalues after rotation***	*4.21*	*3.71*	*2.07*	*9.99*
Variance proportion (%)	*20.0*	*17.6*	*9.8*	*47.5*

(*) *Between-factors correlation: r12=0.507; r13=0.503; r23=0.476; RMSE: 0.059; Chi-square: 1517.1; p-value: <<1%o; (**) The eigenvalues before rotation were: 6.86; 1.89; 1.19; 1.12; 0.95; 0.86; etc.*

Table A.9. Factor analysis of the benefits perceived by schools from mobility, by school activity*.

Improvements	*Sending schools*		*Hosting schools*	
	1st factor	2nd factor	1st factor	2nd factor
Participants' language skills	-0.262	-0.05	0.412	0.15
Teamwork efficiency	-0.377	0.17	0.397	0.04
ICT, project mgmt.., web use, innovate- skills	-0.024	0.58	0.316	0.68
Learning, self-consciousness, completion rate	0.763	0.07	0.330	-0.16
Intergenerational exchange, culture sharing	0.005	-0.22	0.306	-0.15
Assessing promising participants	-0.080	-0.22	NA	NA
Relationships towards the School/Centre	0.545	-0.13	0.517	-0.19
Attracting potential talents	-0.141	-0.72	0.008	-0.62
Improving staff's management skills	-0.145	0.38	-0.332	-0.01
Improving knowledge/usage European tools	0.317	0.42	-0.122	0.45
Innovating teaching/training programmes	-0.016	0.48	-0.083	0.38

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Broadening mind-set and business ideas	-0.615	-0.20	0.059	0.37
Enhancing reputation/brand	0.187	-0.27	-0.553	-0.49
Improving international collaboration	-0.119	-0.10	-0.609	-0.17
Collaboration with local stakeholders	NA	NA	-0.449	-0.08
*Eigenvalues after rotation***	*1.65*	*1.64*	*1.84*	*1.64*
Deviance explained by two factors	*0.235*		*0.248*	
Correlation coefficient between factors	*-0.078*		*-0.181*	

NA: Not applicable; (*) Schools that both send and host participants appear on both categories of activity; (**) Eigenvalues before rotation were: 1.70; 1.60; 1.43; 1.25; 1.13; 1.05; 0.98 etc. for sending schools, and: 1.87; 1.61; 1.50; 1.37; 1.23; 1.08; 1.00; 0.91 etc. for hosting schools.

Regarding schools and companies, 23 variables were factor analysed distinctly for sending and hosting schools and 20 for sending and hosting companies. One variable was excluded from the analysis of hosting schools and that of sending companies because of zero frequency: in both cases the excluded variable is the item "unbalanced candidate gender". Only two factors were retained in all four analyses.

Table A.10. Factor analysis of benefits perceived by companies as regard mobility, by company activity.

Improvements	*Sending companies*		*Hosting companies*	
	1st factor	2nd factor	1st factor	2nd factor
Apprentices/employees language skills	0.379	-0.060	0.660	0.021
Apprentices' motivation	-0.247	-0.151	NA	NA
Assessing promising apprentices	0.502	0.210	NA	NA
Attracting potential talents for recruitment	0.564	-0.136	-0.202	-0.072
Employees' innovation skills	-0.428	-0.116	-0.538	-0.067
Encouraging intergenerational exchange	0.120	-0.163	0.616	-0.244
Teamwork efficiency	-0.024	0.679	-0.154	0.721
Employees' flexibility, professional skills	0.112	0.419	NA	NA
Employees' relationships to company	0.445	-0.095	0.171	-0.144
Time management, reducing extra-time work	-0.256	0.157	NA	NA
Internal cohesion of staff, reducing conflicts	-0.120	0.794	0.265	0.342
Broadening mind-set and business ideas	0.451	-0.342	-0.091	-0.444
Improving international collaboration	-0.699	0.034	-0.174	-0.430
Enhancing reputation/brand	-0.417	-0.535	0.023	-0.279
*Eigenvalue after rotation**	*2.13*	*2.07*	*1.50*	*1.49*
R^2	*0.280*	*0.272*		
Correlation coefficient between factors	*0.034*	*0.164*		

NA: Not Applicable; (*) Eigenvalues before rotation were: 2.13; 2.07; 1.87; 1.63; 1.25; 1.14; 0.95 etc. for sending companies, and: 1.55; 1.43; 1.40; 1.17; 1.12; 1.02; 0.94 etc. for hosting companies.

The analytic solutions of schools and companies show that the first three factors of all analyses explain a similar portion of variance. This means that questions on mobility benefits do not contain a dominant factor but a plurality of independent factors of about-the-same importance to respondents. The oblique rotation did not change much the original factorial solution and this confirms that negative aspects are almost independent to each other.

Table A.11. Factor analysis of the negativities from Erasmus+ mobility as perceived by participants (rotation: Promax).

	Factor 1*	Factor 2*	Factor 3*	Communality
Monetary cost from family	-0.129	0.121	0.449	0.214
Time to prepare	0.116	0.428	0.346	0.290
Sacrificed: family	0.882	0.287	-0.299	0.929
Sacrificed: friends	0.008	-0.197	0.037	0.042
Sacrificed: other relationships	-0.045	0.029	0.594	0.349
Sacrificed: job attended	0.021	0.007	0.149	0.023
Sacrificed: job opportunities	-0.054	0.092	0.518	0.266
Sacrificed: comfort zone	-0.741	0.448	-0.373	0.967
Sacrificed: nothing	-0.049	-0.850	-0.107	0.717
Eigenvalues after rotation	*1.36*	*1.24*	*1.19*	=
Variance proportion (%)	*15.1*	*13.8*	*13.2*	*42.2*

(*) *Between-factors correlation:* r_{12}*=-0.01;* r_{13}*=-0.06;* r_{32}*=-0.11.*

Table A.12. Factor analysis of costs and obstacles the Erasmus+ mobility can cause to schools, by school activity*.

	Sending schools			Hosting schools		
	1st factor	2nd factor	3rd factor	1st factor	2nd factor	3rd factor
Organizational costs	-0.735	-0.143	-0.192	0.789	0.141	-0.155
Direct staff costs	0.100	0.561	-0.018	-0.162	0.117	0.113
Indirect staff costs	0.076	-0.032	0.448	-0.249	-0.060	0.724
Loss in teaching times	0.280	-0.178	-0.124	-0.063	-0.154	0.096
Costs dedicated structures	0.505	-0.097	-0.346	-0.430	0.070	-0.335
Cost of external services	0.087	-0.114	0.536	-0.098	-0.253	-0.245
Language barriers	0.320	0.315	0.249	-0.108	0.560	-0.325
Low number of candidates	0.064	0.307	-0.211	0.035	-0.059	0.513
Low standards of candidates	0.069	0.054	-0.431	0.180	0.639	-0.009
Opposition of families	0.151	0.109	0.392	0.251	-0.277	-0.273
Personal/interpersonal skills	0.288	0.317	0.044	0.018	0.569	-0.191
Inadequacy of possible tutors	0.026	-0.041	-0.270	-0.446	-0.039	-0.057
Not enough hosting units	0.223	-0.419	-0.109	-0.075	-0.102	0.389
Too short length of stay	-0.216	0.144	-0.024	0.159	0.146	-0.113
Heavy costs	-0.388	0.041	-0.017	0.483	-0.143	0.184

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	Sending schools			Hosting schools		
	1st factor	2nd factor	3rd factor	1st factor	2nd factor	3rd factor
Lack of grants	-0.623	-0.021	-0.037	0.440	-0.065	-0.064
Unbalanced candidate gender	0.027	0.279	-0.047	NA	NA	NA
Inadequate accommodation	-0.045	-0.033	0.232	0.058	-0.105	0.401
Administrative burden	-0.006	-0.636	0.092	0.033	-0.504	-0.064
Recognition periods abroad	0.004	0.399	-0.321	0.028	-0.198	-0.284
Appreciation labour market	0.052	-0.172	-0.225	-0.352	-0.074	0.129
Previous experience	0.065	-0.202	0.463	0.004	0.335	0.216
*Eigenvalues after rotation***	*1.748*	*1.625*	*1.611*	*1.870*	*1.831*	*1.681*
Variance proportion	*0.076*	*0.071*	*0.070*	*0.085*	*0.083*	*0.076*

NA: Not Applicable; (*) Schools that both send and host participants appear on both categories of activity; (**) Eigenvalues before rotation were: 1.83; 1.62; 1.55; 1.52; 1.42; 1.35; 1.22; 1.19, 1.14, 1.1 etc. for sending schools, and: 2.01; 1.76; 1.61; 1.52; 1.39; 1.34; 1.26; 1.18; 1.13; 1.05 etc. for hosting schools.

Table A.13. Factor analysis of the costs and burden caused by Erasmus+ mobility to companies, by company activity*.

	Sending companies*			Hosting companies*		
	1st factor	2nd factor	3rd factor	1st factor	2nd factor	3rd factor
Organizational costs	-0.057	-0.553	-0.255	-0.126	0.341	0.354
Direct staff costs	-0.498	0.449	-0.049	-0.116	0.035	0.005
Indirect staff costs	0.101	-0.028	0.640	0.106	.0.724	0.287
Loss in production times	0.077	-0.475	0.061	0.179	0.250	0.133
Costs dedicated structures	0.631	0.171	-0.214	0.003	0.291	-0.688
Cost of external services	0.051	0.296	-0.228	0.230	0.123	-0.151
Language barriers	-0.274	-0.769	-0.030	-0.465	-0.265	0.351
Low number of candidates	-0.528	0.139	-0.357	0.071	0.509	0.015
Low standards of candidates	-0.255	-0.104	-0.283	-0.538	0.139	-0.332
Opposition of families	-0.196	-0.009	0.618	0.003	-0.251	0.068
Personal/interpersonal skills	-0.035	0.334	-0.056	-0.431	0.233	-0.410
Inadequacy of possible tutors	0.051	0.049	-0.283	0.135	-0.147	0.357
Not enough partners	0.377	0.225	0.135	0.307	0.262	0.156
Heavy costs	0.598	0.604	-0.048	0.549	0.037	-0.035
Hosting no financial benefit	0.492	-0.239	-0.208	0.199	-0.138	-0.348
Lack of grants	0.023	0.116	0.571	0.337	-0.199	-0.048
Unbalanced candidate gender	NA	NA	NA	-0.008	0.281	0.401
Inadequate accommodation	-0.124	0.131	0.414	0.453	-0.026	-0.114
Administrative burden	0.564	0.116	-0.252	0.240	-0.043	0.091
Lack of recognition	-0.417	-0.015	-0.153	-0.086	-0.364	0.143
*Eigenvalues after rotation***	*2.307*	*2.034*	*1.888*	*1.655*	*1.536*	*1.508*
Variance proportion	*0.121*	*0.107*	*0.099*	*0.083*	*0.077*	*0.075*

NA: Not Applicable; (*) Companies that both send and host participants appear on both categories of activity; (**) Eigenvalues before rotation were: 2.35; 2.02; 1.89; 1.71; 1.53; 1.43; 1.25; 1.14; 1.04; 0.89 etc. for sending companies, and: 1.68; 1.56; 1.47; 1.42; 1.34; 1.23; 1.19; 1.17; 1.10; 1.07; 0.98 etc. for hosting companies.

A.3. Regression analyses of the positive and negative aspects of mobility

An ordinary least square (OLS) regression model (see, among others: Goldberger, 1964) was applied to highlight the determinants of the performance evaluation according to participants. Such a regression analysis identifies the relations between a 'criterion', or 'dependent' variable, Y, and a set of p possible predictors, $X_1, \ldots, X_i, \ldots, X_p$, observed on a set of n statistical units.

In the ROI-MOB surveys, the dependent variable is the evaluation expressed by respondents and the possible predictors are the characteristics of his/her mobility experience and the positive and the negative aspects of mobility s/he envisaged. Regarding participants, the analysis was applied twice, one to compare the three scales experienced in the participants' questionnaire (Table A.14) and another to elicit the covariates of the final evaluation (Table A.15).

