

ExPerO

A model to evaluate
the quality of the learning
outcome in Higher Technical
Education courses based
on stakeholders' expectations
and perceptions

edited by
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Legend of the most frequent abbreviations

EX-QR: EXpectation of QR.

HTE: Higher Technical Education.

OP: Organizational Processes.

QC: Quality of Competencies.

QI: Quality of Image.

QR: Quality of Results.

PER-QR: PERceptions of QR.

SR: Satisfaction of Results.

STK-I: Internal Stakeholders.

STK- T: Trainees Stakeholders.

STK-E: External Stakeholders.

1. ExPerO Theoretical Model

By Sara Cervai, Barbara Anna Fabbro, Luca Cian¹

Introduction

The main aim in ExPerO is to define and to realize a model to evaluate the quality of learning outcome in HTE²– Vet sector, based on stakeholders' satisfaction.

The application tools and the definition of the learning outcome are based on the theoretical model hereby presented, in which we collected the theoretical frames and the adopted criteria used to define it.

A wide and deep analysis of literature in Work Psychology, Social Psychology, Marketing and Adult Education and a general overview about what is already applied in a local³ sample, as well as an analytic consultation of EC documentation⁴, helped us to tailor the model on the HTE characteristics. The model constitutes phase n. 1.3 of ExPerO Project. It was realized by the Research Manager PsiQu Group (Department of Political Science of University of Trieste – Italy) and it was several times improved and revised thanks to the commitment and the competencies of the whole partnership⁵ and, more specifically, by Govaq through the middle and final evaluations and suggestions.

1.1

Learning Outcome vs Organizational Processes

In order to introduce the concept of **learning outcome**, it is necessary to start with a wider perspective that considers the training activity as a path aimed to valorize the human being (adolescent or adult) with his/her specific educational baggage, who – intrinsically or extrinsically motivated – wants to increase the own *being in the world*.

In this concept, the meaning of “education” is not related to “giving a shape” based on a former project (ministerial programme, training project offer, profiles needed by companies, trainers’ values); instead, here it is necessary to consider education from the perspective of its different mission, that is, “supporting in taking shape”.

The difference is not just about small details in words, but it consists of a different perspective of looking at the trainees. Education as support puts the trainee at the centre of the analysis and gives him/her an active role in defining the outcome.

Taking into consideration the training process and in order to maintain it distinguished by the “learning outcome”, we believe it is important to underline that there is a strong connection between them; it is based on the fact that a good training process contributes to determine a good learning outcome; but it does not guarantee it. So it has to be considered as a *sine qua non* condition. Under the pedagogical profile, the learning outcome is the main aim of a training service, thus its quality level is closely linked to the processes, to organizational actors (i.e. their commitment and competences) and to the socio- economic surrounding.

Looking at Vet institution as work organizations aimed for educational services, we can recognise in them the typical working processes of any organization. Training process is surely the prior process inside the many organizational processes of an Educational institution, although all the processes contribute to the development of the output. **Organizational processes** are formed from the following: a general plan of lessons, school – job – stage activities management, preparation for lessons, credit transfer system, documental and administrative processes, internal communication, internal and external mar-

keting, safety processes, and organization management. To realise a training process means to manage working processes (educational and not), aimed to guarantee the training output.

Although the hereby presented model is primarily centred on the evaluation of the quality of the learning outcome, we also need to consider the learning outcome that can be seen as the final result of the training process and of all organizational processes. Having this intention, we decided to maintain a specific part dedicated to the analysis of the organizational processes, necessary to define where the process can be improved to obtain a better learning outcome; however, these data will not be used for the judgement of the final level of quality⁶.

In other words, we can say that a valid training process, effective management, transparent administration, as well as good financial performance are necessary to obtain a high quality learning outcome, but it is not enough, and they are not the only variables having impact on the learning outcome. But it is also true that, among the many variables that we can individuate in a systemic approach, the organizational processes are the ones that the school itself can directly manage in order to improve the learning outcome. Underlining the fact that the organizational processes are not the only factor that plays a substantial role in the learning outcome, we highlight the determinant role of the trainees as co-workers of the final output.

The pro-active dimension of the people involved in the whole learning process should be put in the central position: they are not only the teachers and school personnel, but also and especially the trainees. Knowles (1987) named the science aimed to help the Adult to learn as Andragogy; it is based on the dual link "education-learning" that highlights interesting differences between educational and training context. There are a lot of technical, psychological, and social components related to training activities that strongly influence educational and learning processes. We underline hereby only a few meanings, helpful to analyze and to improve the training outcomes.

First of all, in projecting a training course the main question to answer should be "*why and how adults learn?*". In other words, training contents should be based not only on contextual needs (to know and to be able to do), but also on the development of the human being. In order to achieve a good development of the student (to be considered as a *single system of knowledge, competencies, needs, ...*), it is necessary to stimulate new mental attitudes (systematic thinking, mind opening, etc.), relationship attitudes (working in group, taking an organizational role, accepting individual and cultural diversity, being able to listen, having pro-active attitudes) and cultural ones (adaptivity, flexibility, capability to make change).

Di Nubila (2004) highlights that the core of education manifests a close link between human and professional purposes; it should be translated into individual and collective aims that should be considered in order to project HTE courses.

After these necessary premises on the theoretical pedagogic background, we propose some considerations on the training practice, needed to develop the concept of “learning outcome”.

Life Long Learning fundamentals are based on the adult motivation about a continuous learning need, after the first degree. The human potential – kept inside everybody – and the own life history are variables that create in everyone a complex system of internal motivation finalized to do and thus to learn.

Over the internal and external reasons that induce people to take part in a training course linked to the need to improve their knowledge, skills and attitudes, we cannot forget the formal acknowledgment of their participation: through it, the training experience can be recognised on the European level, both in educational and professional sides.

Higher Technical Education (HTE) answers to the need to qualify and re-qualify the professional side that increases the European portfolio on didactical and training competences, contributing to specify the professional profile of the person. Learning outcome is what a learner is expected to know, understand and be able to do, or be able to demonstrate, after completion of any learning process or, more generally, at the end of a period of learning.

HTE learning outcome

is an integrated system of competences acquired during the HTE training, formed by knowledge, capability and professional behaviours of the trainee, which answers concretely to work needs.

1.2

The Stakeholders

The more shared meaning of the stakeholder, related mainly to the economic approach is about *“bodies, entities, people who have a kind of interest in the organization and that are able with their decisions and behaviours to influence its activities and results”*. It is also clear that in a systemic view, everything can be related and any limit could be considered as lacking. Trying to define a discrete list of stakeholders for one specific organization, starting with the definition above, we can easily find a *never-ending path*. Everything, in one way or another, can influence a situation to some extent. Considering the organization as an open system, we need to define its limits and carefully analyze which stakeholders should be taken into consideration. People, bodies, companies, which feel themselves involved in a problem, are usually considered stakeholders. Translating this concept from the organization point of view, stakeholders are the ones that the organization considers important to achieve its mission; they are interested in the outcome and also, more generally, in the organization’s being.

An organization’s interest for stakeholders derives from the customer-oriented approach. In the 70’s most of the companies were focused on the customer, oriented to satisfy and to maintain him/her as the fundamental condition for the company’s survival. But a renewed view of the company strategy to succeed proposes an enlarged consideration of all those who have direct interest in the companies. It started with the increasing interest of the US companies toward shareholders: their satisfaction was more important than to satisfy the customer, because they could determine the market and the share index. So the companies were still more oriented to create networking with companies (supplier, customer, competitors) and with public bodies able to influence the market. After this, a more recent tendency has emerged to create and spread a company’s image toward the wider public. In this path we cannot forget the fundamental contribution of TQM philosophy, in which the

role of the primary stakeholder is taken by the employees as human resources inside the organization. To consider stakeholders means to dedicate time and resources to individuate them, to analyze their needs, to negotiate and to create a solid relationship with them. Putting this concept into HTE context, as well as in the school service, the first substantial difference is related to the different organizational culture and to the different history in the application of the “quality of the service” in the school context.

In companies the “stakeholder-oriented approach” has been proposed after the “customer-oriented approach”, while in schools the latter does not exist; so, in most of them, we find a “self-oriented approach”. We believe that it is important to emphasise that schools don’t need to go through the “customer-oriented approach”, they just need to learn about the “stakeholder-oriented approach”. In other words, schools do not need to enlarge the perspective (from the customer to stakeholders)⁷ nor consider that the stakeholders are customers’ categories; instead, a more effective approach for the school personnel is to be open to the perspective of assuming that the quality of their work activity is important for different subjects, inside and outside the school.

The need to take into account the external bodies (stakeholders) arises in the “stakeholder approach”; it is not necessary to satisfy all their expectations but mainly to create networks and communication flows between them and the school.

Considering stakeholders doesn’t mean aiming to satisfy all of them

It could also happen that different types of stakeholders have incompatible interests about the school. For example, a student could be interested to finish the school in the shortest possible time despite the results; however, a family could be more interested in having a good culture for its children and a company could be more interested in practical teachings. So, what a school manager should do in order to satisfy stakeholders without forgetting the formal aim of any educational process?

The stakeholders need to be listened in order to get acquainted with their interests (not just supposing them), to understand them and to tailor the service closer to their needs, but only if it doesn’t collide with the school mission, its resources and institutional interests. In this sense Reavill’s study (1998) appears to be significant, where, analysing TQM applied to the school, he started calling “customer”, then “stakeholder” the ones who pay for the school service. In literature it is generally confirmed that, in educational environment, “stakeholder” could be considered as a synonym of “customer”, i.e. “who contributes and benefits from the school service”.

Analysing the role of stakeholders for HTE courses, we started with a former analysis developed in *QiS project – Quality in School* (Comenius 2.1) and with a deeper literature analysis⁸ about stakeholders in the school. We re-elaborated this list working in a group with ExPerO research partners and considering their local environment.

Even if in the project planning we foresaw to create a weighted list of stakeholders, we have recognized, in this dissertation, a lack of sense in creating a general and abstract measure of their weight.

Stakeholders' relevance needs to be considered by each school. Although it is possible, as we have done, to find a common list of them (defining the borders of the open-system), it is not correct *a priori* to define their relevance. Each school organization maintains its own relationships and it makes decisions on the basis of its values. Elaborating the stakeholders' list, we classified them in homogeneous categories based on the level of interest (and the level of knowledge) in the specific HTE course and, more generally, in vocational dimension of education.

From the data collected, we have individuated the following groups of stakeholders for the HTE courses:

- trainees and trainees with special needs
- teachers of theoretical subjects
- teachers of vocational subjects
- administrative staff
- managerial staff
- tutors
- potential trainees
- former students
- families
- families of trainees with special needs
- associations for people with special needs
- local companies
- excellent companies
- customers of companies
- Ministry of Education
- European policies
- public authorities at local levels
- industrial associations
- work associations
- professional unions
- universities

We highlight that, considering that every school needs to create a relationship network with all its stakeholders, each stakeholder has to be discussed in a different way in the learning outcome. Following this assumption, we have firstly classified them on the basis of their direct or indirect involvement in the educational process:

- **Trainees** have been referred to as a different category of stakeholders. They are simultaneously internal and external ones and completely different from others. They are first of all “users” of the educational service; they are directly involved in the process and determinant in performing the learning outcome. Without stimulating the motivation of the trainees and without achieving the educational aim, the learning process would be empty and unsuccessful, despite excellent educational service provided by the school. The trainee is the foremost beneficiary of the service school.
- **Internal stakeholders** participate in the creation of the training and they directly determine its process and result. They are mostly the staff of the school organization (teachers, administrative staff, other school employees, school managers: headmaster and his/her staff). They have a critical interest in the organizational achievements and in their own professional motivations.
- **External stakeholders** have a direct or indirect interest in the result of the process. They usually don’t actively participate in the process, but they can influence it, even with no direct actions. They are: companies, their customers, related associations, the families of students with special needs, the country and EC institutional bodies.

It is the task of each school to analyze the importance of each stakeholder. It has no sense to figure out a common standard based on the average of weights. The policy makers of the school (leadership) should have a clear vision about the level of importance of each stakeholder, and their declaration of stakeholders’ weights contributes to clarifying the vision of the school.

1.3

Quality of the Service

In order to create a solid theoretical framework, we have deeply analyzed the scientific literature about the quality of the service, the analyses of expectation, its influence on the customer choice and the perceptions as cognitive processes. We have also had a look at the studies concerning the school service and to the application of tools for the analyses of training programmes.

Even if the model is mainly aimed to analyze the quality of learning outcome, we firmly believe that it is correct to start from the quality of the service, in order to develop a model, tailored for HTE courses, and able to consider both components (outcome and service) in their own complexity and interdependency.

Before analyzing in detail the theoretical models about “quality of service”, we need to introduce some theoretical concepts about expectation and perception, which will be used in the following steps.

1.3.1 Perception and Expectation

As Kotler (1995, 2000) states, perception is the process used by people to select and to organize external stimuli giving them sense. However, everyone receives, organizes and translates these stimuli in a personal way; this occurs in relation with three perceptive processes: selective attention, selective distortion, and selective retention.

- Selective attention: when something happens, we perceive it, and this perception is a way to filter the reality; we use our senses to collect information. We do not use all the data we have at disposal, but just a selection of them, mainly on the basis of motivation (what we are interested in), culture and background (how we are used to perceive), physiological status (for example when we are happy we focalize our attention on the better side of things).

- Selective distortion: even when we pay attention to a particular stimulus, it is not automatically translated in a unique way. Everyone, indeed, in an automatic and not controlled way modifies the stimulus to make it more coherent with one's own point of view. When we perceive something, our mind tries to categorize what has just been perceived with something already known, something present in our memory, creating a link between the past and the present; this network of information is called schema. Schemas give us the possibility to understand what happened through the past experience. So every new piece of information is filtered and warped by our schemas.
- Selective retention: the most of what we learn is forgotten; we tend to remember what agrees with our own opinions and with our own point of view.

Concerning expectations, they are schemas about what is going to happen. Expectations are, as all schemas, activated by an automatic process (so we cannot rationally control them). Among the dedicated theories that have tried to explain what happens to our expectations when we receive new information, the best known is the one proposed by Warneryd (2001). This scholar considers expectation as a synergy between: (a) previous experiences about the same phenomena or something like this, (b) validity of previous expectations (if they were confirmed or disconfirmed) and (c) new contextual information.

Considering the validity of Warneryd's model, we underline the importance of the socio-cultural context. Taking into account what Oliver (1980) and Constable (1996) said, we believe that there are a lot of complex factors that intervene in the Warneryd model, such as:

- image and symbolic values
- context
- own personality
- personal motivation
- cultural belonging:
 - vision of the world
 - political and social belonging
 - economic, cultural and educational status

But "expectation" is not a monolithic concept; it can be split up as follows:

- **Expectation as predictive standard**
(Boulding, Kalra, Staelin and Zeithaml, 1993)
This kind of expectation is focalized on the sure forecast about what is going to happen (will happen) in the next match with the service (or with the company). This kind of expectation is usually used in the customer satisfaction studies.

- **Expectation as ideal standard**
(Boulding, Kalra, Staelin and Zeithaml, 1993)
This kind of expectation is what the customer should want to obtain (should happen) in the next match with the service or with the company. This kind of expectation is usually used in the models of quality of service.

Miller (1977) underlines the possibility to take into account another category called “**minimum tolerable standard**”, in other words, the lowest level of performance that the customer can accept. Questions about it use “must” form.

Finally, it is important to analyze the difference between expectation as ideal standard, and desires. It is almost clear that if we ask a person about his desires of a service, the answers could be unrealistic, far from what is possible; it is not much related to the past experiences but more related to fantastic desires. Questions about them use “would like” form. Instead, considering expectation as ideal standard, the requested opinion is more realistic and pragmatic. It is rooted on the past experience but, at the same time, it is seeing the situation in an improving way. The use of “should” form allows to understand and express how the service should be to be considered good.

1.3.2 Quality of image

The image could be defined as a cognitive construct – possessed by a subject – formed through a fusion of opinions, expectations and perceptions, developed along time, about a particular object.

The managing of image is particularly studied in the “integrated communication” approach. According to this prospective, every communicative process – internal and external, formal and informal, commercial and institutional – should not only coexist with the others, but also integrate in an effective way. So, the institute communication, in order to build a believable image, is to be considered as an holistic system, where every single communication is representative of all the others. In this sense, the key word to obtain credibility is coherence; coherence between the image proposed and the reality of

the service offered, coherence between all the communication media utilized and coherence amongst the communications provided along the time. Finally, more are the publics; more the image should be coherent.

Image can strongly influence the choice of a service, having effect both on expectations and on perceptions. Moreover, it gives an indicator to the organization to monitor its changes along years and to compare its image with that of similar services.

1.3.3 Quality of the Service vs Customer Satisfaction

In analysing extensive literature about the quality of service, we found it interesting to highlight the conceptual differences between it and the customer satisfaction.

The table below synthesises the main differences between the two kinds of models.

	Quality of the Service QS	Customer Satisfaction CS
Expectation used	Ideal Expectation	Predictive Expectation
Connection between Expectation (E) and Perception (P)	Quality of the Service derives from a relation between E and P	Customer satisfaction = E-P
Influenced by	Strictly connected by internal factor; not influenced by external factors	Also by factors external to the service (i.e. the specific situation, emotions) not controlled by the "service"
Type of event to be evaluated	A general kind of service	A specific defined event (by Oliver)
	Both specific event and general service (by Teas)	

The first difference refers to the type of expectation considered by two models. The customer satisfaction refers to the predictive standard, while the quality of service to the ideal standard.

The common reading key in this macro category is the consideration of the expectation as foreseen by the customer and related to what is probably going to happen in next transactions. Developing a deeper analysis of the concept, we underline that expectations as “predictive standards” are typical of the paradigm “confirm vs disconfirm” and they are mostly related to literature about customer satisfaction.

However, expectations as “ideal standard” are mostly used in the literature about quality of service and they refer to expectations as the wanted level of performance for the customer (Prakash 1984; Spreng, 1996; Boulding et al., 1993). Even if both concepts (CS and QS) take expectation and perception into consideration, there is a different kind of approach about the type of relation existing between them.

Customer Satisfaction models are based on the idea that the final satisfaction derives from subtraction of expectation from the perception. In this sense, CS models have been using a “subtractive” relation. By contrast, QS models are based on a general relation among expectation and perception. But to clarify the evolution of the theories, we need to explain the conceptual development of the studies, started with Servqual (Parasuraman, Zeithaml and Berry, 1988-1994), maybe the best known (but not the most recent) model about customer satisfaction.

In Servqual model, satisfaction is the result of expectation *less* perception. The same survey scale (a Likert scale) was used to measure both expectation and perception, simply subtracting the perception score from the expectation score. A positive result means that expectation is major than perception, consequently the customer is unsatisfied; and when the result is minus, the customer is satisfied.

Among the various critics to Servqual model, one of the most important is represented by the ServPerf model (Cronin and Taylor, 1994). These authors state that when somebody is called to evaluate the perception, she/he in their own mind has already considered the personal past expectation of the service, thus the evaluation of the perception already contains the expectation. In other words, the subtraction proposed by Servqual becomes double (first, implicitly done by people in their mind, and second, explicitly done by Servqual model).

Another difference between CS and QS rests in the influence of external factors. The factors that cannot be controlled by the service provider are considered external by the authors. These factors derive from external causes, i.e. the emotional status of the user, environmental variables, etc.

Customer satisfaction is mainly a feeling rather than a judgement, such as a temporary status of the mind, and therefore is more influenced by external factors. By contrast, the quality of the service is more an evaluation than an emotion, and so it is not influenced by temporary factors, such as emotions or contextual factors not related to the service.

Lastly, it is correct to consider that, in Oliver's opinion (1996), QS defines a general attitude about a service in its wholeness, while CS is related to a transaction specific. In this sense, we agree with Teas (1994), who says opposing Oliver that the quality of the service could be both related to a whole service and to a specific transaction.

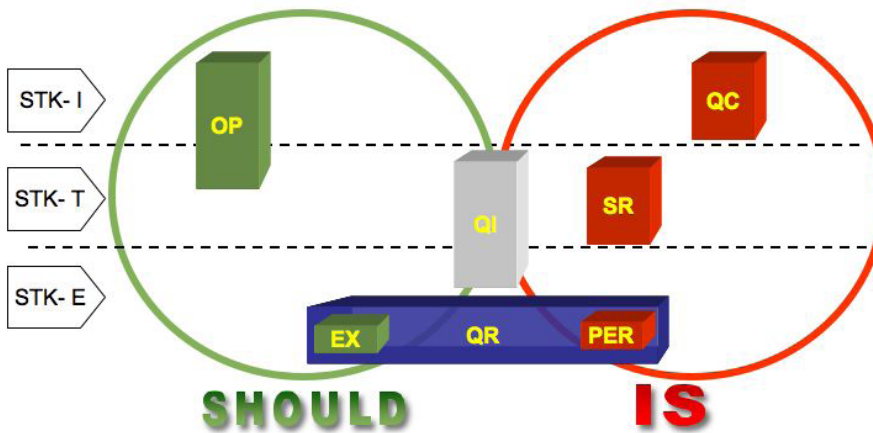
Although until now we have taken into consideration "customer satisfaction" and "quality of the service" as macro areas of literature, next we are going to tailor the model based on ExPerO aims starting from the following concepts:

- ExPerO model aims to measure the quality of the learning outcome: the analysis of the service in its wider meaning, as well as the training process, is not considered in the evaluation set.
- ExPerO model analyzes the stakeholders' point of view: the customer approach has not been considered helpful for the school needs, especially in defining a single category of beneficiaries. Stakeholders promote different needs, expectations and perceptions. In this way, the schools have different kinds of information at their disposition.
- Different stakeholders for different indicators: we propose a different categorisation of stakeholders in order to tailor the analysis of learning outcome to their respective interests and points of view. Consequently, they are called to contribute to the evaluation they are interested in and about which they will be informed.
- QS approach for external stakeholders: to measure the quality of the learning outcome from the external stakeholders' point of view we use the "quality of the service" approach. It means, with reference to what has been explained above, using an analysis of expectation in the form of "should", a complex relationship between Expectation and Perception, and not considering the influence of external factors.
- CS approach for trainees: the trainees are the only category of stakeholders whom we have decided to use in CS approach, instead of QS. The reason is stated in Adult learning dynamics and especially in their own motivation.

Satisfaction is closely related to motivation to learn. Trainees are the only kind of stakeholders that are both internal and external, because they are at the same time beneficiaries and partakers in the process; so we need to evaluate their level of satisfaction in order to consider their active role in the learning process. To measure it, we have accepted ServPerf model (expectations are already taken into account in the perception process).

1.4

The 2 areas of the model: SHOULD area and IS area



On the basis of the theoretical consideration done until now, we have developed the theoretical model tailored for ExPerO aims and needs.

To describe the model we will start by indicating two macro areas that compose it: SHOULD and IS. They are the two labels that we will use to indicate two different steps in analyzing the quality of the learning outcome (that is the project focus). SHOULD area includes the analyses of expectations, tailored for different stakeholders, and it takes into account their interests and their knowledge about the HTE course.

These expectations have been asked using “should” form, thus analyzing the ideal expectation level⁹.

This area is labelled SHOULD because inside it we can find the information useful to improve the learning outcome; it doesn’t directly refer to what is lacking, but it mainly refers to what can be improved. In this way, the TQM states that we don’t need to think about guilt, but it is better if we look how to get

Not taking into consideration the general meaning of ideal expectation in ExPerO, we can say that “the (ideal) expectation about the learning outcome of a HTE course is the cognitive schema that the stakeholders have, based on their past experience and oriented, thus mediated, to their wishes”.

enhanced next time. So the ideal expectations, as they are obviously based on the past experiences but oriented to the desires, allow arising what can be improved. Hence, the SHOULD area contains expectations, and they will be used both to be compared with perceptions in order to “evaluate” the HTE course, and give a feedback to the school about what and how can be improved.

We already said that the learning outcome cannot exist without the organizational process and we underline that ExPerO aim declares evaluating mainly the learning outcome; nevertheless, we included the “organizational process” in the area of SHOULD, but not for the evaluation purpose. The analysis of the expectations about the training process is strategically important to understand *how* to improve (not *what* to improve) and it is the process in which the school has more control and responsibility. Then we have differentiated the expectations analyses among stakeholders on the basis of what they know and what they are interested in. This is why the organizational process expectations are investigated only by the internal stakeholders and trainees: they are the ones who better know how the processes could be improved. On the other hand, the expectations about learning results have been asked only from external stakeholders and trainees because they are the direct beneficiaries of the learning outcome.

The second area, named IS area, is strictly oriented to evaluate the learning outcome, both using concepts belonging to the quality of the service and to customer satisfaction, by adding elements taken from educational field.

Quality of the service concept (based on ideal expectation) has been used in order to measure the quality of the learning outcome by external stakeholders. It consists of comparing the external stakeholders’ ideal expectations (indicated in SHOULD area) with the external stakeholders’ perception of the learning outcome (IS area).