The relation between the criterion variable and the predictors can be expressed with the following model:

$$\hat{Y} = g\left(X_1, \ldots, X_i, \ldots, X_q \middle| \boldsymbol{Z}\right), \tag{A. 5}$$

where g(.) denotes a linear function; X_i (i=1, …, q) a predictor selected among the p observed that significantly explains the variance of the criterion variable; and $\mathbf{Z}$ a set of control variables introduced into the model to partial out the linear effects between the criterion variable and the selected predictors.

In our analyses we considered as possible predictors also the interaction between the listed predictors. A two-way interaction is the joint effect of two possible predictors upon the criterion variable; we state that two quantitative or dichotomous predictors interact to each other if the variable obtained from their product is statistically significant.

To select the significant predictors, a forward stepwise selection criterion was applied. At each step of the analysis, this criterion identifies the not-yet-selected predictor that mostly explains the deviance of the criterion variable and inserts it into the model. It is possible that, due to compensation effects, certain aspects leave the model after the selection of other balancing aspects.

The parameters for the statistical evaluation of the models were: the significance of each single predictor evaluated through a Chi-square test, as well as the Akaike-AIC test and the R^2 criterion for the evaluation of the overall model. R^2 measures the share of deviance explained by the whole set of selected predictors. Predictors were selected if significant at least at 10% level in the explanation of the criterion variable.

To interpret the tables of results, it is important to pay attention to the relative size of the estimates and their sign. A bigger number means the variable is a stronger predictor of the experience evaluation. A positive sign shows higher predictor values are correlated with higher evaluation marks, and vice-versa.

Regarding the participants, the possible predictors are the following:

– The control variables (*Gender; Age; Activity before leaving; Country of origin*), which have been forced and kept into the model independently of their significance to account for the variability typical of participants' subgroups.
– The characteristics of the mobility experience (*Country of destination, Experience length; Preparation, Duties, Use of language*), selected so that only significant variables were retained in the models.
– The benefits (*Currently working; Duration of job searching; Improved final mark; Improved professional skills; Improved linguistic skills; Worked in an international environment; Social and professional opportunities raising; Improvement of psychological traits*) and the costs and obstacles (*Family monetary cost; Time to prepare the experience; Sacrifices due to mobility*), conveniently recoded. Only significant variables have been retained in the models.

Table A.14. Regression models with scales as criterion variables, according to predictors selected at least once in the analyses of the evaluation marks given by participants (n=1003).

	1÷10	**-10÷10**	**1÷4**
Intercept	*12.10****	*22.70****	*0.698****
Gender: Female vs. Male	0.060	0.186	0.054
Age: 21-23 vs. Less than 21	-0.029	-0.051	0.029
" 24 + vs. Less than 21	-0.0004	0.092	-0.009
Worked before the experience	-0.097	0.023	0.041
Weeks length: 5-12 vs. 0-4	.	0.271	0.055
" 12+ vs. 0-4	.	0.103	0.136*
" NR vs. 0-4	.	-1.778*	0.170
Family cost: 1-500 vs. Nothing	.	-0.731*	.
" 501-2000 vs. Nothing	.	-1.220***	.
" NR vs. Nothing	.	-0.208	.
Sacrificed work/study vs. Personal relations	-0.128	0.121	0.203**
Sacrificed job opportunities	-0.357*	-0.856*	.
Sacrificed comfort zone	-0.026	0.036	0.049
Sacrificed nothing	-0.382**	0.814*	-0.042
Sacrificed: NR	-0.114	0.083	0.050
Time to prepare 8-30 vs. 0-7	0.047	-0.106	.
" 31-180 vs. 0-7	0.146	0.0632	.
" NR vs. 0-7	0.376*	0.083*	.
Internat. context: Partly vs. Yes	-0.073	-0.049	0.100*
" No vs. Yes	-0.545***	-1.149**	0.205**
" NR vs. Yes	-0.081	-0.575	-0.146
Job found > 3 months vs. No job	-0.013	0.764	.
" < 3 months vs. No job	0.224*	1.200*	.
Technical skills improved vs. No	0.606***	1.019***	-0.079

continue

continue

	1÷10	**-10÷10**	**1÷4**
Linguistic skills improved vs. No	0.298*	.	.
Improved professional profile	0.145*	.	.
Improved self-confidence	0.204**	.	-0.052*
Improved career opportunities	0.201**	0.314*	-0.057*
Intercept	*12.10***	*22.70***	*0.698***
Follows news from other countries	.	.	-0.073***
More integrated with own school	0.124*	.	.
Improved will to work abroad	0.398***	0.725***	-0.083***
Extrovert and enthusiast	0.290***	0.305*	.
Emotionally stable	.	.	-0.049*
Open to initiatives and challenges	.	0.449*	.
Control actions and master future	-0.188**	-0.322	.
R^2	*0.413*	*0.286*	*0.207*
Adjusted R^2	*0.394*	*0.253*	*0.186*

*Significance levels: *: 0.05; **: 0.01; ***: 0.001. Source: Adapted from Zoccarato (2018).*

Table A.15. Estimate of OLS regression parameters of models* explaining the final evaluation of participants (n=1003).

	Model 1	Model 2	Model 3
Intercept	9.393***	6.464***	7.161***
Gender (female)	-0.849*	0.689.	0.572
Age	-0.033**	-0.032**	0.037**
Activity before: apprentice	-0.107	-0.523*	-1.501
" dual track	0.028	0.046	0.327
" doing nothing	-0.284	-0.096	0.052
Country: Germany	-2.779.	-0.056	0.193
" Italy	0.163	0.061	-0.028
" Spain	-0.002	0.106	0.093
" Portugal	-0.441	0.136	0.252
Female*Age	-0.042**	0.026*	0.024*
Female*Dual track	-0.369.	-0.192	0.101
Realised fair duties	=	1.794***	0.913***
Duties related educational program	=	1.711***	0.772***
New duties	=	1.696***	0.885***
Same duties as country	=	1.467***	0.651**
Same duties as company	=	1.694***	0.722**
International environment	=	0.839***	0.790***
Mother tongue at work	=	-3.882**	-3.094**
English at work	=	-0.345**	-0.195*
Organiser: training centre	=	0.826	=
Apprentice*Mother tongue at work	=	-6.668***	-6.431***

continue

continue

	Model 1	Model 2	Model 3
Apprentice * Country Spain	=	-1.229*	-1.225**
Apprentice*Organ. own company	=	-0.841.	-0.667.
Apprentice * Feeling Europeana	=	=	0.434*
Apprentice * Career opportunitya	=	=	0.496*
Female * English at home	=	0.433**	0.217.
Female * Commerce and tourism	=	-0.251.	-0.226.
Female * Services for industry	=	-0.579.	-0.394*
Female * Raised self-confidencea	=	=	-0.367***
Female*International environment	=	=	-0.543.
Age * Organised a training centre	=	-0.037.	=
Age * Mother tongue at work	=	0.250*	0.133**
Age * Career opportunitya	=	=	-0.012***
Age* Working abroada	=	=	-0.016***
Doing nothing * Fair duties	=	-1.082.	-1.187*
Doing nothing * New duties	=	=	-1.100*
Dual track*Improve job findinga	=	=	-0.251**
Dual track*Sacrifice job opportun	=	=	-1.012***
Dual track* Country: Italy	=	=	0.398.
More extrovert	=	=	-0.255***
Follow attentively EU newsa	=	=	-0.167**
The only mobility experience	=	=	0.246*
Increased language skills	=	=	0.285*
Increased technical skills	=	=	0.609***
Skill: master own futurea	=	=	0.132*
R^2	*2.4%*	*16.9%*	*44.5%*
F statistic	*2.176*	*6.548*	*15.7*
Overall significance	*0.014*	*0.000*	*0.000*

(*) *Coded as 1: negative; 0: positive.*
*Significance levels: ***=1%o; **=1%; *=5%; .=10%.*

A multinomial logistic regression model (Engel, 1988; Agresti, 2002) was estimated to highlight the relationships between the beneficiaries of mobility as perceived by participants and the way the participants themselves realised their mobility. A multinomial logistic model is the result of a regression analysis in which the criterion variable was measured on a nominal scale and the predictors were measured on any scale.

The criterion variable is the set of ranks participants assigned to four possible beneficiaries of mobility: (i) the participants; (ii) the schools and training centres; (iii) the companies (sending or hosting); (iv) the labour market and the EU as an institution.

The possible predictors and the estimated models are described in Section 5.2.3: a basic one (Model 1) containing just the intercept, the control variables and

their interactions, a second model (Model 2) including also the descriptors of the mobility process and then a third model (Model 3) adding the positive and negative factors characterising the participant's experience. Predictors were selected if significant at least at 10% level in the explanation of the criterion variable. The quantitative results of the final model are presented in Table A.16.

During the analysis we realised anomalies in schools' data concerning the duration of the experience. So, the duration in weeks of the experience was standardised by computing the ratio between the cost for the participant's family (in hundred euros) and duration:

$$Cost\ per\ week = \frac{cost\ for\ family}{100 * duration}.$$

Also the duration of the experience was referred to its mean duration, E(*duration*), as follows:

$$Duration * = \frac{duration - E(duration)}{E(duration)}.$$

and then reclassified into three ordinal classes before using it in the regression analysis:

$$Duration ** = \begin{Bmatrix} -1 & if\ Duration * < & -0.5 \\ +1 & if\ Duration * \geqslant & 0.5 \\ 0 & otherwise & \end{Bmatrix}.$$

The multinomial regression analysis was not a success from the technical viewpoint. In fact, the deviance explained by all the selected predictors is just 5%. Nevertheless, in this analysis we used almost all the variables measured with the participants' questionnaire and their interactions.

Table A.16. Estimates of multinomial regression parameters of the mobility beneficiaries as perceived by participants (n=845).

	Schools	Companies	Participants
Intercept	-0.107	0.631	1.291***
Age	-0.005	-0.024.	-0.016
Female	0.498.	0.784**	0.575*
Country: Germany	-0.375	-0.645	0.304
" Italy	0.539	0.089	0.547
" Portugal	0.500	0.081	0.502.
" Spain	1.190**	0.415	0.702*
Activity: Dual track	0.138	-0.383*	-0.254
" Apprentice	-1.825**	-0.628	-0.438

continue

continue

	Schools	Companies	Participants
“ Nothing	14.28***	14.54***	13.27***
Organised by own company	-0.306	0.537*	0.220
Same duties as own company	0.045	-0.230	-0.421*
Sacrificed: job opportunities	-0.102	0.683*	-0.210
Sacrificed: personal relationships	-0.653**	-0.274	-0.481**
Desire to start own business	0.071	0.352*	0.318**
Feel integrate with origin country	0.265	0.384*	0.319*
Age * Destination Portugal	-0.004	-0.009	-0.022**
Age * Industry sector activity	0.009	0.010	0.017**
Age * Opportunity working abroad	0.007	-0.014.	-0.010
Female * Duration experience	0.081	-0.510**	-0.132
Female * Destination EU	0.087	-0.621*	0.058
Female * Destination Portugal	-0.749*	-0.312	-0.064
Female * Origin Spain	-0.892*	-0.993*	-0.525
Female * Origin Italy	-0.187	-0.873*	-0.516.
Female*Improved teamwork skills	0.798**	0.263	0.229
Female* Improved responsibility	0.078	-0.161	-0.316.
Apprentice * Origin Portugal	-3.067*	-1.022	-1.723**
Apprentice * Destination Portugal	1.685**	1.380*	1.075*
Apprentice * Duration experience	-1.011.	0.281	0.044
Apprentice * Commerce sector	1.835	1.934*	2.064*
Apprentice*Improve responsibility	1.300.	-1.144	0.119
Apprentice * Left comfort zone	1.385.	0.610	0.065
Doing nothing * Training organiser	48.08***	1.908.	1.483
Doing nothing*Own program duty	-24.86***	0.131	-0.542
Doing nothing * >emotion stability	-3.662***	-16.04***	-15.52***
Doing nothing * > mental agility	27.46***	-2.477.	-1.677
Doing nothing * > language skills	-11.58***	0.848	2.197*
Doing nothing*Mother tongue at home	1.736.	0.584	-0.341

*Model 1 includes just control variables; Model 2: Characteristics of mobility process added; Model 3: Positive and negative factors added. For the sake of simplicity, only model 3 is shown. Pseudo R^2, Model 1: 0.010; Model 2: 0.017; Model 3: 0.050. Significance levels: ***=1‰; **=1%; *=5%; .=10%.*

Regarding schools and companies, a separate OLS regression analysis was carried out on schools' and companies' datasets to explain the final evaluation of the mobility experience of these organisations. In all analyses, the criterion variable was the overall evaluation expressed by a representative about the mobility experience of his/her organisation.