Customer satisfaction approach (based on predictive expectation) has been used for the trainee stakeholders because, as explained in detail in the next paragraph, their satisfaction is closely connected with the learning outcome level. Then, to complete the evaluation of the quality of the learning outcome, we found it necessary to insert a specific indicator about the level of knowledge acquired during the HTE training (QC) and a specific indicator focused on the quality of image.

Macro indicators of Learning Outcome

Starting with the definition of “learning outcome” – meant as integrated system of competences proper to each trainee – it is now needed to define it in detail.

Learning Outcome is a paradigm described as an integrated system of competences acquired in attending a HTE course. It is formed of knowledge, skills and professional behaviours of each trainee as a direct concrete answer to the market needs. The first keyword that has to be defined is “competence”. This term, used in the technical lexicon of educational context, indicates the system of resources (knowledge, skills and behaviours) needed to efficiently enter into a job environment and, more generally, into the own professional and individual development. The competences acquired by the trainee after a HTE course, especially when s/he will be able to apply them on the job, also constitute the main motivation to attend this kind of courses.

This work has been done after a long and deep analysis of scientific literature¹⁰ (pedagogy and didactics) and of the main documents elaborated by European and National Institutions on vocational educational (i.e. CEDEFOP, Unesco, Isfol). The main features, common to different models, is the multi-factor composition of the competences (in Unesco model there are four, in Cedefop¹¹ one and three in Goguelin,1971).

Starting with different but not so distant positions we have tried to elaborate our own definition about the “system of competences” tailored for HTE education. The learning processes are dynamics that permit the person to build his/her own shape. They decide to be involved in training processes if they perceive their need about these levels:

- **Knowledge** (to know): it is the theoretical knowledge linked to a specific professionalism. It acts on the needs to improve the own knowledge, meant as concepts and conceptual elements that are linked to a specific profession. Moreover, it is also linked to the “tools to know”, i.e. the concentration capability, the memory and the reflection capability.

- **Skills** (to know how to do): it refers to the methodological technical applicative skills that are necessary to solve problems arising in daily work, they are also useful to verify the applicability of the knowledge. Usually, the term skill is used to refer to a level of performance, in the sense of accuracy and speediness in performing a particular task. Proctor and Dutta (1995) – the authors of the most authoritative text about skills acquisition – define them as goal-directed that take place through practice and are performed with economy of efforts.
- **Attitudes** (to know how to be): they act at the social- emotional- relational- level; they are the professional behaviours performed in relation to the labour market needs. They are, for instance: working without a direct supervisor, coordination of the work of other people, analysis and criticism of personal performance level, suggestions for quality improvement; responsibility in training other colleagues; consideration of relevant social and ethical issues.

Thus, we consider the competence as a system on different levels, the result of theoretical- practical- and behavioural- learning that arises as an answer to the individual needs in relation to the job context. In this way the conceptual framework proposed by ExPerO can be considered as a deeper development of the previous ones. In fact, it permits to split the individual system of competences taking into account the *learning areas*. Effectively, the learning process is closely linked with the biological and psychological growth and we need to consider that the improving of competences (basic, cross and professional ones) can be better acquired through a consistent, deep and individual analysis of the training needs. One of the aims of HTE courses is, in fact, to propose a training programme interesting and suitable for the trainees on the basis of the requirement of the labour context (stakeholders).

Moreover, assuming that in the personal development everyone takes simultaneously information from different sources (formal, not formal and informal networks), we believe that HTE courses should keep the interest and the main focus in the creation and consequently evaluation of the formal competences.

It is important for evaluation purposes to isolate the competences acquired in formal contexts from the ones that are developed in non-formal or informal environments. In fact, not formal and informal competences are not under control of HTE organization and they can hardly be managed by the institution. For this reason these kinds of competences can be checked and monitored (i.e. for incoming level, can be also be certified by credits), but they will not be included in the quality evaluation of HTE courses in ExPerO model.

– QC- Quality of Competences

This indicator represents the evaluation of competences acquired by the trainees during the HTE course. It consists of the evaluation of knowledge, skills and professional behaviours acquired in attending the course. It represents the learning efficacy of the training programme with respect to the initial and final competences of each trainee. It can be measured through the comparison of results with incoming tests (attitudinal and knowledge tests), as graduation votes. In particular we identify these as significant measures:

- a. competences before the beginning (previous knowledge)
- b. competences at the end of the course
- c. educational and professional background
- d. final grades

Then, it refers to the evaluation done by the teacher staff about the competences demonstrated by trainees according to the HTE course attendance (levels and content of the *curricula*). We hereby consider that trainees are *adult people* able to properly interpret their social doing and that this ability implies the consciousness of their own being. We attribute it as belonging to IS area, because it depends directly on the teachers' perceptions about it. Each school evaluator can choose the indicators as well as the standard of QC evaluation, using a percentage score to define it.

– SR- Satisfaction of the Result

It represents the satisfaction of the training performance as general judgement expressed by the trainee on the perceived quality, in which the personal (predictive) expectations are already considered (ServPerf model). The trainees' satisfaction about what they have learnt refers to the educational performance in its whole. Here we used the satisfaction concept, instead of the service evaluation one, because the adults' motivation is a necessary condition to learn and this factor regulates the psychological process connected to satisfaction. Reciprocally, the learning process is deeply influenced by the trainee's satisfaction level as motivating function. The self-efficacy theory by Bandura (1989) has been taken as reference; it explains the cyclic process in which the high or low motivation level towards a specific activity is cyclically connected to the individual perception about the capability to positively modify the situation. Finding confirmations about the utilisation of HTE degrees or recognition of the acquired professional competences are the situations that allow trainees to feel actors (influents) in their own education. If trainees feel satisfied about what has been learnt, they tend to strongly believe in their capabilities and

then be more committed, thus obtaining more success. This process brings growth to self-esteem that goes through perceiving efficacy in the educational context. In this way, a trainee tends to gain a positive evaluation of the learning outcome. We need to underline that this process could run both positively and negatively. The positive attitude leads to the growth of self esteem, while the negative one makes the trainee perceive his/her (as well as the learning outcome) limitations and inefficacy.

– **QR- Quality of Result = Expectations (EX) * Perceptions (PER) on Learning Outcome**

It involves two different levels of analyses that consider both expectations and perceptions of the quality of the learning outcome by external stakeholders. In detail, the part named EX is concerned with the system of external stakeholders' expectations about the HTE learning outcome. This indicator is part of the SHOULD area because it also conveys useful information given by the external stakeholders, indicating the part of learning outcome they are more interested in, both referring to HTE general level of education and to the specific HTE examined. Nearby to the expectation analyses, we find the perception analyses (PER) of the learning outcome. It stays in the IS area, as another component of QR indicator. Analysing Expectations and Perceptions, the evaluator has all the necessary data to judge the quality of learning outcome for the External stakeholders. We proposed a model that translates qualitative data into quantitative evaluation. This process cannot be realistically realised in an automatic translation. The evaluation should be a thorough process of data analyses observed through the lens of the school organization.

– **OP- Organizational Processes**

It refers to the organizational quality evaluation by internal stakeholders and trainees. Among organizational processes (leadership, internal communication, external school marketing, financial management, management of resources, etc.), the main is the training process. It refers to the whole service, but it focuses on the educational processes (teachers' competences, training methodologies, didactical material, workload, laboratories). This area is analyzed by the actors that are taking active part in the training and, because of it, have the possibility to directly influence those processes. We stated that these categories are the only ones able to indicate the strengths and weaknesses of the training process, because they define it and participate in it. The aspects of the processes, considered as basic for the monitoring of learning outcome, are analyzed starting with the ideal expectations. This factor is located in SHOULD area.

– **QI – Quality of Image**

In building the model, we cannot avoid considering the role of the image. The brand image has been defined¹² as a vehicle of meaning able to create values and virtual worlds (immaterial side); but to trust it, the image has to be linked with the real characteristics of the service (material side). It becomes the social memory of the service able to give identity and make the difference among other similar services.

The image can be referred to three objects: the corporate one, the brand one and the product one (Bernstein, 1984). In this context brand image refers to the image that people have about the HTE course¹³.

Brand image can strongly influence the choice of a service. Moreover, it gives an indicator to the organization to monitor, to compare itself with other similar services and to compare its changes along years.

In order to manage the image, one of the aims of the organization is to maintain coherence between internal and external communication (*integrated communication system*). Besides, it is important to not force external communication to display values that are not present in reality; strategies aimed to generate a falsification of the reality in fact are destined to fail. The more stakeholders, the more strength should be demonstrated to clarify the own image; the more public, the more coherent the image should be.

1.6

Stakeholders and five macro-indicators

After the description of the 2 macro areas (IS and SHOULD) and the macro-indicators involved in the model, we hereby present the conceptual passages to define the involved stakeholders for each macro-indicator.

- **OP - Organizational Processes indicator** is concerned about the aspects of the training service that influences as a process the quality of the learning outcome. The aim is to observe the main processes that have a predominant role in the outcome we are going to evaluate. OP indicator is asked in form of “ideal expectation” in order to analyze what can be improved the next time (Annex A and Annex B). In particular, we need to check teaching methodologies, programmes, timetables (daily and weekly), students’ workload, financial performance, training management. Stakeholders involved in investigating this macro-indicator are trainees and internal ones (teachers, tutors, managers and administrative staff). Trainees are the builders of the training process, thus are the ones who know it from the inside and cooperate in its development. School people are actors in the process; they cover different areas and different internal processes that should work in synergic way for the mission of the organization.
- **QC - Quality of Competences indicator** includes different approaches to measure the level of competences acquired by the trainees during the HTE. The stakeholders involved are the teachers. The final grades are usually considered the most widely used measurement of learning, but we know they should not be the only indicator. New models already developed in EC propose a comparison between the grade (given by teachers) and the results of self evaluation by trainees (grade given by themselves). This Indicator stays in IS area and is based on the teachers’ evaluation about the learning performance of the trainee. It is defined measuring the acquired competences of trainees in the different fields, considering marks of written, practical and oral tests. It can be obtained starting with the choice of an evaluation standard (i.e. the average of scores in the pre-

vious year) and it can be represented by percentage (%). The final indicator in percentage has to be compared with the previously chosen quality standard. In this way it is possible to check the level of adequacy of the training programme. More information about how to improve the obtained level can be found searching in OP data.

- **SR - Satisfaction of Results indicator** refers to the satisfaction of learning outcome by each trainee and it focuses on the satisfaction about the educational course in its whole. Trainees develop their own opinion along the course and they make an internal balance between their own expectations (foreseen) and their own perceptions. With regard to this indicator we accept the *ServPerf* model, in which the satisfaction analysis is done using only the perception indicator, in agreement with the fact that expectations are already considered inside perceptions. Conversely, concerning the evaluation of quality asked from the external stakeholders – aimed to define the quality level perceived by those who do not so directly partake in the learning outcome – SR aims at identifying the level of satisfaction by the trainees, because their satisfaction is supposed to be directly linked with their performance, personnel aims and internal motivation in following the course. SR is assessed through a semi-structured interview (Annex M) to the trainees after 3 months of ending the course, which also includes a level (in percentage) of general satisfaction about the HTE course.

- **QR (PER-EX) - Quality of Results indicator** is composed of two parts: expectation and perception: QR-EX includes expectations (ideal expectation) asked in the form of “should be” from the external stakeholders; QR-PER consists of all the perceptions of the same stakeholders (external) about the learning outcome. QR derives from an evaluation of the gap between QR-EX and QR-PER. QR-EX stays into the SHOULD area and it contains information provided by the stakeholders, a precious resource to redefine quality of learning outcome. The aim is to create a network to maintain relationship among stakeholders: companies, universities, industrial associations, trade unions, families of students with special needs, Chamber of Commerce, customers of companies that are in direct contact with employees, Ministry of Education and EC. All these categories have interests and expectations in the HTE outcome, not necessarily on its process. To collect information from external stakeholders (such as managers in companies, heads of workers’ association, families of students with special needs, academics, professors, etc) we used a direct contact (interview). To evaluate the expectations of the Ministry of Education and Ministry of Labour and the European Commission we only made use of documental analyses of

formal acts, in which these institutions explain the mission of HTE courses. Both the Ministry of Education and EU aim to elaborate and to disseminate the features of the learning, thus their guidelines about High Technical Education articulate their expectations about its quality level. Where present, we suggest considering standards indicated by different institution as “expectations”.

QR-PER, instead, stays in the IS area because is directly connected with the evaluation of the learning outcome. The aim is to collect data about the perceptions of the external stakeholders related to the results of the HTE course.

In order to define QR, we need to compare expectations and perceptions (EX and PER), but this operation cannot be performed as an automatic procedure. It depends on the importance given to the different stakeholders. It should be a qualitative comparison to define a *numerical evaluation or judgement*. From the different possibilities we have considered we believe that one more practical way – considering the resources available – is to choose an internal evaluator.

We underline that the evaluator of the gaps between expectations and perceptions should be the *decision maker* (or somebody close to it). The school evaluator must have the competences and the knowledge to analyze the collected data and to answer about how much the product (learning outcome) responds to expectations.

If the school wants to reduce the distance between expectations and perceptions about the quality of learning outcome, it can adopt the following strategies:

- a) change expectations (better communication about learning outcome)
- b) change further perceptions (modify the training process and/or aims in order to answer better to stakeholders’ expectations).

Finally, we believe that this decision has to be made *inside the HTE institution*, because through it the policy and the future actions are being defined.

Among ExPerO tools there is also the Database of Managing Divergences, that is a collection of best practices and suggestions, selected from the partners and aimed to reduce gaps between expectations and perceptions in the various indicators of QR.

– **QI- Quality of Image indicator**

In marketing and economic literature there is neither enough agreement nor clarity about the concept of image and some analogous terms, such as reputation and identity. After an accurate and thorough analysis we can try to delineate these concepts.

By **reputation** we mean an “umbrella concept”, a global vision of the perceptions possessed by both internal and external stakeholders (Chun, 2005).

By **image** we mean the set of cognitive representations (Brognara, Code-luppi, 1992) possessed by external stakeholders (Bromley, 1993; Davies e Miles, 1998; Hatch e Schultz, 2000). It is more conditioned than reputation by the short-period tactics (Abratt, 1989; Bromley, 1993; Dowling, 1993).

By **identity** we mean the organization’s internal vision; what the internal stakeholders perceive, hear and think about the organization they belong to (Hatch e Schultz, 1997). Identity is usually divided into organizational identity (Albert and Whetten, 1985) and desired identity (Dowling, 1994; Selame and Selame, 1988).

On the basis of this dissertation we have asked the external stakeholders (STK-E) and the trainees stakeholders (STK-T) about the image; the latter, as previously said, are a *sui generis* category; they are simultaneously both internal and external stakeholders and they are completely different from others. Due to being first of all “users” of the educational service and the foremost beneficiary of the service, the trainees stakeholders are surely interesting for the image analysis.

Endnotes

1 More specifically, L. Cian developed marketing and semiotic fields; S. Cervai the psychological field, B.A. Fabbro the educational fields. Authors thank to Romualda Marcinkoniene for her prompt support in checking the English Style.

2 Higher Technical Education. It consists of a training/educational level introduced into the vocational or technical high schools. Its morphology is very heterogeneous between the institutes and countries. It can extend from 6 months to 2 years and include different curricula to the different needs and requests

from the local work context. Its goals are to offer full competences in the profession to which it is aimed.

3 It refers to Friuli Venezia Giulia region (Italy) in which the Trieste University group (in specific Valentina Cipolat Mis and Carlotta Cassan) developed a field analysis about the quality indicators used by Vet centers.

4 In particular Cedefop and CQAF papers (9599/04 – 18th May 2004 and Credit System 31st October 2006).

5 Ljubljana meeting – January 2006, Barcelona meeting – April 2006, Sofia meeting – December 2006, Trieste meeting – July 2007.

6 For this reason the analysis of the organizational processes stays only in the SHOULD area and not in the IS one. The main reason not to consider the organizational processes in the IS area rests on the earlier consideration about the relationship that is not unidirectional between organizational processes and learning outcome.

7 To find agreement about *who is the customer* is really hard and it meets a lot of resistance from school employees, instead it is really easier and more achievable *to think in terms of stakeholders*.

8 Wright and Palmer, 1995, Bryson, 2004, McDaniel and Miskel, 2002.

9 Ref. par. 3.

10 More in specific Goodlad J.I., 1975; Cross K.B, 1981; Knowles M.S., 1984, Podeschi R.L., 1987.

11 KSC o KSA.

12 See for instance, Semprini 1996, Floch 1990.

13 In this context the corporate image refers to the institution as a whole that could have more courses (for example: Malignani school) and the brand image refers to the HTE course (for example: Malignani HTE course). In some cases the corporate image and the brand image could be the same.

2. Tools

By Sara Cervai, Barbara Anna Fabbro, Luca Cian

Hereby we propose the survey tools created in ExPerO. The whole set of tools – including data processing tools, database of management divergences, training, related materials – is collected in the hypertext, a dynamic tool that is available in CD on demand¹.

2.1 School Evaluator Tool – Step by step Guidelines to manage the data collection and the data processing

The information hereby exposed consist in the description of the whole analysis a school is called to organize in order to use ExPerO model in practice. All the survey tools and the data collection tools, as well as the guidelines, are collected in the ExPerO hypertext where the user can find all interactive links to process the data.

Related tools

- *Hypertext* (online or in CD) – collect all the materials, tools and the data processing sheets
- *Training course* – slides to train people in adopting the model

Stakeholders Weight

Each school has to divide 1000 points among the category of stakeholders included in the list. The list is composed by the 7 external stakeholders' categories individuated in the project. In this way, each school is able to obtain an own weighted list that will be used to calculate the final scores. We underline that if the score given to a category is 0, it means that this category of stakeholder will not be included in the analysis (nor expectation, nor perception).

Stakeholder's category	score
Companies	
Customers	
Vocational association	
Families/association of special needs	
Universities	
Ministry	
EU policies	
Potential trainees	
	1000

Collecting Tools - Sample

The same people that will be interviewed in Expectation survey should be contacted again for the Perception survey:

- max 10 internal stakeholders (teachers, tutor, administrative staff, headmaster) for the focus group
- 10 students
- 10 potential student
- 3 companies
- 3 customers

- 3 associations
- 10 families/associations of special needs people
- 1 university referent

SHOULD Area

In the Should area You are called to collect data about OP- Organisational Process and QR-EX- Expectation about Quality of the Result.

In the tools section of the hypertext You find the tools that permit You to collect this data. Most of them are semi-structured interviews instead one consists in a focus group; documental analysis is suggested in order to collect data by EU and National Ministries. Please read also carefully the proper guidelines in order to focus about the main features of these qualitative tools.

Related Tools

OP Organizational Processes

- Annex A. Focus group – observation grid for Organizational Processes
- Annex B. Semi-structured interview to students and to students with special needs about Organizational Processes

QR-EX Expectations about Quality of the Result.

- Annex C. Semi-structured interview to the potential trainees about the expectations of the learning outcome
- Annex D. Semi-structured interview to associations of students with special needs about expectations of the learning outcome
- Annex E. Research of standards and indicators to be used to monitor EC expectations
- Annex F. Semi-structured interview to companies about expectations of the learning outcome
- Annex G. Semi-structured interview to customers about expectations of the learning outcome
- Annex H. Indications for documental analyses of Ministries (Education, Economy, Labour) about expectations of the learning outcome
- Annex I. Semi-structured interview to Chamber of Commerce, Vocational Associations about expectations of the learning outcome
- Annex L. Semi-structured interview to University about expectations of the learning outcome
- *Guidelines for semi-structured interview, for focus groups, for documental analysis available in the hypertext*

Image

The Quality of the Image (QI) refers to both the areas. It stays in the centre of the visualization because on one side the image influences the expectations of the HTE course, on the other side the image can also be considered as a quality indicator of the organization, as it derives from the perceptions of the HTE course. In the tools section You can find the questionnaire that permits You to collect data about Image. We developed different ones aimed to different stakeholders' categories; the structure is always the same, just the headline differs.

We suggest You to read the guidelines for questionnaire that help You to focus on the main features of this tool.

Related Tools

- Image Questionnaire. Questionnaire to analyze the image of the Institute
- Guidelines for questionnaire available in the hypertext
- Data Processing in MSEXcel[®] available in the hypertext

IS Area

In the IS Area You are called to collect data about SR- Satisfaction of Results and QR-PER Perceptions about Quality of the Result. There is also another indicator in this area that is QC – Quality of Competencies. It refers mainly to marks although each HTE can also choose another way to consider it (there are also other EU projects that consider how to measure the Quality of the Competencies).

In the tool section You can find the tools that permit You to collect these data. Most of them are semi-structured interviews. Ministerial and EC indicators chosen in the Should Area need now to be monitored and checked.

Related Tools

QR-PER Perceptions about Quality of the Result.

- Annex PD. Questions for semi-structured interview to families or association of special needs people about perception of learning outcome
- Annex PE. Measure of standards and indicators to be used to monitor EC chosen indicators
- Annex PF. Questions for semi-structured interview to companies about perception of learning outcome

- Annex PG. Questions for semi-structured interview to customers of companies about perception of learning outcome
- Annex PH. Measure of standards and indicators to be used to monitor Ministerial chosen indicators
- Annex PI. Questions for semi-structured interview to vocational association/institution about perception of learning outcome
- Annex PL. Questions for semi-structured interview to university about perception of learning outcome
- Annex M. Questions for semi-structured interview to trainees
- *Guidelines for semi-structured interview available in the hypertext*

Evaluation of QR – Quality of the results of the learning outcome by External Stakeholders

QR is based on two data surveys: one about expectations (EX), one about perceptions (PER). The collected data are qualitative. The transformation of these data in numerical indexes is defined by the “evaluator”.

This evaluator (called *School-Evaluator*) should be the main referent of Quality Management in the school: i.e. the headmaster or the Quality Referent (if existing) or other roles delegated for Quality Assurance.

The *School-Evaluator* has to give a score to each quality indicator, comparing Expectations and Perceptions of each external stakeholder category. This score represents how much the Perceptions fits the Expectations. The scale for this score is 0 -100. It represents the percentage of “fitting” the expectations (%).

The indicators are: competencies, employability, credit system, drop out, meeting future needs. They derive from the information collected in the first survey about Expectations.

The External Stakeholders categories are: *families or associations of special needs people, companies, customers of companies, vocational associations, universities, ministries, EC.*

This means that the *School-Evaluator* has to give a score for each quality indicator by each stakeholder involved. The Table contains all the possible evaluation types (23). The number of the scores must be coherent with the weight given to stakeholders. In another words, if a school gave 0 point to *customers*, it means that *customers’* point of view is NOT important for the school (they are not considered as stakeholder). Consequently the school should not have been collected data about them.

In the Hypertext is available an MSExcel® sheet that permits You to automatically calculate the value of QR, pondered on the basis of the stakeholders’ weight.

INPUT

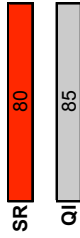
Introduce in the following cells the weights attributed to each stakeholder. Sum of weights must be equal to 1000.

Weights	potential trainees	special needs	companies	customers	vocational	universities	ministry	eu
	100	100	400	5	150	70	100	75

Introduce in the following cells the scores (from 1 to 100) attributed to each subindicator for each stakeholder.

	potential trainees	special needs	companies	customers	vocational	universities	ministry	eu
Competencies	80	25	90	15	85	60	70	50
Meeting the future needs			50		50		80	25
Employability	90	30	90		60		90	90
Dropout							95	95
Credits system	95					60	70	60

Introduce in the following cells the scores (from 1 to 100) attributed to SR (Satisfaction Results) and QI (Quality of image).



OUTPUT

	potential trainees	special needs	companies	customers	vocational	universities	ministry	eu
Competencies	good	not enough	good enough	excellent	good	good enough	good enough	good enough
Meeting the future needs			not enough		not enough		good	not enough
Employability	excellent	not enough	good enough		not enough		excellent	excellent
Dropout							excellent	excellent
Credits system	excellent					good enough	good enough	good enough

Guideline to evaluate SR – Satisfaction of Result

This index represents the level of satisfaction of the learning outcome by the Trainees (with a special focus on special needs students). It is based on Customer Satisfaction model that refers to ServPerf structure, in which expectations are already included in the personal perception system.

Data had been collected through interviews to students. At the end of the interview the students gave a final score that represents the own level of satisfaction about the learning outcome.

Then *School-Evaluator* has to read the qualitative answers and the average of the student scores. At this point, the *School-Evaluator* gives the own score (0-100) representing, in percentage, how much the students are satisfied of the learning outcome. This final score is limited by a range of 30 points around the students' average score. In other words the evaluator's score cannot be more than 15 points up or down of the students average.

Average of the scores given by students (S)	Minimum level (S-15)	Maximum level (S+15)	Assigned Score (SR)

Guideline to evaluate QI – Quality of the Image

This index represents the level of satisfaction of the school about its image. It is given by the *School-Evaluator* using a score 0-100, after the reading of the image report. The image report assembles a synthesis of the data collected by external stakeholders and trainees about the image associated to the institution.