The possible predictors were categorised as follows:

– Regarding the schools, the control variables were: *country of residence, type of school, school size, sending/hosting activity, experience in mobility,* and regarding companies, the variables were: *country of residence, business sector, firm size,*

sending/hosting activity, experience in mobility. Also the interactions between all possible couples of control variables were considered. The control variables have been forced and then kept into the model independently of their statistical significance, while their interactions have been selected according to statistical significance.

– The characteristics of the mobility experience (*Engagement in mobility processes; Budget sources; Direct and indirect costs; Dedicated structures and personnel*) have been selected so that only significant variables were retained in the models.
– The *possible returns* and the *costs to the organisation from mobility* and the *possible obstacles to youth international mobility* as envisaged by the representative of the organisation were then added. Only significant variables have been retained in the model.

We estimated three models: Model 1, including all control variables and a selection of their interactions, Model 2, including also a selection of descriptors of the mobility process, and Model 3 which included also positive and negative aspects of mobility. The results of the four applications for hosting and sending schools and for hosting and sending companies are presented, respectively, in Tables A17 to A.20. Predictors were selected if significant at least at 10% level in the explanation of the criterion variable. The technical data of the analysis are given in table's footnotes.

Table A.17. Estimates of regression parameters of models[a] explaining the final evaluation of hosting schools.

	Model 1	Model 3
Intercept	6.931***	6.202***
Country: Italy	0.059	0.638
" Portugal	0.997	1.584.
" Spain	1.039*	1.431**
School size	-0.019	-0.006
Higher secondary school	1.281*	0.857
Lower secondary school	1.892**	1.358*
Vocational school	1.338*	1.419**
> 5-year experience mobility	-0.688*	-0.573*
Participants hosted last year	0.325	0.081
Innovative methods teaching	=	1.001**
Loss teaching times	=	0.994.
Cost provide external services	=	1.374*
Italy * Inadequate accommodation	=	-3.665**
Sample size (n)	*(115)*	*(109)*
R^2	*20.8%*	*33.7%*
Significance	*0.003*	*0.000*

*(a) Model 1 included just control variables, no interaction was statistically significant; Model 2: Characteristics of mobility processes were added as possible predictors but none was significant; Model 3: Positive and negative factors were added. Significance levels: ***=1‰; **=1%; *=5%; .=10%.*

Table A.18. Estimates of regression parameters of models[a] explaining the final evaluation of sending schools.

	Model 1	Model 1+	Model 3
Intercept	8.673***	8.046***	7.825***
Country: Italy	0.241	0.755*	1.000**
" Portugal	0.387	0.847*	1.009**
" Spain	0.516*	0.976**	1.003**
School size	-0.010	-0.035	0.003
Higher secondary school	0.138	-0.062	-0.084
Lower secondary school	0.263	0.187	0.185
Vocational school	0.269	0.631*	0.070*
> 5-year experience mobility	-0.032	-0.548*	-0.467.
Participants sent last year	0.325	1.979**	1.811**
Vocational * Participants sent	=	-1.632*	-1.641*
Spain * Participants sent	=	-1.494.	-1.339
Spain * Higher secondary	=	1.007.	1.050.
School size * > 5-year experience	=	0.168*	0.148*
Culture sharing	=	=	-0.815**
Participants sent*Culture share	=	=	1.937*
Lack recognition abroad	=	=	0.519*
Sample size (n)	*(213)*	*(213)*	*(206)*
R^2	*4.0%*	*11.1%*	*17.6%*
Significance	*0.491*	*0.031*	*0.002*

*(a) Model 1 included just control variables; Model 1+: Interactions between control variables were added; Model 2 is identical to Model 1; Model 3: Positive and negative factors were added. Significance levels: ***=1%o; **=1%; *=5%; .=10%.*

Regarding the analysis of the companies' data, we noticed that the number of participants per company gave weird results because of extreme values. Thus, the variable "number of participants", for both the hosting and the sending companies, was first referred to the mean number of participants, *E(N.participants)*, as follows:

$$N.participants* = \frac{N.participants - E(N.participants)}{E(N.participants)},$$

and then reclassified in three ordinal classes before using it in the regression analysis:

$$N.participants** = \begin{Bmatrix} -1 & if\ N.participants* < -0.5 \\ +1 & if\ N.participants* \geqslant 0.5 \\ 0 & otherwise \end{Bmatrix}.$$

Table A.19. Estimate of regression parameters of models[a] explaining the final evaluation of hosting companies.

	Model 1	Model 1+	Model 3
Intercept	6.710***	6.193***	6.025***
Country: Italy	0.871	0.267	-0.337
" Portugal	0.947*	1.539**	1.361*
" Spain	1.359**	1.878**	1.445*
Number hosted participants	0.495**	0.484**	0.550**
Experience >5 years	0.361	0.108	-0.020
Sector: commerce	0.021	0.023	-0.011
" industry services	0.201	0.171	0.035
" services	-0.186	-0.496	-0.420
Firm size: micro	0.119	0.156	-0.074
" small	-0.107	-0.049	-0.125
" large	-0.087	1.025	1.041
Large size * Portugal (origin)	=	-1.568.	-1.808*
Experience > 5 * Services sect	=	0.894.	0.768
Hosts participants regularly	=	=	0.821***
Attract potential talents	=	=	-0.511.
Improve teamwork efficiency	=	=	0.818**
Inadequate accommodation	=	=	0.716.
Unbalanced participants' gender	=	=	1.205.
Sample size (n)	*(251)*	*(251)*	*(226)*
R^2	*11.7%*	*14.2%*	*27.8%*
Significance	*0.001*	*0.000*	*0.000*

*(a) Model 1 included just control variables; Model 1+: Interactions between control variables were added; Model 2 is identical to Model 1+; Model 3: Positive and negative factors were added. Significance levels: ***=1%o; **=1%; *=5%; .=10%.*

Table A.20. Estimate of regression parameters of models[a] explaining the final evaluation of sending companies.

	Model 1	Model 2	Model 3
Intercept	7.639***	8.854***	7.418***
" Portugal	-2.560*	-3.330**	-3.029**
" Spain	-1.976	1.804	2.985
Number sent participants	-0.769	-0.919*	-1.403**
Experience >5 years	0.517.	1.396.	2.334**
Sector: commerce	-0.509	-0.828	-1.198*
" industry services	0.569	0.327	0.428
" services	-1.267	1.033	2.257.
Size firm: micro	4.918**	1.302	0.303

continue

continue

	Model 1	Model 2	Model 3
" small	0.362	-0.331	0.375
" large	-0.049	-0.887	-0.675
Experience >5y * Services sect	4.145*	1.268	-0.290
Selection: staff opinion	=	-2.279**	-1.852**
Service sector * Staff opinion	=	3.722*	3.190*
Service sector * Selection CV	=	-3.246*	-4.227**
Improve employees flexibility	=	=	0.959*
Inadequate accommodation	=	=	2.376*
Sample size (n)	*(44)*	*(44)*	*(43)*
R^2	*43.5%*	*66.2%*	*77.6%*
Significance	*0.038*	*0.000*	*0.000*

*(a) Model 1 includes just control variables; Model 2: Characteristics of mobility process added; Model 3: Positive and negative factors added. Significance levels: ***=1‰; **=1%; *=5%; .=10%.*

Essential glossary

Applicant

Participating organisation or informal group that submits grant application. Applicants may apply either individually or on behalf of another organisation involved in the project. In the latter case, the applicant is also defined as coordinator.

Source: European Commission (2019).

Apprenticeship

Systematic, long-term training alternating periods at the workplace and in an educational institution or training centre. The apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the trainee with training leading to a specific occupation.

In French, the term 'apprentissage' relates to both apprenticeship and the process of learning (see 'learning');

The German 'dual system' is an example of apprenticeship.

Apprenticeship-type schemes are understood as those forms of Initial Vocational Education and Training (IVET) that formally combine and alternate company based training (periods of practical work experience at a workplace) with school based education (periods of theoretical/practical education followed in a school or training centre), and whose successful completion leads to nationally recognised initial VET qualifications

Sources: Cedefop (2004); European Commission (2019).

Basic skills

The skills needed to live in contemporary society, e.g. listening, speaking, reading, writing and mathematics. Combined with new basic skills, basic skills form key skills.

Source: Cedefop - Tissot (2004).

Certification of learning outcomes

Process of issuing a certificate, diploma or title formally attesting that a set of learning outcomes (knowledge, know-how, skills and/or competences) acquired by an individual have been assessed by a competent body against a predefined standard.

Source: Cedefop (2008).

Competence

The ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development). Competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompasses functional aspects (involving technical skills) as well as interpersonal attributes (e.g. social or organisational skills) and ethical values.

Source: Cedefop - Tissot (2004).

Dual system / alternance training

Education or training combining periods in an educational institution or training centre and in the workplace. The alternance scheme can take place on a weekly, monthly or yearly basis. Depending on the country and applicable status, participants may be contractually linked to the employer and/or receive a remuneration. The German 'dual system' is an example of alternance training.

Source: Cedefop (2008).

Education or training provider

Any organisation or individual providing education or training services. Education and training providers may be organisations specifically set up for this purpose, or they may be other, such as employers, who provide training as a part of their business activities. Training providers also include independent individuals who offer services.

Source: based on Cedefop - Tissot (2004).

Erasmus Charter for Higher Education (ECHE)

An accreditation granted by the European Commission giving the possibility to higher education institutions from Programme Countries to be eligible to apply and participate in learning and cooperation activities under Erasmus+. The Charter outlines the fundamental principles an institution should adhere to in organising and implementing high quality mobility and cooperation and states the requisites it agrees to comply with in order to ensure high quality services and procedures as well as the provision of reliable and transparent information.

Source: European Commission (2019)

Erasmus+

The European Commission's Programme for education, training, youth and sport for the period 2014–2020, succeeding the previous Lifelong Learning Programme (2007–2014). As an integrated programme, Erasmus+ offers more opportunities for mobility of learners and staff and cooperation across the education, training and youth sectors and is easier to access than its predecessors, with simplified funding rules and a structure which aims to streamline the administration of the programme.

Source: European Commission (2019).

Europass

Portfolio of five documents helping citizens to better communicate their skills and qualifications when applying for job or study in Europe. The Europass CV and the language Passport are completed by citizens themselves; the other three documents can be issued to citizens who achieve a mobility experience in another European country (Europass mobility) or who complete a formal programme of Vocational Education or Training (certificate supplement) or of Higher Education (diploma supplement). Europass promotes an adequate appreciation of learning outcomes acquired in formal, non-formal or informal settings.

Source: https://europass.cedefop.europa.eu/editors.

European credit system for vocational education and training (ECVET)

Technical framework for transfer, validation and, where appropriate, accumulation of learning outcomes by individuals, to achieve a qualification. ECVET tools and methodology comprise a description of qualifications in units of learning outcomes with associated points, a transfer and accumulation process and complementary documents such as learning agreements, transcripts of records and ECVET users' guides.

The ECVET framework aims to promote:

– mobility of people undertaking training;
– accumulation, transfer and validation of learning outcomes (either formal, non-formal or informal) acquired in different countries;
– implementation of lifelong learning;
– transparency of qualifications;
– common trust and cooperation between providers of vocational training and education in Europe.