All the scores assigned to each indicator (SR, QI) can be put in the MSeXcel[®] sheet in the Hypertext that automatically elaborates the scores giving, as result, the whole matrix diagrams.

Database of Managing Divergences


This tool has been created in order to collect suggestions and best practices by each partner, in particular by schools. For each indicator, it is available a list of helpful indications about how to solve gaps between expectations and perceptions related to the specific stakeholder. The whole database is available in the hypertext.

Endnotes

1 Who is interested to receive the hypertext or other information about the project results can contact the author (cervai@units.it) or the project coordinator (arturo@malignani.ud.it)

2.2 Annex A

Focus Group – Observation Grid For Organizational Processes

FOCUS GROUP – OBSERVATION GRID FOR ORGANIZATIONAL PROCESSES		Date __ / __ / _____	
Participants:			Moderator:
			Observer:
Indicators	+	-	NOTE
Programme – Contents of the teaching			
Methodology			
Timetables (delay in learning process) internal and external flexibility			
Initial selection			
Human Resources (level of competencies – updating, training)			
Organisation (management and administration) – integration and internal communication (specially among different competencies)			

FOCUS GROUP – OBSERVATION GRID FOR TRAINING PROCESS – sheet 2/2			Date
Indicators	+	-	NOTE
Financial performance			
Resources available (laboratories, structures and infrastructures) and degree of usability.			
Which areas are lacking? – Critical Incident exams.			

2.3 Annex B

Questions for semi-structured interview to students AND to students with special needs about Organizational Processes (OP)

Date _____	
Name of the Course that you are attending	School that you attended
Age	Gender

We propose some questions for each indicator, it is not compulsory to ask all the questions.

Sometimes it could be enough just indicate the main theme and let the interviewee free to answer. It is probably it will happen after the first 2-3 questions.

Programme – Contents of the teaching

- 1 On the basis of your previous experience, are there some topics or fields You believe important to add to the course? If your answer is “Yes”, which ones?
- 2 Are there some topics or fields (among the existing ones) You believe not absolutely necessary? If your answer is “Yes”, which ones?

Methodology

- 3 On the basis of your previous experience, do You believe the contents of the courses could be improved?
- 4 How the methods of teaching could be improved? (for example do You believe they are needed more practical example, more interaction with the teachers, more discussion in group, more theoretical explanations)

Timetables (internal and external flexibility)

- 5 On the basis of your previous experience, do You believe that the timetables could be improved?
If your answer is “Yes”, which aspects should be also considered for a good timetable? (Do You believe it is needed a different organisation among practical and theoretical topics, distribution among school-stage-job, time compatibility with school year, production cycle and university semesters).

Workload for student

6 Do You believe the rate between homework and schoolwork should be distributed in a different way?

If your answer is "Yes", which aspects should be also considered for more efficient workload?

How many hours, in average, do You believe suitable for a student like You?

Evaluation process

7 Do You believe that the evaluation process could be improved?

If your answer is "Yes", which aspects should be also considered for more efficient evaluation process? (Do You believe it could be better to do more written test, more oral test or more practical test).

Initial selection

8 Do You believe there are better criteria to be applied in the initial selection of participants?

If your answer is "Yes", which aspects should be also considered for more efficient initial selection?

Resources available (laboratories) and degree of usability

9 Is there any kind of tools/devices, not yet available, You find useful for Your professional preparation?

Organisation (management – administration and integration)

10 Are there organisational aspects that need to be improved? Both referring to administration, both to general organisation and management?

If your answer is "Yes", can You indicate some organizational or managerial aspect?

Financial Performance

11 Which kind of services (meals, laboratories and materials) should be available on the basis of the training fee/charge paid?

Which areas are lacking?

12 Are there any other suggestions You would express in order to improve the course?

Something happened during the course (critical incident) that make You reflect on what could be improved?

Questions ONLY for special need students

13 Which kind of aspects needs to be improved in order to facilitate students with your kind of disability? Do You have suggestion to improve the integration of disadvantaged students in the group /in the job?

2.4 Annex C

Questions for semi-structured interview to the potential trainees of the course, about the expectation of learning outcome (EX-QR)

Date _____	
Name of the Course that you are attending	School that you attended
Age	Gender

- 1 Indicate 3 main theoretical subjects You would like to find in course programme
- 2 How should be the proportion among theoretical and technical subjects? Indicate the percentage
- 3 Indicate 3 main technical subjects You would like to find in course programme
- 4 Indicate 3 main skills You would like to learn through this course
- 5 How should be the proportion among lesson in classroom and in laboratories? Indicate the percentage
- 6 Indicate 3 main professional behaviours You would like to learn through this course
- 7 How should be the proportion among lessons and stage? Indicate the percentage
- 8 Please, grade from 1 (more important to learn) to 5 (less important to learn) the following Competencies
 - a) level of autonomy
 - b) inter-relation capability
 - c) decisional capability
 - d) problem solving capability
 - e) integration level in the work space

Pay attention: In the last question the 5 elements should order from 1 (most important) to 5 (less important).

In the following questions, the interviewee should to indicate his agree degree whit the sentences that here we propose (from 1 to 5) where 1 is the maximum disagree and 5 is the maximum agree).

9 It represents an indicator of good quality if a course changes and renew its programme year per year

DISAGREE
 1 2 3 4 AGREE
 5

10 A good course should take in consideration the needs of the trainee before the needs of the companies

DISAGREE
 1 2 3 4 AGREE
 5

11 A course should evaluate the learning through very strict grades to increase its quality

DISAGREE
 1 2 3 4 AGREE
 5

12 The level of employment after the course is the best indicator of the quality of a course

DISAGREE
 1 2 3 4 AGREE
 5

In the following questions, the interviewee should to indicate the importance degree with the aspects that here we propose (from 1 to 5) where 1 is the minimum importance and 5 is the maximum importance.

13 How much is important the possibility to transfer the credits of this course in university credits?

LOW
 1 2 3 4 HIGH
 5

14 How much is important the possibility to transfer the credits of this course in other learning programme in Europe?

LOW

1

2

3

4

HIGH

5

15 How much is important the possibility to transfer the credits of this course in job benefit?

LOW

1

2

3

4

HIGH

5

Open Questions

16 Thinking to the employability criteria; how many months on average should be you spent to find a job after the course?

17 Why are You considering the idea to join a HTE course?

18 Which are the 3 main characteristics of the course that you would attend?

2.5 Annex D

Questions for semi-structured interview to associations and families of students special needs about expectation of learning outcome (EX-QR)

Date _____	
Name of the Course that you are attending	School that you attended
Age	Gender

These first questions are ice-breaking and should be really open.

What do You know about this course?

What have You evaluated to chose this course for Your?

Referring to the kind of disability, how should they be taken in account?

Competencies (3 item)

- 1 Which kind of competencies (theoretical knowledge, skills and professional behaviours) would s/he learn during the training?
- 2 Can You grade from 1 (most important) to 5 (less important) these competencies?
 - level of autonomy
 - inter-relation capability
 - decisional capability
 - problem solving capability
 - integration level in the work space

Pay attention: in the last question the 5 elements should order from 1 (most important) to 5 (less important).

- 3 What do You prefer s/he will do just after the course?
 - a) Attending other courses
 - b) To find a job

Expectation about Employability

- 4 Do You believe this course gives to s/he more opportunities to find a job?
Why?
- 5 How much s/he should wait before to find a job?
- 6 Do You believe s/he could apply in the job what learnt?

2.6 Annex E

Research of standards and indicators to be used to monitor EC expectations

Indications for documental analysis of EC about learning outcome (EX-QR)

Sources of information: Cedefop; TWG -Technical working group; CQAF Eurovillage; LdV projects outcome.

Indicators – main areas

- 1 Best practices of HTE considered as excellent example by EC
- 2 Theoretical knowledge: definitions/ levels/areas/classifications/standards
- 3 Skills: definitions/levels/areas/classifications/standards
- 4 Professional behaviours: definitions/levels/areas/classifications/standards
- 5 Formal competencies; Informal competencies; Non formal competencies
- 6 Credit system, portfolio, differences among didactic and training credits
- 7 Training supply: rate of old courses; rate of re-made courses; rate of new courses
- 8 Rate of dropout (standard? Level to be achieved, benchmarking)
- 9 Rate of employability (standard? Level to be achieved, benchmarking)
- 10 Meeting the emerging occupations/trades/sectors

Other information

- network among companies and other institution
- internal flexibility (distribution among school-stage-job),
- external flexibility (time compatibility with school year, production cycle and university semesters).

From these reading the following table should be filled in limited to the FIRST and THIRD column (the second one will be filled in during the perception phase).

Each table refers to one macro indicator we are using in ExPerO.

Asking to the school/headmaster, fill in the tables:

- put in each row (use as many rows You need) of the first column the indicator derived by EC expectation.
- in the third column (standard) indicate if there is a formal standard or a average data to refer.

Indicator suggested by EC for competencies	HTE level	STANDARD
<i>i.e. PISA</i>		<i>NO (average 220)</i>

Indicator suggested by EC for meeting the future needs	HTE level	STANDARD
<i>i.e. % of new courses</i>		<i>NO (N.A.)</i>

Indicator suggested by EC for employability	HTE level	STANDARD
<i>i.e. employed after 3 months</i>		<i>NO (45% average)</i>

Indicator suggested by EC for drop- out	HTE level	STANDARD
<i>i.e. percentage of student that conclude the course</i>		<i>NO (90%)</i>

Indicator suggested by EC for credit system	HTE level	STANDARD
<i>i.e. credits recognised by Uni</i>		<i>NO (N.A.)</i>

2.7 Annex F

Questions for semi-structured interview to companies about expectation of learning outcome (EX-QR)

Name of the company	
Date of interview	Name of interviewer
Name of the interviewee	Role in the company

These first questions are ice-breaking and should be really open.

- What do You know about this course? How do You know it?
- Have You known past students of this course? Which opinion do You have about them?
- Do You collaborate with HTE institution? How?

Competencies (refers to knowledge, skills and professional behaviours)

- 1 In order to answer to organisational needs, which are the knowledge, skills and behaviours that a HTE graduated should have?
- 2 Which kinds of competencies are important during the selection assessment?
- 3 Can You grade from 1 (most important) to 5 (less important) these training results?

<i>Professional behaviours</i>	<i>Level</i>				
level of autonomy	1	2	3	4	5
inter-relation capability	1	2	3	4	5
decisional capability	1	2	3	4	5
problem solving capability	1	2	3	4	5
integration in the work space	1	2	3	4	5
Other _____	1	2	3	4	5

Meeting the emerging occupations/trades/sectors

- 4 Which kinds of occupations-trade-sector are actually in development?
- 5 Which kinds of competencies do they require?

Employability

- 6 Do you believe the attending of this course is a (positive) distinction in order to be recruited in your firm? Why?

2.8 Annex G

Questions for semi-structured interview to Customers of related services (if they are direct in contact) about expectation of learning outcome (EX-QR)

Name of the referring companies	
Date of interview	Name of interviewer

These first questions are ice-breaking and should be really open.

- What do You know about this course? How do You know it?
- Have You known past students of this course?

Competencies

- 1 In order to answer to customer needs, which are the competencies a student should have?
(Please refer to knowledge, skills and professional behaviours.)
- 2 Can You grade from 1 (most important) to 5 (less important) these training results?

<i>Professional behaviours</i>	<i>Level</i>				
level of autonomy	1	2	3	4	5
inter-relation capability	1	2	3	4	5
decisional capability	1	2	3	4	5
problem solving capability	1	2	3	4	5
integration in the work space	1	2	3	4	5
Other _____	1	2	3	4	5

2.9 Annex H

Indications for documental analyses of Ministry (Education, Economic, Labour) about expectation of learning outcome (EX-QR)

Documental analyses: the following items should be found analysing documents, laws, regulation by National Ministry

- 1 Theoretical knowledge: definitions/ levels/areas/classifications/standards
- 2 Skills: definitions/levels/areas/classifications/standards
- 3 Professional behaviours: definitions/levels/areas/classifications/standards
- 4 Formal competencies; Informal competencies; Non formal competencies
- 5 Credit system, portfolio, differences among didactic and training credits
- 6 Training supply: rate of old courses; rate of re-made courses; rate of new courses
- 7 Rate of dropout (standard? Level to be achieved, benchmarking)
- 8 Rate of employability (standard? Level to be achieved, benchmarking)
- 9 Meeting the emerging occupations/trades/sectors

Other information

- network among companies and other institution
- internal flexibility (distribution among school-stage-job),
- external flexibility (time compatibility with school year, production cycle and university semesters).

From these readings the following table should be filled in limited to the FIRST and THIRD column (the second table will be filled in during the perception phase).

Each table refers to one macro indicator we are using in ExPerO.

Asking to the school/headmaster, fill in the tables:

- put in each row (use as many rows as you need) of the first column the indicator derived by Ministerial expectation.
- in the third column (standard) indicate if there is a formal standard or an average data to refer.

Indicator suggested by Ministry for competencies	HTE level	STANDARD
<i>i.e. math scores</i>		<i>NO (average 220)</i>

Indicator suggested by Ministry for meeting future needs	HTE level	STANDARD
<i>i.e. of new courses</i>		<i>NO (N.A.)</i>

Indicator suggested by Ministry for employability	HTE level	STANDARD
<i>i.e. employed after 3 months</i>		<i>NO (45% average)</i>

Indicator suggested by Ministry for drop-out	HTE level	STANDARD
<i>i.e. percentage of student that conclude the course</i>		<i>NO (90%)</i>

Indicator suggested by Ministry for credit system	HTE level	STANDARD
<i>i.e. credits recognised by Uni</i>		<i>NO (N.A.)</i>

2.10 Annex I

Questions for semi-structured interview to Chamber of Commerce, Vocational Associations, about expectation of learning outcome (EX-QR)

Name of the institution	
Date of interview	Name of interviewer
Name of the interviewee	Role in the institution

These first questions are ice-breaking and should be really open.

- What do You know about this course? How do You know it?
Have You known past students of this course?
- What is the role of Your Organisation as stakeholder of HTE?
In which ways do You cooperate with HTE institution?

Competencies (refers to knowledge, skills and professional behaviours)

- 1 In order to answer to organisational needs, which are the competencies a student should have?
- 2 Can You grade from 1 (most important) to 5 (less important) how much these training results are important in the trainees?

<i>Professional behaviours</i>	<i>Level</i>				
level of autonomy	1	2	3	4	5
inter-relation capability	1	2	3	4	5
decisional capability	1	2	3	4	5
problem solving capability	1	2	3	4	5
integration in the work space	1	2	3	4	5
Other _____	1	2	3	4	5

Meeting the emerging occupations/trades/sectors

- 3 Do You believe that in the next years this trade/this sector will need something new? What?
- 4 How should HTE organization understand the future needs?

Expectation about Employability

- 6 Do You believe the attending of this course is a (positive) distinctions in order to be recruit in Your firm? Why?

2.11 Annex L

Questions for semi-structured interview to University referent about expectation of learning outcome (EX-QR)

Name of the University	
Date of interview	Name of interviewer
Name of the interviewee	Role in the institution

These first questions are ice-breaking and should be really open.

- What do You know about this HTE course? How do You know it?
- Have You known past students of this course?
- What is the role of Your University as stakeholder of HTE?
In which way do You cooperate with HTE institution?

Competencies

- 1 Considering a passage from HTE course to University, which are the competencies a student must not lack?
- 2 Do You believe the attending of this course is a (positive) distinct in order to be accepted in Your University? How?

Credit system

- 3 Which are the criteria in order to recognize their credits?
- 4 Are there different criteria between didactical vs training- credits?

<i>Professional behaviours</i>	<i>My level</i>			<i>HTE impact</i>		
a level of autonomy	1	2	3	-	=	+
b inter-relation capability	1	2	3	-	=	+
c decisional capability	1	2	3	-	=	+
d problem solving capability	1	2	3	-	=	+
e integration in the work space	1	2	3	-	=	+

Meeting the emerging occupations/trades/sectors

3 In Your opinion, does the learning outcome respond to the new needs of the labour market?

Employability

4 What is s/he doing after the course (working, studying...)? How much has s/he waited before to find a job? Do You believe the attending of this course has created more opportunity to find a job?/ to find a better position (if already employed)? Please, explain why. Is s/he applying what learnt during the course? Explain in detail.

2.13 Annex PE

Comparison between selected indicators to monitor EC expectations and HTE level

Referring to the documental analysis done in the first phase, write a list of the indicators that a HTE institution has to individuate in order to answer to EC expectation (*even if NO specific material has been found, it should represent the school idea about it*).

Each table refers to one macro indicator we are using in ExPerO.
The School Evaluator fills in the tables:

- in each row (use as many rows You need) of the first column the indicator derived by Ministerial expectation (see Annex E).
- In the second column indicate/calculate the level obtained by the HTE course trainees (it could also be a description, not always a number)
- in the third column (standard) indicate if there is a formal standard or a average data to refer (see Annex E).

Indicator suggested by EC for competencies	HTE level	STANDARD
<i>i.e. PISA</i>	<i>210</i>	<i>NO (average 220)</i>

Indicator suggested by EC for meeting future needs	HTE level	STANDARD
<i>i.e. % of new courses</i>	<i>15%</i>	<i>NO (N.A.)</i>

Indicator suggested by EC for employability	HTE level	STANDARD
<i>i.e. employed after 3 months</i>	<i>50%</i>	<i>NO (45% average)</i>

Indicator suggested by EC for drop-out	HTE level	STANDARD
<i>i.e. percentage of student that conclude the course</i>	<i>100%</i>	<i>NO (90%)</i>

Indicator suggested by EC for credit system	HTE level	STANDARD
<i>i.e. credits recognised by Uni</i>	<i>6 credits for other activities in Engineering Diploma</i>	<i>NO (N.A.)</i>

2.14 Annex PF

Questions for semi-structured interview to companies about perception of learning outcome QR-PER

Name of the Company	
Date of interview	Name of interviewer
Name of the interviewee	Role in the company
Same person of Expectation survey?	<input type="checkbox"/> YES <input type="checkbox"/> NO

These first two questions are ice-breaking and should be really open.

- Have You known the past students of this course? How many?
- Which opinion do You have about them?

Competencies (refers to knowledge, skills and professional behaviours)

- 1 Which are the knowledge, skills and behaviours that these people demonstrate to have?
- 2 Which are the strength points?
- 3 Which are the lacks?

- 4 Evaluate the level of the following professional behaviours You had noted in the trainees (1=not enough, 2=good enough, 3=very good)

<i>Professional behaviours</i>	<i>Level</i>				
level of autonomy	1	2	3	4	5
inter-relation capability	1	2	3	4	5
decisional capability	1	2	3	4	5
problem solving capability	1	2	3	4	5
integration in the work space	1	2	3	4	5
Other _____	1	2	3	4	5

Meeting the emerging occupations/trades/sectors

- 5 Do they respond to the new needs of Your companies? If not, what is missing?

Employability

- 6 Do You believe the attending of this course is a (positive) distinctions in order to be recruit in Your firm? Why?

2.15 Annex PG

Questions for semi-structured interview to customers of companies about perception of learning outcome QR-PER

Name of the companies	
Date of interview	Role in the organisation
Name of the interviewee	Name of interviewer
Same person of Expectation survey?	<input type="checkbox"/> YES <input type="checkbox"/> NO

This first questions are ice-breaking and should be really open.

Have You known the past students of this course? How many? Which opinion do You have about them?

Competencies (refers to knowledge, skills and professional behaviours)

- 1 Which are the knowledge, skills and behaviours that these people demonstrate to have?
- 2 Which are the strength points?
- 3 Which are the lacks?
- 4 Evaluate the level of the following professional behaviours You had noted in the trainees (1=not enough, 2=good enough, 3=very good)

<i>Professional behaviours</i>	<i>Level</i>				
level of autonomy	1	2	3	4	5
inter-relation capability	1	2	3	4	5
decisional capability	1	2	3	4	5
problem solving capability	1	2	3	4	5
integration in the work space	1	2	3	4	5
Other _____	1	2	3	4	5

2.16 Annex PH

Research of standard and indicator can be used to monitor Ministry expectation

Referring to the documental analysis done in the first phase, write a list of the indicators that a HTE institution has to individuate in order to answer to Ministerial expectations (*even if NO specific material has been found, it should represent the school idea about it*).

Each table refers to one macro indicator we are using in ExPerO.

Asking to the school/headmaster, fill in the tables:

- put in each row (use as many rows You need) of the first column the indicator derived by Ministerial expectation (see Annex H).
- in the second column indicate/calculate the level obtained by the HTE course trainees (it could also be a description, not always a number)
- in the third column (standard) indicate if there is a formal standard or a average data to refer (see Annex H).

Indicator derived by Ministry for competencies	HTE level	STANDARD
<i>i.e. average of math scores of HTE trainees</i>	6	<i>NO (average of past year scores in our HTE is 6.5)</i>

Indicator derived by Ministry for meeting future needs	HTE level	STANDARD
<i>i.e. % of new courses</i>	15%	<i>NO (N.A.)</i>

Indicator derived by Ministry for employability	HTE level	STANDARD
<i>i.e. employed after 3 months</i>	<i>50%</i>	<i>NO (45% average)</i>

Indicator derived by Ministry for drop-out	HTE level	STANDARD
<i>i.e. percentage of student that conclude the course</i>	<i>100%</i>	<i>NO (90%)</i>

Indicator derived by Ministry for credit system	HTE level	STANDARD
<i>i.e. credits recognised by Uni</i>	<i>6 credits for other activities in Engineering Diploma</i>	<i>NO (N.A.)</i>

2.17 Annex PI

Questions for semi-structured interview to Vocational Association/ Chamber of Commerce about perception of learning outcome QR-PER

Name of the Institution	
Date of interview	Name of interviewer
Name of the interviewee	Role in the institution
Same person of Expectation survey?	<input type="checkbox"/> YES <input type="checkbox"/> NO

This first question is ice-breaking and should be really open.

Have You known the past students of this course? How many? Which opinion do You have about them?

Competencies (refers to knowledge, skills and professional behaviours)

- 1 Which are the knowledge, skills and behaviours that these people demonstrate to have?
- 2 Which are the strength points?
- 3 Which are the lacks?

- 4 Evaluate the level of the following professional behaviours You had noted in the trainees (1=not enough, 2=good enough, 3=very good)

<i>Professional behaviours</i>	<i>Level</i>		
a level of autonomy	1	2	3
b inter-relation capability	1	2	3
c decisional capability	1	2	3
d problem solving capability	1	2	3
e integration in the work space	1	2	3
f Other (specify) _____	1	2	3

Meeting the emerging occupations/trades/sectors

5 Do they respond to the new needs of the trades and the sector? If not, what is missing?

Employability

6 Do You believe the attending of this course is a (positive) distinctions in order to be recruited? Why?

2.18 Annex PL

Questions for semi-structured interview to University about perception of learning outcome QR-PER

Name of the University	
Date of interview	Name of interviewer
Name of the interviewee	Role in the institution
Same person of Expectation survey?	<input type="checkbox"/> YES <input type="checkbox"/> NO

This first question is ice-breaking and should be really open.

Have You known the past students of this course? How many? Which opinion do You have about them?

Competencies (refers to knowledge, skills and professional behaviours)

- 1 Which are the knowledge, skills and behaviours that these people demonstrate to have?
- 2 Which are the strength points?
- 3 Which are the lacks?

- 4 Evaluate the level of the following professional behaviours You had noted in the trainees (1=not enough, 2=good enough, 3=very good)

<i>Professional behaviours</i>	<i>Level</i>		
a level of autonomy	1	2	3
b inter-relation capability	1	2	3
c decisional capability	1	2	3
d problem solving capability	1	2	3
e integration in the work space	1	2	3
f Other (specify) _____	1	2	3

Credit system

- 5 Is their preparation coherent with the credits Your institution recognises? If not, why?
- 6 Which integration do You ask to validate HTE credits?

Employability

- 7 Attending the HTE course has been a positive distinction for enrolling in this University? How?

2.19 Annex M_SR

Questions for semi-structured interview to trainees (after 3 months from the end of the course)

Name of the course	
Date of interview	Name of interviewer
Age	Gender

1 **Competencies** – Describe the competencies You have acquired during this course. If possible, split them up in:

- a Knowledge
- b Skills
- c Professional behaviour

2 **Competencies** – behaviours

Fill in the following table, indicating in the first column Your personal level in the listed competencies (1=low 2=enough 3=very good) and in the second column the impact of HTE attended course (+ improved, = not changed, – decreased).

<i>Professional behaviours</i>	<i>My level</i>			<i>HTE impact</i>		
a level of autonomy	1	2	3	-	=	+
b inter-relation capability	1	2	3	-	=	+
c decisional capability	1	2	3	-	=	+
d problem solving capability	1	2	3	-	=	+
e integration in the work space	1	2	3	-	=	+

3 **Employability** – Have You find a job thanks to this course (or thanks to the competencies acquired in it)? How? (How many contacts/recruitment processes have You done?) Are You satisfied about your job? About your work performance? About Your work competencies? If You are not working, which are the main causes (have you applied for a job? have you done recruitment assessment?)