ECVET is based on the description of qualifications in terms of learning outcomes (knowledge, skills and/or competences), organised into transferable and accruable learning units to which credit points are attached and registered in a personal transcript of learning outcomes.

Source: European Parliament and Council of the European Union (2009a).

European credit transfer and accumulation system (ECTS)

A systematic way of describing a higher education programme by attaching credits to its components (modules, courses, placements, dissertation work, etc.), to:

- make study programmes easy to read and compare for all students, local and foreign;
- encourage mobility of students and recognition of formal, non-formal and informal learning;
- help universities to organise and revise their study programmes.

ECTS is based on the student workload required to achieve the objectives of a programme, specified in terms of learning outcomes to be acquired. The student workload of a fulltime study programme in Europe amounts in most cases to around 1500-1800 hours per year and in those cases one credit stands for around 25 to 30 working hours. Individuals who can demonstrate similar learning outcomes acquired in other learning settings may obtain recognition and credits (waivers) from the degree awarding bodies.

Source: Cedefop (2008).

European qualification framework for lifelong learning (EQF)

A reference tool for the description and comparison of qualification levels in qualifications systems developed at national, international or sectorial level. The EQF's main components are a set of 8 reference levels described in terms of learning outcomes (a combination of knowledge, skills and/or competences) and mechanisms and principles for voluntary cooperation. The eight levels cover the entire span of qualifications from those recognising basic knowledge, skills and competences to those awarded at the highest level of academic and professional and vocational education and training. EQF is a translation device for qualification systems.

Source: European Parliament and Council of the European Union (2008).

European quality assurance in vocational education and training (EQAVET)

Reference framework to help EU member States and participating countries develop, improve, guide and assess the quality of their own vocational education and training systems. The methodology proposed by the framework is based on:

- a cycle consisting of four phases (planning, implementation, assessment and review) described for VET providers/systems;
- quality criteria and indicative descriptors for each phase of the cycle;
- common indicators for assessing targets, methods, procedures and training results.

Some indicators are based on statistical data, others are of a qualitative nature.

Source: European Parliament and Council of the European Union (2009b).

Guidance and counselling

Range of activities designed to help individuals to take educational, vocational or personal decisions and to carry them out before and after they enter the labour market.

Guidance and counselling may include:

– counselling (personal or career development, educational guidance);
– assessment (psychological or competence/performance related);
– information on learning and labour market opportunities and career management;
– consultation with peers, relatives or educators;
– vocational preparation (pinpointing skills/competences and experience for job-seeking);
– referrals (to learning and career specialists);

Guidance and counselling can be provided at schools, training centres, job centres, the workplace, the community or in other settings.

Source: Cedefop (2008).

In-company training / On-the-job training

Vocational training given in the normal work situation. It may constitute the whole training or be combined with off-the-job training.

Source: Unesco (1979).

Key skills / key competences

The sum of skills (basic and new basic skills) needed to live in contemporary knowledge society. In its Recommendation on key competences for lifelong learning, the European Commission sets out the eight key competences: communication in the mother tongue; communication in foreign languages; competences in maths, science and technology; digital competence; learning to learn; interpersonal, intercultural and social competences, and civic competence; entrepreneurship; cultural expression.

Source: Cedefop (2004).

Knowledge

The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of study or work. There are numerous definitions of knowledge. Nevertheless, modern conceptions of knowledge rest broadly on several basic distinctions: (a) Aristotle distinguished between theoretical and practical logic. In line with this distinction, modern theoreticians (Alexander *et al.*, 1991) distinguish declarative (theoretical) knowledge from procedural (practical) knowledge. Declarative knowledge includes assertions on specific events, facts and empirical generalisations, as well as deeper principles on the nature of reality. Procedural knowledge includes heu-

ristics, methods, plans, practices, procedures, routines, strategies, tactics, techniques and tricks (Ohlsson, 1994); (b) it is possible to differentiate between forms of knowledge which represent different ways of learning about the world. Various attempts have been made to compile such lists, the following categories seem to be frequently represented: – objective (natural/scientific) knowledge, judged on the basis of certainty; – subjective (literary/aesthetic) knowledge judged on the basis of authenticity; – moral (human/normative) knowledge judged on the basis of collective acceptance (right/wrong); – religious/divine knowledge judged by reference to a divine authority (God). This basic understanding of knowledge underpins the questions we ask, the methods we use and the answers we give in our search for knowledge; (c) knowledge encompasses tacit and explicit knowledge. Tacit knowledge (Polanyi, 1967) is knowledge learners possess which influences cognitive processing. However, they may not necessarily express it or be aware of it. Explicit knowledge is knowledge a learner is conscious of, including tacit knowledge that converts into an explicit form by becoming an 'object of thought' (Prawat, 1989).

Source: Cedefop (2004).

Intermediary organisation / Mobility provider

Organisation active in the labour market or in the fields of education, training and youth in the hosting country, whose expertise allows it to assist the sending organisations or individual participants with administrative procedures, practical arrangements, matching apprentice/learner profiles with the needs of companies in case of traineeships, and preparing the participants.

As 'intermediary organisation' is a word coming from the financial sector, which can hardly adapt to Education and Training, EfVET recently proposed to replace it with 'Mobility provider'. Mobility providers can be public or private organisations, even schools, offering service to VET providers for the design and organization of VET mobility projects.

Source: EfVET (2018).

Learning mobility

Moving physically to a country other than the country of residence, in order to undertake study, training or non-formal or informal learning; it may take the form of traineeships, apprenticeships, youth exchanges, volunteering, teaching or participation in a professional development activity, and may include preparatory activities, such as training in the host language, as well as sending, hosting and follow-up activities.

Source: European Union (2013b).

Learning outcomes / learning attainments

Set of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal,

non-formal or informal. Statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence.

Sources: Cedefop (2008); European Union (2008).

Mobility

The ability of an individual to move and adapt to a new occupational environment. Mobility can be geographical or 'functional' (a move to a new post in a company or to a new occupation). Mobility enables individuals to acquire new skills and thus to increase their employability.

Source: Cedefop (2004).

On-the-job training

Vocational training given in the normal work situation. It may constitute the whole training or be combined with off-the-job training.

Source: based on Unesco (1979).

Participants

In Erasmus+ participants are considered those individuals fully involved in a project and, in some cases, receiving part of the European Union grant intended to cover their costs of participation (notably travel and subsistence). Under certain actions of the Programme (i.e. Strategic partnerships) a distinction is hence to be made between this category of participants (direct participants) and other individuals indirectly involved in the project (e.g. target groups).

Source: European Commission (2019).

Partnership

In Erasmus+, an agreement between a group of institutions and/or organisations in different Programme countries to carry out joint European activities in the fields of education, training, youth and sport or establishing a formal or informal network in a relevant field such as joint learning projects for pupils and their teachers in the form of class exchanges and individual long-term mobility, intensive programmes in higher education and cooperation between regional and local authorities to foster inter-regional, including cross-border, cooperation; it may be extended to institutions and/or organisations from partner countries with a view to strengthening the quality of the partnership.

Source: European Union (2013b).

Qualification

Qualification covers different aspects:

– Formal qualification: the formal outcome (certificate, diploma or title) of an assessment process which is obtained when a competent body determines that an

individual has achieved learning outcomes to given standards and/or possesses the necessary competence to do a job in a specific area of work. A qualification confers official recognition of the value of learning outcomes in the labour market and in education and training. A qualification can be a legal entitlement to practice a trade (OECD);
– Job requirements: knowledge, aptitudes and skills required to perform specific tasks attached to a particular work position (ILO).
Sources: Cedefop (2008); Eurydice (2006); ETF (1997); ILO (1998).

Receiving / hosting organisation

Under some actions of Erasmus+ (notably mobility actions) the receiving organisation is the participating organisation receiving one or more participants and organising one or more activities of an Erasmus+ project.
Source: European Commission (2019).

Recognition of learning outcomes

a) Formal recognition: the process of granting official status to skills and competences either through the:
   – award of qualifications (certificates, diploma or titles); or
   – grant of equivalence, credit units or waivers, validation of gained skills and/or competences; and/or
b) Social recognition: the acknowledgement of the value of skills and/or competences by economic and social stakeholders.
Source: Cedefop (2004).

Sending organization

Under some actions of Erasmus+ (notably mobility actions) the sending organisation is the participating organisation sending one or more participants to an activity of an Erasmus+ project.
Source: European Commission (2019).

Stakeholder

A person with an interest or concern in something, especially a business. In mobility, all parties somehow involved in mobility processes.
Source: Oxford Dictionary.

Traineeship (work placement)

Spending a period of time in an enterprise or organisation in another country, with a view to acquire specific competences that are required by the labour market, carry out work experience and improve the understanding of the economic and social culture of that country.
Source: European Commission (2019).

Vocational education and training (VET)

Education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly in the labour market.

Source: ETF (1997).

Work-based learning

Acquisition of knowledge and skills through carrying out – and reflecting on – tasks in a vocational context, either at the workplace (such as alternance training) or in a VET institution.

Source: Cedefop (2011).

Workplace learning

Study type which involves the acquisition of knowledge, skills and competences through carrying out – and reflecting on – tasks in a vocational context, either at the workplace (such as alternance training) or in a vocational education and training institution.

Source: European Commission (2019).

Young people

Individuals aged between 13 and 30.

Source: European Union (2013).

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QUESTIONNAIRE FOR PARTICIPANTS

This questionnaire is aimed at describing your recent Erasmus+ mobility experience. It will take less than 10 minutes to fill in the questionnaire. Your answers will be kept in strict confidentiality and will be analysed only for statistical purposes, in compliance with privacy regulations.

Please, click NEXT to start the questionnaire.

A. Participant's characteristics

A1. Country of residence
1. Belgium
2. Germany
3. Italy
4. Portugal
5. Spain
6. Other country (Please, specify:……..)

A2. Gender
1. Male
2. Female

A3. Age (years): __ __

A4. Educational level completed
1. Lower secondary school
2. Vocational, dual vocational school
3. Higher secondary school
4. University/college
5. Other (Please, specify……..)

A5.* You are currently:
1. Just studying
2. Studying and working
3. Working
4. Looking for employment
5. Studying and looking for employment
6. Internship or other qualification programme, during studies
7. Internship or other qualification programme, after studies
8. Attending a dual training program
9. Doing nothing

A6 (If A5=1 or 2 or 5 or 6) Which educational level are you attending?

1. Lower secondary school
2. Vocational school
3. Dual vocational apprenticeship
4. Higher secondary school
5. University/college
6. Other (Please, specify……..)
7. *(No school programme attendance)*

A7. (If A5 = 2 or 3) Are you working:

1. Full time
2. Part time
3. Other (Please, specify……)
4. *(Not working)*

A8. (If A5 = 2 or 3) Which is your current job? (Please, describe)

A9. (If A5 = 2 or 3 or 6 or 7) In which economic branch are you working?

1. Farming, animal production, agroindustry
2. Industry: mechanics, mechatronics; maintenance
3. Industry: electric or electronics, IT, ICT, informatics
4. Industry: other sectors (chemical, etc.)
5. Construction industry
6. Energy, renewable industry, heat industry
7. Commerce and trade (sales, retail, etc.)
8. Hotels, tourism, gastronomy, catering, other hospitality industry
9. Services for persons and families (hairdressing, child/elderly/disabled support, social care, social services, etc.)
10. Services for industries (financial or fiscal consulting, engineering, physical and chemical analyses, event organization, etc.)
11. Educational/training services
12. Health services, nursing, rehabilitation
13. Public administration, civil services
14. Banks, financial services
15. Non-profit services
16. Other services
17. Other economic sector (Please, specify: ……)
18. *(Not working)*

A10. (If A5 = 2 or 3 or 6 or 7 or 8) Which is your activity field/department?

1. Administration
2. Management
3. Human resources
4. Production, quality control
5. Marketing, brand management, CRM-Customer Relationship Management, communication, reception
6. Information systems
7. Arts, design, advertisement, writing, media, photography, fashion
8. Various departments
9. Other business activity (Please, specify:…….)
10. *(Not working)*

A11. (If A5 = 2 or 3) Which is your current position as an employee?

1. Apprentice
2. Other probationary position
3. Workman
4. Office worker
5. Manager, supervisor
6. Self-employed
7. Other (Please, specify: ……..)
8. *(Not working)*

A12. (If A5 = 2 or 3 or 6 or 7 or 8) Would you say that you are currently working in an international environment?

1. Absolutely yes
2. Just partially
3. Not at all
4. *(Not working)*

A13. (If A5 = 2 or 3 or 6 or 7) In which country are you working?
[list] + Other country, please specify:

A14. (If A5 = 2 or 3) For how long have you been looking for a job before finding your first position?

Months: __ __

A15*. (If A5 = 1, 4, 5, 6, 7) Did you ever work (besides your Erasmus+ mobility experience)?

1. Yes
2. No

A16. (If A15=1) Was it before or after your mobility experience?
1. Before mobility
2. After mobility
3. Both before and after
4. *(Never worked)*

A17.* (If A5 =9) Did you ever look for a job?
1. Yes
2. No

A18. (If A17=1) Was it before or after your mobility experience?
1. Before
2. After
3. Both before and after
4. *(Never looked for a job)*

A19.* What activity were you performing just before your Erasmus+ experience?
1. Just studying
2. Studying and working
3. Working
4. Looking for employment
5. Studying and looking for employment
6. Internship
7. Attending a dual training program
8. Doing nothing

A20. (if A19=2 or 3) Which was your professional position at the time you started your Erasmus+ experience?
1. Apprentice
2. Other probationary position
3. Workman
4. Office worker
5. Manager, supervisor
6. Self-employed
7. Other (Please, specify: ……..)
8. *(Not working at that time)*

A21. (if A19=2 or 3) Which was your job just before you started your Erasmus+ experience?

B. Mobility experience

B1. Let us refer to your recent experience of international mobility. In which country did it take place?

1. Belgium
2. Germany
3. Italy
4. Portugal
5. Spain
6. Other country (Please, specify:……..)

B2. In which month and year did it start?

Month: __ __ (Programmer: 1-12 number, or month)
Year: 20__ __

B3. How many weeks did it last? (Please, approximate to an integer number)

— —

B4. In which sector?

1. Farming, animal production, agroindustry
2. Industry: mechanics, mechatronics; maintenance
3. Industry: electric or electronics, IT, ICT, informatics
4. Industry: other sectors (chemical, etc.)
5. Construction industry
6. Energy, renewable industry, heat industry
7. Commerce and trade (sales, retail, etc.)
8. Hotels, tourism, gastronomy, catering, other hospitality industry
9. Services for persons and families (hairdressing, child/elderly/disabled support, social care, social services, etc.)
10. Services for industries (financial or fiscal consulting, engineering, physical and chemical analyses, event organization, etc.)
11. Educational/training services
12. Health services, nursing, rehabilitation
13. Public administration, civil services
14. Banks, financial services
15. Non-profit services
16. Other services
17. Other economic sector (Please, specify: ……)

B5. In which field of activity/department?
1. Administration
2. Management
3. Human resources
4. Production, quality control
5. Marketing, brand management, CRM-Customer Relationship Management, communication, reception
6. Information systems
7. Arts, design, advertisement, writing, media, photography, fashion
8. Various departments
9. Other business activity (Please, specify:…….)

B6. What did you do during your stay? (Only one choice, the prevalent one)
1. More or less the same duties I used to do in my origin/sending company
2. More or less the same duties I would do in an internship in my country
3. I realised fair duties considering the short period of the internship
4. Activities relating to my educational programme
5. I did new things outside my experience/educational programme
6. Nothing specific
7. Other (Please, specify…….)

B7. Which language did you mainly use at work during your stay?
1. My mother tongue
2. English as a foreign language
3. Language of the host country
4. Other language (Please, specify…….)

B8. Which language did you mainly use at home and in general outside the worksite, during your stay?
1. My mother tongue
2. English as a foreign language
3. Language of the host country
4. Other language (Please, specify…….)

B9. Would you say that you have been working in an international environment?
1. Absolutely yes
2. Just partially
3. Not at all
4. Other (Please, specify…….)

B10. Which organisation mainly helped you carrying out this mobility experience?
1. My school
2. My training centre
3. My company
4. One school and/or company in the destination
5. Other (Please, specify…..)

B11. Can you estimate the cost for you and/or your family, **in monetary terms**, of the Erasmus+ experience? (*in addition to the grant you received by the Programme and ignoring non-monetary aspects such as dedicated time, worries, etc.*)
……. Euro

B12. What did you have to "sacrifice" in order to attend mobility? (*Just one response, the most relevant to you*)
1. Family
2. Friends
3. Other personal relationships
4. Job attended
5. Job opportunities
6. My comfort zone
7. Other (Please, specify……)
8.

B13. Can you estimate the time it took to you to prepare your mobility?
1. Days: __ __

B14. Was this the only mobility experience you ever had?
1. Yes
2. No, I took part in other mobility experiences. Please, specify which programme:……

C. Opinions on mobility

C1. Now we propose you to evaluate your mobility experience. Please, select **maximum two skills** which have improved the most as an effect of your mobility:
[*Programmer: maximum 2 choices; administrate in a random order*]
1. Mental agility
2. Team-working
3. Professional self-confidence
4. Professional autonomy, self-management
5. Problem solving
6. Taking responsibility, initiative
7. Commitment to own company/school
8. Intercultural skills (understanding host and foreign countries and cultures, tolerance for diversity, etc)

C2. And which was the least improving skill?
[*Programmer: the same 8 skills of C1, removing those selected at C1*]

C3. During your stay in a foreign company, did your technical skills (e.g. specific of your professional profile) improve or did they remain the same?
1. Improved
2. Same

C4. Did your language skills improve or did they remain the same?
1. Improved
2. Same

C5*. With reference to your occupational and social opportunities, in what measure…

	Very much	Fairly	Little	Not at all
…could/did mobility add value to your profile to the purpose of finding a job?	1	2	3	4
…could/did mobility improve your desire to start your own business/company?	1	2	3	4
…did mobility raise your self-confidence?	1	2	3	4
…could mobility be (was mobility) a factor for you to get a long term contract?	1	2	3	4
…could mobility improve your career chances?	1	2	3	4
…did mobility change your life plans (either to work and study choices)?	1	2	3	4
…could/did mobility improve your final degree/qualification score?	1	2	3	4
…did mobility raise your feeling of European citizenship?	1	2	3	4
…did mobility drive you to follow more attentively the news of other European countries, especially of the one you visited?	1	2	3	4
...do you feel yourself more integrated and participative with your country of origin?	1	2	3	4
...do you feel more integrated and participative with the school / company that encouraged your mobility?	1	2	3	4
…did mobility make you more willing to work abroad?	1	2	3	4

C6*. Let us evaluate your emotional changes. As a consequence of your Erasmus+ experience, do you feel – at least with respect to your peers – to be…

	Certainly Yes	More Yes than No	More No than Yes	Certainly No
…more conscious of your own resources?	1	2	3	4
…more extroverted and enthusiastic of life?	1	2	3	4
…more sociable and helpful to other people?	1	2	3	4
…more emotionally stable and more resistant to frustration?	1	2	3	4
…more open to initiative and new challenges?	1	2	3	4
…more able to control your actions and master your own future?	1	2	3	4

C7. What is your final judgment of the Erasmus VET mobility experience you had?
Very negative= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Very positive

C8. Imagine you have up to 10 'negative kilos' to weight all the efforts you made and the difficulties you faced (e.g. money, time, sacrifice, etc.); now imagine to have up to 10 'positive kilos' to weight all the benefits you got from mobility (e.g. increased skills, increased employability, new relationships, overall satisfaction, etc.). Now sum up positive and negative kilos, and tell us what the final result is:

-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10

C9. All in all, would you suggest a friend to start an Erasmus VET mobility experience like yours?

1. Yes, I recall only positive aspects
2. Yes, positive aspects prevail
3. No, negative aspects prevail
4. Not at all, so many negative aspects

C10. Finally, which are the two categories that get the highest benefits from Erasmus+ mobility? (*Please, click the first and the second category of possible recipients*)

Category	**First**	**Second**
Students/apprentices		
Schools and training centres		
Companies (both sending and hosting)		
Labour market		
The European Union as an institution		

D. Final suggestions

D1. Questions are over. Do you have any suggestion about possible ways to improve the aims or ease the mobility experience of future participants?

D2. Would you like to receive the final report (computer file) collecting findings from this survey? If so, please provide us a valid e-mail address.

D3. As a whole, how much did you feel this questionnaire was

1.	Interesting, stimulating	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
2.	Clear in terms of questions	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
3.	Easy to fill	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
4.	Stressing, annoying	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

Thank you very much for your kind collaboration.

Questionnaire for Schools and Training centres

This questionnaire is aimed at describing the experience and attitudes of schools and training centres towards Erasmus+ mobility. It will take less than 15 minutes to fill in the questionnaire. All responses will be kept strictly anonymous.

Please, click ENTER to start the questionnaire.

A. School/centre and respondent characteristics

A1. Country where the School/Centre is located
1. Belgium
2. Germany
3. Italy
4. Portugal
5. Spain
6. Other country (Please, specify:……..)

A2. Type of school/centre
1. Lower secondary school
2. Vocational school
3. Training centre
4. Higher secondary school
5. Other (Please, specify……..)

A3. Major/Discipline of the School/Centre (please, describe::……..)

A4. Number of enrolled students at school (last available year)
1. Less than 100
2. 101-200
3. 201-300
4. 301-500
5. 501-1,000
6. More than 1,000

A5.* Did the School/Centre send and/or host students/apprentices in the framework of **Erasmus+** mobility?

1. Just sent apprentices/students
2. Just hosted apprentices/students
3. Both sent and hosted apprentices/students
4. Not at all

A6.* Did the School/Centre send and/or host students/apprentices under other (**non-Erasmus+**) mobility schemes?

1. Just sent apprentices/students
2. Just hosted apprentices/students
3. Both sent and hosted apprentices/students
4. Not at all

A7. Gender of the person responding to the questionnaire on behalf of the School/Centre

1. Male
2. Female

A8. Respondent's age (years)

1. Below 30
2. 30-45
3. 46-60
4. More than 60

A9. Respondent's role

1. Principal, vice-principal
2. Head of department
3. Mobility responsible
4. Teacher, trainer
5. Other (Please, specify: ……)

B. Sending process (if A5=1 or 3 or A6=1 or 3)

B1. How long has the School/Centre been involved in international mobility programmes, sending participants abroad?

1. Less than 2 years
2. 2-3 years
3. 4-5 years
4. 6-10 years
5. More than 10 years

B2. How many participants have been sent abroad in the last 12 months? ……

B3. Are you sending participants to whatever country or do you have any preferred countries?

1. Whatever country
2. Some countries more than others

B4. (if B3=2) Which are the preferred countries? (*Please, click the preferred countries; maximum three*)
[list] + Other country, please specify:

B5. Does the selection process of participants follow a fixed-quota policy or is their number defined every year according to variable parameters?

1. Fixed quota
2. Variable every year

B6. Does the School/Centre organize outgoing mobility on its own (as an autonomous promoter), or does it get support from other organizations? (YES/NO)

1. Autonomous promoter
2. Partner of a consortium / network
3. Informal network of schools/ centres and similar organisations
4. Intermediary organizations
5. Other supporting bodies (Please, specify:…….)

B7. Which are the most relevant criteria in the participant selection process? (*max 3 choices*) *YES/NO*

1. we do not apply any selection criteria
2. first-come-first-served
3. curriculum/performance
4. language skills
5. personal and social skills
6. previous work experience
7. previous mobility experience
8. participant's motivation to go on mobility
9. staff's certainty of usefulness of mobility for the participant
10. other (please, specify……)

B8. Which is the approximate per cent rate of acceptance of requests for mobility? (reference: last year)

1. Less than 25%
2. Between 26 and 50%
3. Between 51 and 75%
4. Between76 and 99%
5. 100%

B9. Which is the rate of participants taking part (e.g. the students/trainees who asked to participate) in Erasmus+ or Erasmus-like mobility programmes compared to your total number of students/trainees?