4 **Credits** – If you are going to continue Your educational/training process (University, other HTE courses...) have HTE credits been recognised? How? (by the University, by the institution by the company,) If You have a European Portfolio, are You satisfied about it? Why?

5 Please, assign a score (0 – 100) to Your level of **satisfaction about the learning outcome** of this course. (*Remember to strictly limit the evaluation at the learning outcome = what You have learnt, NOT refer this evaluation at other topics of the service.*)

6 Is it what You expected from? What is different?

2.20 Image Questionnaire

Questionnaire to analyze the image of the Institute

 Questionnaire about institute image			
Stakeholder			
(1) Company (2) Family/association of trainees with special needs (3) Organisation		(4) Potential trainees (5) Trainees (6) Trainees with special needs	
Name of interviewer		Date of interview	
Name of interviewee	(1) Male (2) Female	Age: (1) < 30 (2) 30-45	(3) 46-60 (4) > 60
! This questionnaire should be fulfilled ONLY from people who know the institute			
1. How have you known about this institute?		(1) Advertising (2) Open days (3) Word of mouth (4) Friends (5) Past student (6) Family (7) Previous school (8) Other (specify _____)	
2. Have you collected explicit dissenting opinions/communications about this institute?		(0) No (1) Yes	
3. You believe that this year the institute image:		(1) Is not changed (2) Is partially changed, to be abreast of time (3) Is radically changed	

4. If you believe that the image is radically changed, how is it changed?		(1) It is improved at all (2) It is partially improved (3) It is neither improved nor worsen (4) It is partially worsen (5) It is worsen at all
How? (1) (2) (3) (4) (5) (6) (7) (8) (9)		
6. How do you trust in this institute?		Low High (1) (2) (3) (4) (5) (6) (7)
7. How do you believe that the advertising and the communication of this institute are realistic?		Low High (1) (2) (3) (4) (5) (6) (7)
8. Please try to identify the institute values		
Elitist	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Widespread
Lively	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Calm
Traditional	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Innovative
Technologic /hi tech	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Manual / low tech
International	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Local
Flexible	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Rigid
Open to the students' problems	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Indifferent and detached
Funny	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Serious
Focused on creativity	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Focused on homologation
Rewarding system	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Punishing system
Religious	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Laic
Individualist	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Collective
Similar to the others	(1) (2) (3) (4) (5) (6) (7) (8) (9)	Different from the others
Thanks for your collaboration!		

3. Data Processing

By Massimo Borelli and Sara Cervai

3.1 Data Elaboration

Forced to move from qualitative toward quantitative results, ExPerO project provided to each School Evaluator a user-friendly numerical tool, able to assess the QR quality indicator. Briefly, by means of two qualitative data survey, the School Evaluator is required to give a score to each of the five sub-indicator of QR: the competencies, the employability, the credit system, the dropout and the meeting of future needs. The score intends to represent how much the Perception fits for the Expectation. Those five indicators have to be attributed with regards to eight External Stakeholders categories, which are the families or the associations of special needs people, the companies, the customers of the companies, the vocational associations, the universities, the ministries and the European Union. There is also a further slight complication, represented by the fact that it was not possible to create a common and shared ranking of importance among External Stakeholders valid for all the schools. We decided to maintain the possibility for each school to decide the weight of importance to give to each external stakeholder. For this reason the data processing has also to consider the various ranking given by each school.

We realized that the algorithm could be implemented into a spreadsheet, in such a way that users of the well-acquainted MS Excel® or Open Office

CALC™ could find it cheering and user-friendly. We chose also a colour code to highlight the strengths and the weak points of each item, using a typical *triage* scale: red, yellow, green and white.

From a mathematical point of view, every School Evaluator has to assign a five rows and eight columns matrix $[a_{ij}]$, $0 < a_{ij} \leq 100$, and a eight components vector $[w_j]$ of weights,

$$0 \leq w_j \leq 1000, \sum_{j=1}^8 w_j = 1000.$$

The goal is to create a $[0,1]$ -valued function $QR([a_{ij}], [w_j])$ which can globally represent the “percentage of fitting the Expectations”. The idea is to normalize the weights,

$$[w_j / M], M = \max\{w_j\}_{j=1..8}$$

and to define a “negligeability” vector

$$[n_j], 0 \leq n_j \leq 1, n_j = 1 - w_j / M.$$

The negligeability vector $[n_j]$ achieves its null minimum value over the maximum weight M , and it is eventually equal to one whether a Stakeholder has a zero weight. For instance, suppose that $[w_j] = [300, 120, 200, 0, 80, 60, 190, 50]$; then $[n_j] = [0, 0.60, 0.33, 1, 0.73, 0.8, 0.37, 0.83]$.

The negligeability vector has the role to maintain eventual penalizing low scores toward an important Stakeholder, and to neglect low scores assigned to not so relevant Stakeholders. Consequently, by means of the score matrix $[a_{ij}]$, an “improved scores” matrix $[\tilde{a}_{ij}]$ was defined:

$$\tilde{a}_{ij} = \text{int}(a_{ij} + n_j \cdot (100 - a_{ij})).$$

For example, suppose that the i -th row of $[a_{ij}]$ is $[96, 88, \text{NA}, 97, 95, \text{NA}, 90, 95]$. Therefore the distance from the top, $100 - a_{ij}$, is equal to $[4, 12, \text{NA}, 3, 5, \text{NA}, 10, 5]$. This distance is weakened by the negligeability vector $[n_j]$, lowering the distance from the top by a factor $n_j \cdot (100 - a_{ij}) = [0, 7.2, \text{NA}, 3, 3.7, \text{NA}, 3.7, 4.2]$, and therefore the i -th row is improved to a new scores matrix $[\tilde{a}_{ij}] = [96, 95.2, \text{NA}, 100, 98.7, \text{NA}, 93.7, 99.2]$. Note that the first element of a_{ij} (96) do not increase as its weight was maximum (i.e. 300, and therefore negligeability was 0), while the fourth one (97) automatically reaches the top (100) because of its null weight.

Now it is possible to determinate minimum, first quartile, median, third quartile and maximum values of $[\tilde{a}_{ij}]$ in order to attribute an intervention priority and a lack of fitting expectation to each spreadsheet cell:

- red cells refer to the values from the minimum to the first quartile; they show the most urgent areas to improve, i.e. important stakeholders with a low assigned score;
- yellow cells refer to the values from the first quartile to the median, they show the areas to improve, although not so urgent than the red level;
- white cells refer to the values from the median to the third quartile, showing the area in good enough level, or weakness in not important stakeholders;
- green cells refer to the values from the third quartile to the maximum and indicate the areas in which no improvement is needed: they are the areas of excellence or they refer to not important stakeholders.

Moreover, weighting the median row value of $[\tilde{a}_{ij}]$, i.e. weighting the five rows vector

$$[\text{median}_{j=1..8}(\tilde{a}_{ij})],$$

and performing a scalar product with a fixed weight vector [0.33, 0.20, 0.22, 0.10, 0.15] we obtain the quality indicator QR.

INPUT

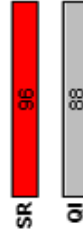
Introduce in the following cells the weights attributed to each stakeholder. Sum of weights must be equal to 1000.

Weights	potential trainees	special needs	companies	customers	vocational	universities	ministry	eu
150	0	350	25	125	100	50	200	

Introduce in the following cells the scores (from 1 to 100) attributed to each subindicators for each stakeholder.

	potential trainees	special needs	companies	customers	vocational	universities	ministry	eu
Competencies	65		90	95	80	90	100	75
Meeting the future needs			90		80		90	85
Employability	70		95		95		80	80
Dropout							70	70
Credits system	80					85	80	90

Introduce in the following cells the scores (from 1 to 100) attributed to SR (Satisfaction Results) and QI (Quality of Image).



OUTPUT

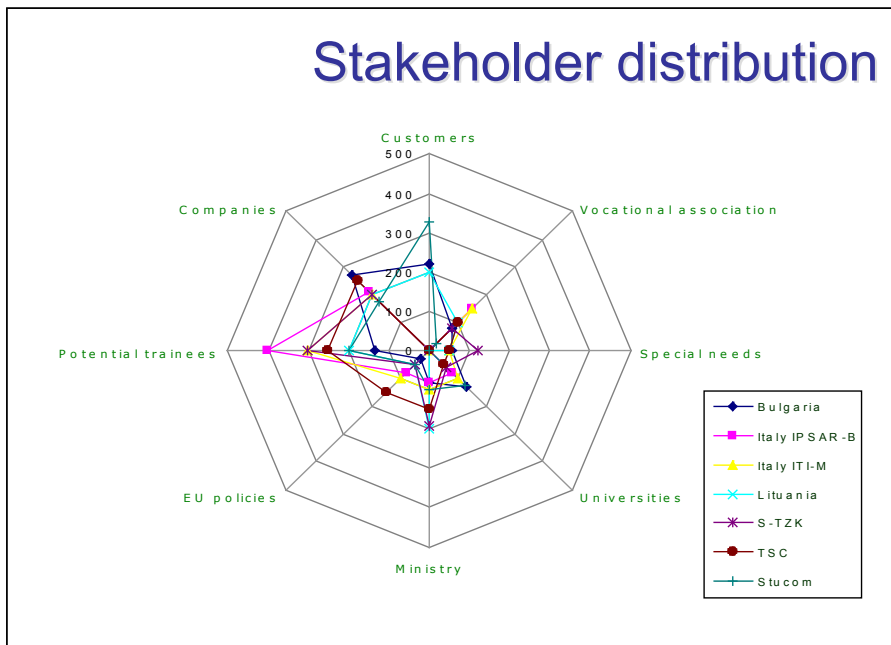
	potential trainees	special needs	companies	customers	vocational	universities	ministry	eu
Competencies	not enough	excellent	not enough	excellent	good enough	excellent	excellent	not enough
Meeting the future needs			not enough		good enough		excellent	good enough
Employability	not enough		good		excellent		excellent	not enough
Dropout							good	not enough
Credits system	good enough					good	excellent	good

3.2

Graphical Representation

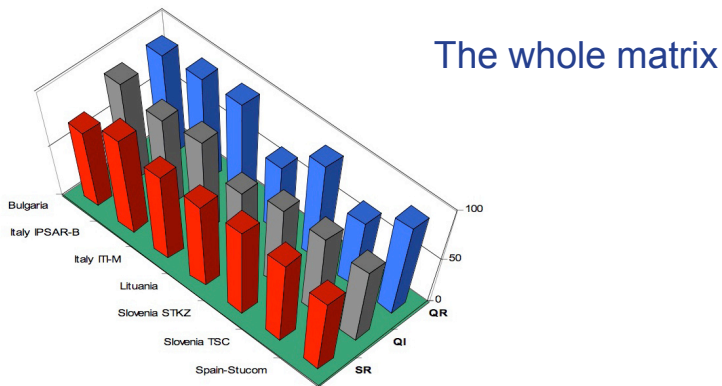
Stakeholders weight distribution

As it is highlighted by the Polar Diagram, the sample of schools investigated in ExPerO has given very different weights to the various kinds of external stakeholders. It is another confirmation to the decision taken into the project to not search for a common weight to be applied for all the schools. HTE features (service oriented, manufactured oriented) and Country culture do not allow to create a standard score.



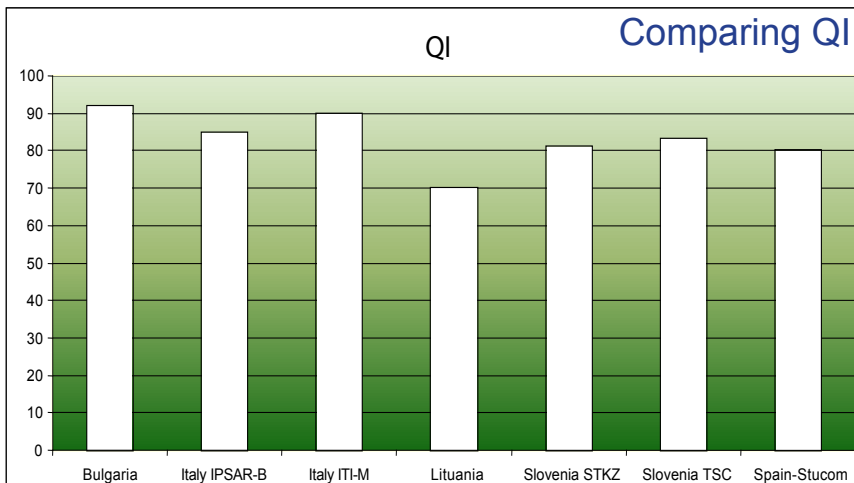
The whole matrix

The bars-diagram shows the scores given by the school evaluators to the three macro indicators quantified in the model (SR, QI, QR).