1. Less than 2%
2. Between 2 and 5%
3. Between 5 and 10%
4. Between 10 and 15%
5. More than 15%

B10. Do you think that the number of participants in Erasmus+ mobility programmes, at the national level, is adequate?

1. Too low, should grow
2. Adequate
3. Too high, should decrease

B11. And in your organization?

1. Too low, should grow
2. Adequate
3. Too high, should decrease

B12. Imagine your School/Centre needs 100 budget-points to finance its sending activities. From which sources are these 100 points procured? (if no funding is needed, put 'own budget'=100)

1.	Own budget:	__ __
2.	Private funds	__ __
3.	EU funds	__ __
4.	Other public funds	__ __
5.	Other sources	__ __
	Total	100

B13. Which is the average amount of grants per participant assigned to participants sent abroad (reference: last year)?
…… Euro

B14. All in all, in monetary terms, can you estimate the **total yearly** cost of the Erasmus+ experience for your School/Centre (besides possible grants you received by the Erasmus+ and ignoring non-monetary aspects such as dedicated time, worries, etc.?
…….. Euro

C. Hosting process (if A5=2 or 3 or A6=2 or 3)

C1. How long has the School/Centre hosted participants in international mobility?
1. Less than 2 years
2. 2-3 years
3. 4-5 years
4. 6-10 years
5. More than 10 years

C2. How many participants did your School/Centre host in the last 12 months? ……

C3. Are you hosting participants from whatever country or do they mostly come from some specific countries?
1. Whatever country
2. Specific countries

C4. (if C3=2) Which countries are they from? (*Please, click maximum three countries*)
[list] + Other country, please specify:

C5. In its hosting activities, does your School/Centre operate as an autonomous partner, working directly with sending organizations, or does it have the support of other organizations? (YES/NO)
1. Autonomous partner
2. Partner of a consortium / network
3. Informal network of schools/centres and similar organisations
4. Intermediary organizations
5. Other supporting bodies (Please, specify:…….)

C6, Does your School/Centre apply a predefined plan with standard criteria for participant selection?
1. Yes, we have a plan we follow
2. No, we make a case by case analysis
3. No, we do not make any selection

C7, (If C6 = 1 or 2) Which are the most relevant criteria in your participant selection plan? (*max 3 choices*)
1. Duration of the internship
2. Time of the year
3. Language skills
4. Professional and technical skills
5. Age
6. Gender
7. Nationality
8. Other (please, specify:_____)

C8. What is the approximate per cent rate of acceptance of hospitality applications? (reference: last year)

1. Less than 25%
2. Between 26 and 50%
3. Between 51 and 75%
4. Between 76 and 99%
5. 100%

C9. Imagine your School/Centre needs 100 budget-points to finance its hosting activities. From which sources are these 100 points procured (*reference: last year; if no external funding is required, put 'own budget'=100*)?

1.	Own budget:	__ __
2.	Private funds	__ __
3.	EU funds	__ __
4.	Other public funds	__ __
5.	Other sources	__ __
	Total	100

C10. All in all, in monetary terms, can you estimate the **approximate total yearly cost** incurred by your school/centre for hosting one participant (besides possible grants you received by the Erasmus+ Programme and ignoring non-monetary aspects such as dedicated time, worries, etc.?

1. Till 250
2. 251-500
3. 501-1,000
4. 1,001-2,000
5. More than 2,000

D. Level of School/Centre engagement

D1. (If A5=1 or 3 or A6=1 o 3) Is your School/Centre available to send abroad more people in the future than those sent in the past 12 months?

1. Our School/Centre is available to send abroad more participants
2. The number sent in the last year fulfils our School/Centre policy
3. The number sent in the last year is beyond sustainability

D2. (If A5=2 or 3 or A6=2 o 3) Is your School/Centre available to host more mobility participants in the future than those hosted in the past 12 months?

1. Our School/Centre is available to host more participants
2. The number hosted in the last year fulfils our School/Centre policy
3. The number hosted in the last year is beyond sustainability

D3. (If A5=2 or 3 or A6=2 or 3) Does your School/Centre involve own staff in tasks specifically devoted to hosting foreign participants?

1. Yes, mainly for tutorship and/or training
2. Yes, mainly for social activities
3. Yes, for all related activities
4. No staff is specifically devoted to mobility programmes

D4. (If A5=2 or 3 or A6=2 or 3) Are the hosted participants usually involved in on-going learning activities or are they part of special pathways?

1. Usually integrated into on-going activities
2. Part of special pathways
3. Other (Please, specify: ……)

D5. (If A5=2 or 3 or A6=2 or 3) Which is the most relevant investment required by engaging in hosting activities? (*Pick up one, the most relevant to your School/Centre*)

1. Organizational costs
2. Direct staff costs (e.g. salaries, allowances, etc.)
3. Indirect staff costs (for tutorship, training, social activities, etc.)
4. Loss in teaching times
5. Costs and time of dedicated structures
6. Cost of providing externally dedicated services
7. Other (Please, specify:……..)

D6. (If A5=1 or 3 or A6=1 or 3) With reference to participants sent abroad, does this activity require to engage School/Centre staff in tasks specifically devoted to own students in mobility (*Please, ignore obvious administrative duties*)?

1. Yes, mainly for tutorship and/or training
2. Yes, mainly for language training
3. Yes, for all related activities
4. No staff is specifically devoted to outgoing Erasmus+ tasks

D7. (If A5=1 or 3 or A6=1 or 3) Which is the most relevant investment required by sending activities? (*Pick up one, the most relevant to the School/centre*)

1. Organizational costs
2. Direct staff costs (e.g. salaries, allowances, etc.)
3. Indirect staff costs (for tutorship, training, other dedicated activities)
4. Loss in teaching times
5. Costs and time of dedicated structures
6. Cost of providing externally dedicated services
7. Other (Please, specify:……..)

D8. Which are the main obstacles to youth international mobility? Please, select the aspects that, according to your opinion, could discourage schools/centres from sending or hosting participants? (*maximum three options for outgoing and three for incoming mobilities*) (Programmer: random order but Other)

Sending	*Aspects*	*Hosting*
1	Language barriers	1
2	Insufficient number of self-offering candidates	2
3	Inadequate professional standards of candidates	3
4	Opposition of families to mobility	4
5	Inadequate personal or interpersonal competencies of candidates	5
6	Inadequacy of possible tutors	6
7	Insufficient number of hosting companies	7
8	Too short length of stay	8
9	Heavy costs (direct or indirect) of the whole process	9
10	Hosting organizations have no financial benefit	10
11	Lack of grants with respect to demand	11
12	Unbalanced distribution of the candidates' gender	12
13	Inadequate accommodation for candidates	13
14	Administrative burden of the process	14
15	Lack of recognition of periods spent abroad	15
16	Insufficient appreciation of mobility outcomes by the labour market	16
17	Mistrust about mobility caused by previous experience	17
18	Other (please. Specify…….)	18

D8b (se D8_sending=16) Please, specify the aspect that according to your experience could discourage outgoing mobility
D8c (se D8_hosting=16) Please, specify the aspect that according to your experience could discourage incoming mobility

E. Evaluation of possible returns (se A5=1,3 or A6=1,3)

E1.* Let us now evaluate the returns your School/Centre could get from sending its participants abroad. Please, consider the possible benefits described in the following and select **three** that, in your opinion, mostly apply to your School/Centre experience.

1. Improving own participants' language skills
2. Improving teamwork efficiency (without coaching costs)
3. Improving participants' ICTs, project management, innovation skills
4. Motivating participants to learning, improving self-consciousness, increasing completion rate
5. Encouraging intergenerational exchange, culture sharing
6. Assessing the competencies of promising participants
7. Strengthening participants and families relationships towards the School/Centre (nice place to study)
8. Assessing potential talents, easing enrolment
9. Improving staff's management skills (included planning and evaluation)
10. Improving knowledge and usage of European tools (e.g. Europass, ECVET, etc.)
11. Innovating methods of teaching or training, matching programme contents with labour market needs
12. Broadening mind-set and business ideas
13. Enhancing reputation/brand
14. Improving international collaboration

E2.* And which are the three aspects that least apply to your School/Centre experience? (*Programmer: same as E1 but those selected in E*1)

E3.* Now, please, consider the following benefits you pinpointed as very relevant from sending participants abroad. Which is the **most relevant** to you?
[most relevant]

E4.* And among the three aspects you selected as lesser relevant, which is the least relevant to you?
[least relevant]

E5. All in all, how much do you feel that sending participants abroad is worth the effort?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

E. Evaluation of possible returns (2) (se A5=2 o 3 o A6=2 o 3)

E6.* Let us now evaluate the returns the School/Centre could get from hosting participants from other countries. Please, select three of the possible benefits listed in the following that, in your opinion, mostly apply to your School/Centre.

1. Improving own participants' language skills
2. Improving teamwork efficiency (without coaching costs)
3. Improving participants' ICT, project management, web use, innovation skills
4. Motivating participants to learning, improving self-consciousness, increasing completion rate
5. Encouraging intergenerational exchange, culture sharing
6. Strengthening participants and families relationships towards the School/Centre (nice place to study)
7. Attracting potential talents, easing enrolment
8. Improving staff's management skills (included planning and evaluation)
9. Improving knowledge and usage of European tools (e.g. Europass, ECVET, etc.)
10. Innovating methods of teaching/training, matching programme contents with labour market needs
11. Broadening mind-set and business ideas
12. Enhancing reputation/brand
13. Improving international collaboration
14. Improving collaboration with local stakeholders

E7.* And which are the **three** aspects that least apply to your School/Centre experience?
(*Programmer: same as E6 but those selected in E6*)

E8.* Now, please, consider the following benefits you pinpointed as very relevant from hosting participants in mobility. Which is the **most relevant** to you?
[most relevant]

E9*. And among the three aspects you selected as lesser relevant, which is the **least relevant** to you?
[least relevant]

E10. All in all, how much do you feel that hosting participants is worth the effort?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

E. Evaluation of possible returns (to everybody)

E11. Finally, which are the categories of possible recipients that get the highest benefits and the ones that get the lowest ones from Erasmus+ mobility? Please, order the categories **from 1 (highest) to 5 (lowest benefits)**

Category	Order
Students/apprentices	
Schools and training centres	
Companies (both sending and hosting)	
Labour market	
The European Union as an institution	

F. Closing suggestions

F1. Our questions are over. Would you mind adding some suggestions for EU schools or training centres, about how to improve and make international mobility easier? ……..

F2. Would you like to receive the final report (computer file) collecting findings from this survey? If so, please provide us a valid e-mail address. ……..

Thank you very much for your kind collaboration.

QUESTIONNAIRE FOR COMPANIES

This questionnaire is aimed at describing your Company's experience and attitudes towards Erasmus+ mobility. It will take less than 15 minutes to fill in the questionnaire. Your answers will be kept in strict confidentiality and will be analysed only for statistical purposes, in compliance with privacy regulations.

Please, click NEXT to start the questionnaire.

[Programmer: each session a page]

A. Company and respondent characteristics

A1. Country where the Company is located

1. Belgium
2. Germany
3. Italy
4. Portugal
5. Spain
6. Other country (Please, specify:……..)

A2. Main business sector of the Company

1. Farming, animal production, agroindustry
2. Industry: mechanics, mechatronics; maintenance
3. Industry: electric or electronics, IT, ICT, informatics
4. Industry: other sectors (chemical, etc.)
5. Construction industry
6. Energy, renewable industry, heat industry
7. Commerce and trade (sales, retail, etc.)
8. Hotels, tourism, gastronomy, catering, other hospitality industry
9. Services for persons and families (hairdressing, child/elderly/disabled support, social care, social services, etc.)
10. Services for industries (financial or fiscal consulting, engineering, physical and chemical analyses, event organization, etc.)
11. Educational/training services
12. Health services, nursing, rehabilitation
13. Public administration, civil services
14. Banks, financial services
15. Non-profit services
16. Other services
17. Other economic sector (Please, specify: ……)

A3. Company size (*number of employees*)
1. 1-9 employees
2. 10-49 employees
3. 50-249 employees
4. 250-999 employees
5. 1,000-19,999 employees
6. 20,000 employees and more

A4.* Did your Company send and/or host students or apprentices in **Erasmus+** mobility?
1. Just sent apprentices/students
2. Just hosted apprentices/students
3. Both sent and hosted apprentices/students
4. Not at all

A5.* Did your Company send and/or host students or apprentices in other (**non-Erasmus+**) mobility?
1. Just sent apprentices/students
2. Just hosted apprentices/students
3. Both sent and hosted apprentices/students
4. Not at all

A6. Gender of the person responding to the questionnaire on behalf of the Company
1. Male
2. Female

A7. Age of the respondent (years)
Below 30
1. 30-45
2. 46-60
3. More than 60

A8. Respondent's role
1. Company executive, associate, decision maker
2. Production manager
3. HR manager, HR employee
4. Trainer, training manager
5. Other role (Please, specify: ……)

B. Sending process (if A4=1 or 3, or A5=1 or 3)

B1. How long has your Company been involved in international mobility programmes sending apprentices abroad?

1. Less than 2 years
2. 2-3 years
3. 4-5 years
4. 6-10 years
5. More than 10 years

B2. How many apprentices have been sent to other companies in the last 12 months?

B3. Are you sending apprentices to whatever country or do you have any preferred countries?

1. Whatever country
2. Some countries more than others

B4. (if B3=2) Which are the preferred countries? (*Please, click maximum three countries*) [list] + Other country, please specify:

B5. Does the selection process of apprentices follow a fixed-quota policy or is their number defined every year according to variable parameters?

1. Fixed quota
2. Variable every year

B6. Does the Company organize outgoing mobility on its own (as an autonomous promoter), or does it get support from other organizations? (YES/NO)

1. Autonomous promoter
2. Partner of a consortium / network
3. Informal network of companies and similar
4. Intermediary organizations
5. Other supporting bodies (Please, specify:……)

B7. Which are the most relevant criteria in the apprentices selection process? (*max 3 choices*) *YES/NO*

1. We do not apply any selection criteria
2. First-come-first-served
3. Curriculum/performance
4. Language skills
5. Personal and social skills
6. Previous work experience
7. Previous mobility experience
8. Participant's motivation to go on mobility
9. Staff's certainty of usefulness of mobility for the participant
10. Other (please, specify……)

B8. What is the approximate per cent rate of acceptance of apprentices' requests for mobility? (*reference: last year*)

1. Less than 25%
2. Between 26 and 50%
3. Between 51 and 75%
4. Between 76 and 99%
5. 100%

B9. Imagine the Company needs 100 budget-points to finance its sending activities. From which sources are these 100 points procured? (*if self-funded, please, write 100 to 'Own budget'*)

1.	Own budget:	__ __	
2.	Other private funds		__ __
3.	EU funds		__ __
4.	Other public funds		__ __
5.	Other sources	__ __	
		Total	100

B10. All in all, in monetary terms, can you estimate the **average** cost **per month** of sending one of your apprentices abroad (besides possible grants you received by the Erasmus+ Programme and ignoring non-monetary aspects such as dedicated time, worries, etc.)?
…….. Euro

B11. How many **hours per participant** does the Company spend on sending an apprentice abroad?

1. Nothing at all, participants provide by themselves
2. 1-5 hours
3. 6-10 hours
4. More than 10 hours

C. Hosting process (if A4=2 or 3, or A5=2 or 3)

C1. How long has your Company hosted participants in international mobility?
Less than two years

1. 2-3 years
2. 4-5 years
3. 6-10 years
4. More than 10 years

C2. How many participants did your Company host in the last 12 months?

C3. Are you hosting participants from whatever country or do they mostly come from specific countries?

1. Whatever country
2. Specific countries

C4. (if C3=2) Which countries do they come from? (*Please, click maximum three countries*) [list] + Other country, please specify:

C5. In its hosting activities, does your Company operate as an autonomous partner, working directly with sending organizations, or does it have the support of other organizations? (YES/NO)

1. Autonomous partner
2. Partner of a consortium / network
3. Informal network of companies and similar
4. Intermediary organizations
5. Other supporting bodies (Please, specify:……..)

C6. What is the approximate per cent rate of acceptance of hospitality applications? (*reference: last year*)

1. Less than 25%
2. Between 26 and 50%
3. Between 51 and 75%
4. Between 76 and 99%
5. 100%

C7. Imagine your Company needs 100 budget-points to finance its hosting activities. From which sources are these 100 points procured? (*reference: last year; if no external funding is required, put 100 to 'Own budget'*)

1.	Own budget:	__ __
2.	Other private funds	__ __
3.	EU funds	__ __
4.	Other public funds	__ __
5.	Other sources	__ __
	Total	100

C8. For hosting participants, did your company buy:

1. Extra equipment (YES/NO)
2. Extra working materials (YES/NO)
3. Other needed services (YES/NO)

C9. All in all, can you estimate the **approximate total yearly cost** (in Euro) incurred by your Company specifically for hosting participants? (*besides possible grants you received by the Erasmus+ Programme and ignoring non-monetary aspects such as dedicated time, worries, etc.*)

1. Till 250
2. 251-500
3. 501-1,000
4. 1,001-2,000
5. More than 2,000

C10. How many **hours per month** does your Company spend on hosting an apprentice from abroad?

1. None
2. 1-5 hours
3. 6-10 hours
4. More than 10 hours

D. Level of Company engagement

D1 (If (A4 = 1 or 3 or A5=1 o 3)) Is your Company available to send abroad more apprentices in the future than those sent in the past 12 months?

1. Our Company is available to send abroad more apprentices
2. The number sent in the last year fulfils our Company's policy
3. The number sent in the last year is beyond sustainability

D2 (If (A4 = 2 or 3 or A5=2 o 3)) Is your Company available to host in the future more mobility participants than those hosted in the last 12 months?

1. Yes, our Company is available to host more participants from abroad
2. No, the number hosted in the last year fulfils our Company's policy
3. No, the number hosted in the last year is above sustainability

D3. (If A4=2 or 3 or A5=2 or 3) Does your Company involve own personnel in tasks specifically devoted to hosting foreign participants?

1. Yes, mainly for tutorship and/or training
2. Yes, mainly for social activities
3. Yes, for all related activities
4. No staff is specifically devoted to incoming mobility programmes

D4. (If A4=2 or 3 or A5=2 or 3) How do you usually involve participants in on-going activities? Are they integrated into production processes, are they kept marginal to production, or what else?

1. Usually integrated into production processes
2. Usually kept marginal to production
3. About half of them are integrated into production processes, while half not
4. Other (Please, specify: ……)

D5. (If A4=2 or 3 or A5=2 or 3) Which is the most relevant cost generated by engaging in hosting activities? (*Pick up one, the most relevant*)

1. Organizational costs
2. Direct staff costs (e.g. salaries, allowances, etc.)
3. Indirect staff costs (for tutorship, training, social activities, etc.)
4. Loss in production times or quantities
5. Costs and time of dedicated structures
6. Cost of providing externally dedicated services
7. Other (Please, specify:……..)

D6. (If A4=1 or 3 or A5=1 or 3) With reference to apprentices sent abroad, does this activity require to engage Company staff in tasks specifically devoted to them? (*Please, ignore obvious administrative duties*)

1. Yes, mainly for tutorship and/or training
2. Yes, mainly for language training
3. Yes, for all related activities
4. No staff is specifically devoted to outgoing Erasmus+ tasks

D7. (If A4=1 or 3 or A5=1 or 3) Which is the most relevant cost generated by engaging in sending activities? (*Pick up one, the most relevant*)

1. Organizational costs
2. Direct staff costs (e.g. salaries, allowances, etc.)
3. Indirect staff costs (for tutorship, training, other dedicated activities)
4. Loss in production times or quantities
5. Costs and time of dedicated structures
6. Cost of providing externally dedicated services
7. Other (Please, specify:……..)

D8. Which are the main obstacles to youth international mobility? Please, select the aspects that, according to your experience, could discourage companies from sending or hosting apprentices? (*Please, highlight possible obstacles even in case of positive experience; You can choose maximum three options for outgoing and three for incoming mobilities*)
(Programmer: random order but Other)

Sending	Aspects	Hosting
1	Language barriers	1
2	Insufficient number of self-offering candidates	2
3	Inadequate professional standards of candidates	3
4	Opposition of families to mobility	4
5	Inadequate personal and interpersonal competencies of candidates	5
6	Inadequacy of possible tutors	6
7	Insufficient number of trustworthy partners	7
8	Heavy costs of the whole process	8
9	Hosting organizations have no financial benefit	9
10	Lack of grants with respect to demand	10
11	Unbalanced distribution of the candidates' gender	11
12	Inadequate accommodation for candidates	12
13	Administrative burden of the processes	13
14	Lack of recognition of advantages, fear of unknown	14
15	Other	15

D8b (If D8_sending=15) Please, specify the aspect that, according to your experience, could discourage outgoing mobility
D8c (If D8_hosting=15) Please, specify the aspect that, according to your experience, could discourage incoming mobility

E. Evaluation of possible returns [sending process] (IF A4=1 o 3 o A5=1 o 3)

E1. Have you ever compared the results before and after the mobility phase of apprentices?
1. Yes, periodically
2. Yes, rarely
3. No

E2.* With references to apprentices sent abroad, please, consider the possible benefits described in the following and select **three** that, in your opinion, mostly apply to your Company's experience.
1. Improving apprentices' language skills
2. Improving apprentices' motivation
3. Assessing the competencies of promising apprentices
4. Attracting potential talents at the recruitment stage, easing recruitment
5. Improving employees' innovation skills
6. Encouraging intergenerational exchange, culture sharing
7. Improving teamwork efficiency (without coaching costs)
8. Developing employees' flexibility, other professional skills
9. Strengthening employees' relationships to the Company, reducing turnover (nice place to work)
10. Reducing extra-time work, and/or improving time management
11. Reducing conflicts among internal personnel
12. Broadening mind-set and business ideas
13. Smoothing process deployment, increasing production or sales quantities
14. Improving international collaboration
15. Enhancing reputation/brand

E3.* And which are the **three** aspects that least apply to your Company's experience? (*Programmer: same as E2 but those selected in E2*)

E4.* Now, please, consider the following benefits you pinpointed as very relevant from sending apprentices abroad. Which is the most relevant to you?
[most relevant]

E5.* And among the three aspects you selected as lesser relevant, which is the least relevant to you?
[least relevant]

E6. All in all, how much do you feel that sending Company apprentices abroad is worth the effort?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

E. Evaluation of possible returns (2) [*hosting process*] (se A4=2 o 3 o A5=2 o 3)

E7. Do you host mobility participants regularly or just occasionally?
1. Regularly
2. Just occasionally

E8.* Let us now evaluate the returns your Company could get from hosting participants from other countries. Please, select **three** of the possible benefits listed in the following that, in your opinion, mostly apply to your Company.
1. Improving own employees' language skills
2. Fostering own employees' innovation skills
3. Attracting potential talents at the recruitment stage, easing recruitment
4. Encouraging intergenerational exchange, culture sharing
5. Improving teamwork efficiency (without coaching costs)
6. Improving internal cohesion of staff and sharing social activities
7. Strengthening relationships with the Company sending hosted people
8. Increasing production or improving sales, extra hands for pending projects, for satisfaction surveys, etc.
9. Broadening mind-set and business ideas
10. Improving international collaboration
11. Enhancing reputation/brand

E9.* And which are the three aspects that least apply to your Company's experience? (*Programmer: same as E8 but those selected in E8*)

E10.* Now, please, consider the following benefits you pinpointed as very relevant from hosting apprentices or students in mobility. Which is the **most relevant** to you?
[most relevant]

E11.* (If A4=2 or 3 or A5=2 or 3) And among the three aspects you selected as lesser relevant, which is the **least relevant** to you?
[least relevant]

E12. All in all, how much do you feel that hosting apprentices or students is worth the effort?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

E. Evaluation of possible returns (to everybody)

E13. Finally, which are the categories of possible recipients that get the highest benefits and the ones that get the lowest ones from Erasmus+ mobility? Please, order the categories **from 1 (highest) to 5 (lowest benefits)**

Category	Order
Students/apprentices	
Schools and training centres	
Companies (both sending and hosting)	
Labour market	
The European Union as an institution	

F. Closing suggestions

F1. Our questions are over. Would you mind adding some suggestions for EU companies, about how to improve and make international mobility easier?

F2. Would you like to receive the final report (computer file) collecting findings from this survey? If so, please, provide us a valid e-mail address

Thank you very much for your kind collaboration.

QUESTIONNAIRE FOR OTHER STAKEHOLDERS

This questionnaire is aimed at collecting evaluations and ideas from experienced stakeholders towards Erasmus+ mobility. It will take 20 minutes. Your answers will be kept in strict confidentiality and will be analysed only for statistical purposes, in compliance with privacy regulations.

[Programmer: each session a page]

A. Respondent characteristics

A1. Gender of the respondent
1. Male
2. Female

A2. Age of the respondent (years)
1. Below 30
2. 30-45
3. 46-60
4. More than 60

A3. Body to which the respondent belongs
1. EU institution (e.g. EU parliament, EU Commission DG, Agency, etc.)
2. Other international organisation
3. National government
4. Regional or local government
5. Education & training system
6. Company
7. Academia
8. Labour market organisation
9. Freelance, self-employed
10. Other (please, specify……..)

A4. Respondent's role
1. Executive, decision maker
2. Activity manager, officer, employee
3. Political representative, union representative
4. Teacher, trainer, dean, school director
5. Researcher, expert
6. Other role (Please, specify: ……)

A5. Country/institution in which the respondent's activity occurs
1. Belgium
2. Germany
3. Italy
4. Portugal
5. Spain
6. Other country (Please, specify:……..)
7. EU institution
8. Other international organisation

A6. Have you been directly involved„ with any role (including decision making, programme managing or monitoring, etc.) in VET international mobility? If not, in which type of mobility have you been involved, if any?
1. Yes, I was involved in VET international mobility
2. No, only VET national mobility
3. No, only other type(s) of mobility
4. No direct involvement in mobility

A7. (If A6=1, 3) How long have you been involved in international mobility?
1. Less than 1 year
2. 1-2 years
3. 3-5 years
4. 6-10 years
5. More than 10 years

A8. (If A6=1, 3) Have you been directly involved in sending and/or hosting participants or only in other activities related to mobility?
1. Just sending
2. Just hosting
3. Both sending and hosting
4. Only other activities (please, specify…….)

B. Problems of, and solutions for VET international mobility

B1. Did you have a direct experience in a VET mobility process, either as a participant, or as a staff of a school or company active in mobility?
1. No direct experience in mobility processes
2. Direct involvement as a participant
3. Direct involvement through schools
4. Direct involvement through companies
5. Direct involvement through schools and companies
6. Direct involvement as a participant and also schools or companies

B2. Were you directly involved in VET mobility processes from an institutional point of view?

1. No
2. Yes, through the European Commission or its agencies
3. Yes, as a country representative (e.g. Erasmus+ National Agency, national government, etc.)
4. Yes as a regional/local representative
5. Yes, as a union or social group (either European or local) representative
6. Yes, as another group or institution representative

B3. All in all, are you able to understand and discuss how a VET mobility process develops as regard the perspective of participants, schools, or companies?

1. No
2. Just participants
3. Just schools
4. Just companies
5. Participants and schools
6. Participants and companies
7. Schools and companies
8. Participants, schools and companies

B4. (IF B3=2, 5, 6 or 8) If you are able to understand mobility from the perspective of participants, what problems do you see regarding preparation, implementation and evaluation of the process? *[more responses possible]*

1. No problem
2. Problems in preparation (please, describe……)
3. Problems in implementation (please, describe……)
4. Problems in evaluation/certification (please, describe……)

B5. (IF B3=3, 5, 7 or 8) If you are able to understand mobility from the perspective of schools and training centres, what problems do you see regarding preparation, implementation and evaluation/certification of the process? *[more responses possible]*

1. No problem
2. Problems in preparation (please, describe……)
3. Problems in implementation (please, describe……)
4. Problems in evaluation/certification (please, describe……)

B6. (IF B3=4, 6, 7 or 8) If you are able to understand mobility from the perspective of companies, what problems do you see regarding preparation, implementation and evaluation/certification of the process? *[more responses possible]*

1. No problem
2. Problems in preparation (please, describe……)
3. Problems in implementation (please, describe……)
4. Problems in evaluation/certification (please, describe……)

B7. Independently of your experience, what would you suggest to solve the problems you perceive in VET international mobility organisation? *[more responses possible]*

1. No suggestion
2. Suggestions to improve preparation (please, describe……)
3. Suggestions to improve implementation (please, describe……)
4. Suggestions to improve evaluation and certification (please, describe……)

B8. In your opinion, which are the main **obstacles** to VET international mobility? Please, select the aspects that could discourage schools or companies from sending or hosting participants? (*maximum three options for outgoing and three for incoming mobilities*)
(Programmer: random order)

Sending	**Aspects**	**Hosting**
1	Language barriers	1
2	Insufficient number of candidates	2
3	Inadequate professional standards of candidates	3
4	Opposition of families to mobility	4
5	Inadequate candidates' personal or interpersonal competencies	5
6	Inadequacy of possible tutors	6
7	Insufficient number of trustworthy partners	7
8	Heavy costs (direct or indirect) of the whole process	8
9	Hosting organizations have no financial benefit	9
10	Lack of grants with respect to demand	10
11	Unbalanced distribution of the candidates' gender	11
12	Inadequate accommodation for candidates	12
13	Administrative burden of the processes	13
14	Lack of recognition of periods spent abroad at sending unit	14
15	Lack of appreciation of mobility outcomes by labour market	15
16	Mistrust about mobility caused by previous experience	16
17	Too short length of stay	17

B9. As regard organisational and social issues you envisaged as obstacles to VET mobility, what are the possible areas of intervention?

1. No area in particular
2. Intervention areas (please, specify how as regard sending and hosting perspectives …….)

B10. If you are able to figure out the costs of schools and training centres that send or host students abroad, which is the most relevant cost generated to schools and training centres by their engagement in sending and hosting activities? (*Pick up one, the most relevant for both sending and hosting*)

Sending	Aspects for schools & training centres	Hosting
1	Organizational costs	1
2	Direct staff costs (e.g. salaries, allowances, etc.)	2
3	Indirect staff costs (for tutorship, training, social activities….)	3
4	Loss in production/teaching times or quantities	4
5	Costs and time of dedicated structures	5
6	Cost of providing externally dedicated services	6
7	Other (Please, specify:……..)	7

B11. Now let us consider the companies that send or host apprentices abroad. Which is the most relevant cost generated to companies by their engagement in sending and hosting activities? (*Pick up one, the most relevant for both sending and hosting*)

Sending	Aspects for companies	Hosting
1	Organizational costs	1
2	Direct staff costs (e.g. salaries, allowances, etc.)	2
3	Indirect staff costs (for tutorship, training, social activities….)	3
4	Loss in production/teaching times or quantities	4
5	Costs and time of dedicated structures	5
6	Cost of providing externally dedicated services	6
7	Other (Please, specify:……..)	7

B12. Specifically regarding monetary and non-monetary costs related to mobility, what are, if any, the possible areas of intervention?

1. No area in particular
2. Intervention areas (please, specify how as regard sending and hosting dimensions…)

B13. According to your experience, are there problems related to costs or organisation that are specific to some EU country?

1. No specific country-related problems
2. Problems specific to one or more countries (please, specify which countries and why…)

C. Benefits and beneficiaries of mobility

C1. With reference to VET international mobility, please, consider the aspects described in the following and select three that, in your opinion, are a positive consequence of both sending and hosting practices (three for sending and three for hosting).

Sending	Aspects	Hosting
1	Improving participants and employees language skills	1
2	Motivating participants to learn and fulfil duties	2
3	Assessing the competencies of promising participants	3
4	Attracting potential talents at the recruitment stage	4
5	Improving participants and employees ICTs, innovation skills	5
6	Encouraging intergenerational exchange, culture sharing	6
7	Improving teamwork efficiency (excluding coaching costs)	7
8	Developing employees' flexibility, other professional skills	8
9	Strengthening employees' relationships with the sending or hosting unit, reducing turnover (nice place to work)	9
10	Reducing extra-time work or improving time management	10
11	Smoothing process deployment, increasing production/sales	11
12	Broadening mind-set and business ideas	12
13	Improving knowledge of EU tools (e.g. Europass, ECVET....)	13
14	Improving international collaboration between units	14
15	Enhancing reputation/brand of collaborating units	15

C2. Now, please, consider the positive aspects you pinpointed as relevant from **sending** apprentices or students in VET mobility abroad. Which is the **most relevant** to you?
[*Programmer: only the three select appear*]

C3. And regarding the positive aspects from **hosting** apprentices or students. Which is the **most relevant** to you?
[*Programmer: only the three select appear*]

C4. And which is the aspect that, in your opinion, least apply to **sending** activities?
(*Programmer: same as C1 but those already selected*)

C5. And which is the aspect that least apply to **hosting** activities?
(*Programmer: same as C1 but those already selected*)

C6. Regarding the aspects you envisaged as least applicable to mobility, do you think they could be improved with adequate intervention or they are simply irrelevant to VET international mobility?

1. Simply irrelevant
2. Cannot be improved
3. Possible interventions for sending purposes (please, specify how……..)
4. Possible interventions for hosting purposes (please, specify how...……)

C7. In your opinion, which are the categories of possible recipients that get the highest and the lowest benefits from Erasmus+ VET mobility? Please, order the categories **from 1 (highest) to 7 (lowest benefits)**.

Category	**Order**
Students/apprentices	
Sending schools and training centres	
Hosting schools and training centres	
Sending companies	
Hosting companies	
Labour market	
The European Union as an institution	

C8. All in all, in a 1 to 10 scale, how much do you feel that **sending** apprentices or students is worth the effort to a school?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

C9. And to a sending company?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

C10. All in all, in a 1 to 10 scale, how much do you feel that hosting apprentices or students is worth the effort to a school?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

C11. And to a hosting company?

Minimum= ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ =Maximum

D. Pointing to the future

D1. The large majority of students and apprentices who collaborated with the international survey stated that, if possible, they would repeat their mobility experience. According to your perception, is this what they really think, or is it just to be accommodating?

1. It is what people think
2. It is to be accommodating

D2. Why? ……..

D3. Some schools stated they are available to send or host more participants, others that last-year numbers should be maintained in the future, and others that they are going to reduce their engagement. According to your perception, schools will be more, the same or less engaged in the near future?

1. More engaged
2. Same engaged
3. Less engaged

D4. Why? Is there any difference between sending and hosting schools for their potential future engagement? ……..

D5. Similarly, some companies stated they are available to send or host more participants, others that last-year numbers will be kept, and others that they are going to reduce their engagement. According to your perception, companies will be more, the same, or less engaged in the near future?

1. More engaged
2. Same engaged
3. Less engaged

D6. Why? Is there any difference between sending and hosting companies for their potential future engagement? ……..

D7. What could institutions, academia, experts, or other organisations do to improve future mobility?

1. EU institutions……..
2. National institutions…….
3. Private bodies……..
4. Schools and training centres, educational systems……..
5. Companies and industrial organisations……
6. Academics, experts…….

E. Closing suggestions

E1. Our questions are over. Do you have any new suggestions for EU or national institutions about how to improve and make international VET mobility easier?

E2. Would you like to receive the final report (computer file) collecting findings from this survey? If so, please, provide us a valid e-mail address ……..

Thank you very much for your kind collaboration.

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