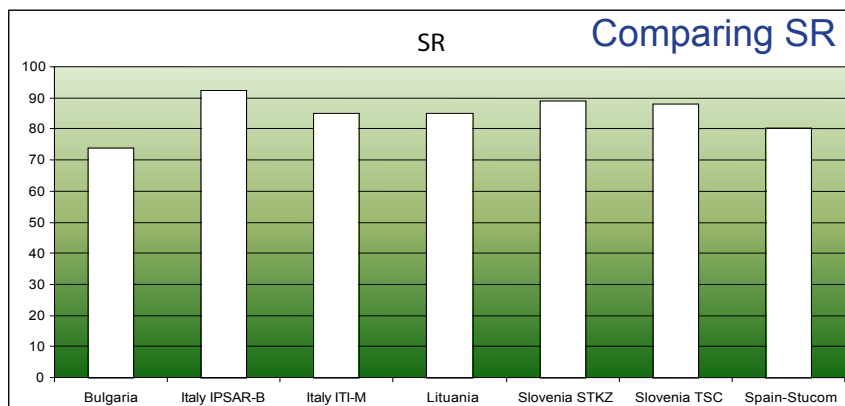
Comparing QI – Quality of the Image

The bars-diagram shows the scores given by the school evaluators to the Quality of the Image. It is important to take note that this evaluation is given by each school on the basis of the Image report and the own evaluation about how much it fits or not the vision of the school, i.e. how much the school can be satisfied of this resulting image.



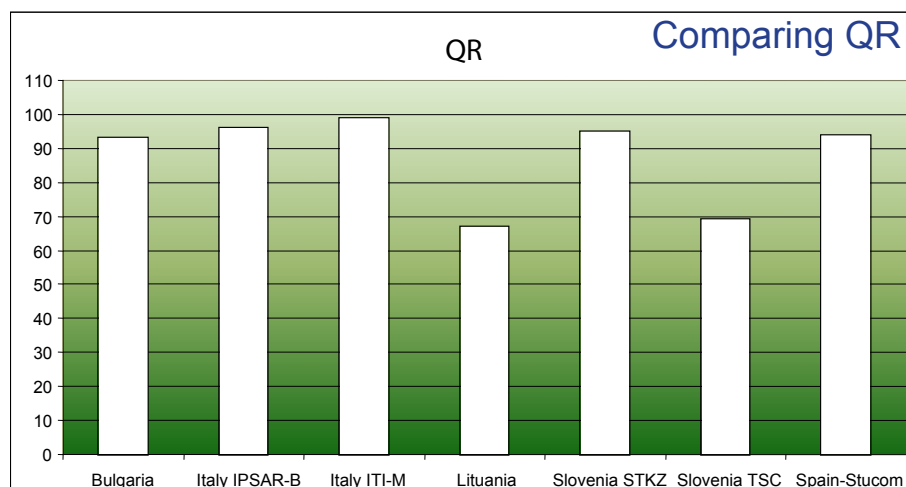
Comparing SR – Satisfaction of Results

The bars-diagram shows the scores given by the school evaluators to the Satisfaction of Results. This evaluation, given by each school, is linked to the average of the scores given by the surveyed students sample.



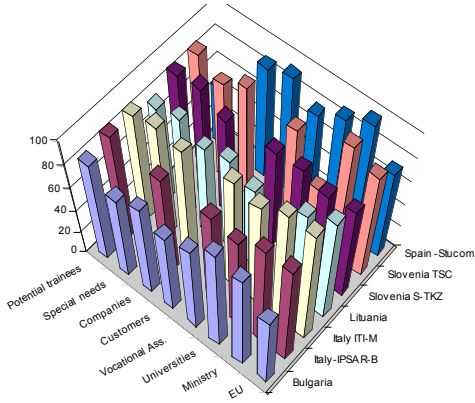
Comparing QR – Quality of Results

The bars-diagram shows the scores elaborated via the MSEXcel® data sheet, previously exposed, that permits to obtain for each HTE course a synthetic indicator considering the weight of the stakeholders and the scores given by the school evaluator to each of the five micro indicators of QR.



Comparing Micro Indicator of QR - Competencies

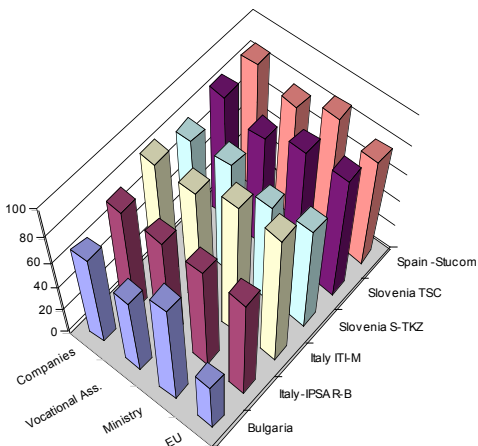
In this three dimensions diagram, there is one bar for each HTE course (7), for each external stakeholder category (8), it indicates the quality level obtained in the micro indicator "Competencies". This single score is given by the school evaluator analyzing the single expectations and perceptions of each interviewed stakeholder and evaluating how much they are fitted.



Competencies per stakeholder

Comparing Micro Indicator of QR – Meeting the Future Needs

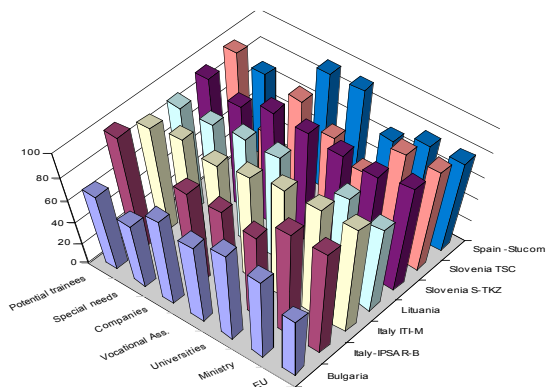
In this three dimensions diagram, there is one column for each HTE course (7), for each external stakeholder category hereby involved (4), it indicates the quality level obtained in the micro indicator "Meeting the Future Needs". This single score is given by the school evaluator analyzing the single expectations and perceptions of each interviewed stakeholder and evaluating how much they are fitted.



Meeting future needs per stakeholder

Comparing Micro Indicator of QR – Employability

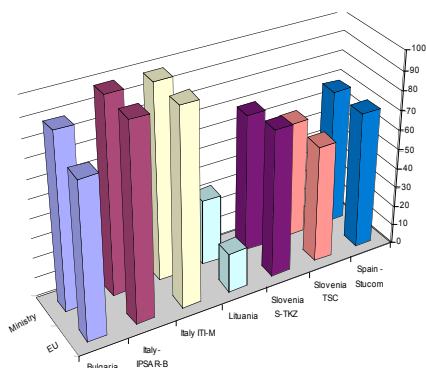
In this three dimensions diagram, the reader can find, for each HTE course (7), for each external stakeholder category hereby involved (7), the quality level obtained in the micro indicator “Employability”. This single score is given by the school evaluator analyzing the single expectations and perceptions of each interviewed stakeholder and evaluating how much they are fitted.



Employability
per stakeholders

Comparing Micro Indicator of QR – Dropout

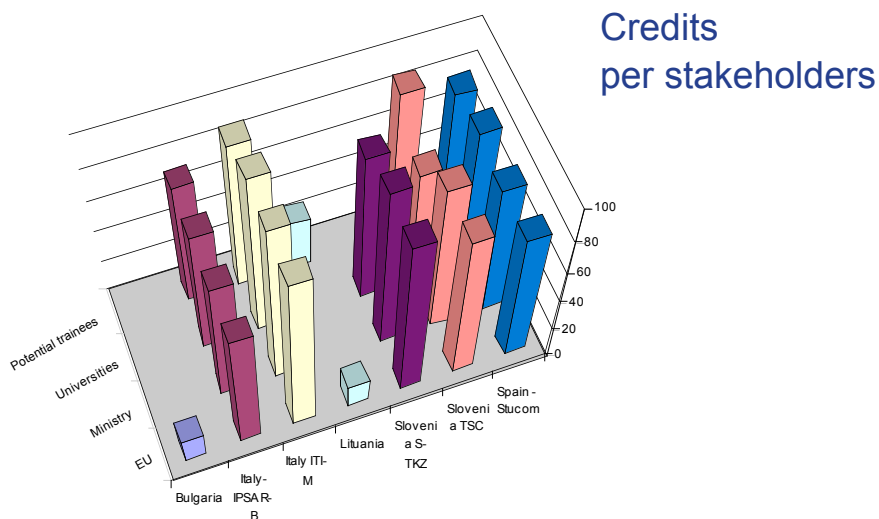
In this three dimensions diagram, there are highlighted, for each HTE course (7), for each external stakeholder category hereby involved (2), the quality level obtained in the micro indicator “Dropout”. This single score is given by the school evaluator after: firstly, to have chosen the indicators to monitor the dropout level and to have assigned it an “expected” value in order to fit Ministerial and EC needs; secondly, to have calculated this indicator for the own course and, thirdly in comparing the two values (expected and surveyed) and evaluating how much the Ministerial and EC expectations about dropout level are fitted.



Dropout
per stakeholders

Comparing Micro Indicator of QR – Credits

In this three dimensions diagram, there are shown, for each HTE course (7), for each external stakeholder category hereby involved (4), the quality level obtained in the micro indicator “Credits”. This single score is given by the school evaluator analyzing the single expectations and perceptions of each interviewed stakeholder and evaluating how much they are fitted. Some columns are empty; it means that in some countries (where HTE courses had been monitored) the credit system is not yet applied and in this situation just the EC remains and the main stakeholders involved.



Finally, it is important to underline that the graphical representation hereby presented has only a descriptive scope. It is not aimed to create competition among schools, but just a simple comparison about the data collected during the project period.

ExPerO model aimed to collect and to analyse the data from a qualitative point of view, in order to support the process of continuous improvement that each school is called to do to offer a higher and higher quality level. Total Quality Management usually proposes schemas and graphs as tools for problem finding and problem solving. The presented diagrams can be a good starting point to analyze what can be improved with the related priority and the qualitative data can mostly be useful to understand how this improvement can be realized.

4. Image Report

by Luca Cian

In the following pages it will be exposed, after a short theoretical introduction, the elaboration of the data collected about the Quality of Image (QI) in the ExPerO project.

4.1

Definition

Brand image has been defined¹ as a vector of meanings, able to give a symbolic and value dimension to the object of reference; in spite of that, communicated values and symbols should be continuously connected with the material and concrete nature of the object, in order to avoid a generation of mistrust.

The brand image brings to HTE institutions two important advantages: firstly, it becomes the social memory of the service, able to give it identity, thus to differentiate it from other similar services; secondly, the brand image – thanks to material and immaterial natures – is able to be an intermediary between the business/ bureaucratic world (ruled by rational elements) and the consumer world (ruled by emotions). But the most important factor, because we considered image in ExPerO project, is its capacity to influence expectations and perceptions about the learning outcome.

Considering the importance of image, we have created the macro indicator QI (Quality of image), located, in the ExPerO theoretical model, among the IS and SHOULD areas. QI provides the operative dimensions through we can measure the construct of image. It is composed by the following factors:

- The image oneness (see the paragraph: “To be one like no one”).
- The coherence through all the sources (see the paragraph: “Coherence through all the sources”).
- The coherence along time (see the paragraph: “Coherence along time”).
- The legitimacy (see the paragraph: “Legitimacy”).
- The values (see the paragraph: “The value of the values”).

All these factors are connected with a current communication philosophy, called “image integrated strategy” aimed to create a unique and coherent image toward all the different audiences (targets) of an institution. In this way, the image should be managed, by the institution, as a systematic and holistic concept, where each kind of communication (internal or external, formal or not formal, commercial or institutional) should appear coherent and integrated with the others.

4.2

To be one like no one

The material and immaterial nature of a brand allows it to be unique and different from the others. This differentiation is transposed in the last point of the values list of the questionnaire about image: "Similar to others vs. Different to others".

In the following table, it was considered the median of the 1 to 9 scale, where: "1" means that the institute is perceived as completely similar to the others and "9" means that the institute is perceived as utterly different to the others.

In order to simplify the exposition, the HTE school name has been replaced with the Country name. Only for Italy and Slovenia, having two HTE courses analyzed in the project, it has been written the name or acronym of the institute.

HTE institute	Median (from 1 to 9)
BULGARIA	7 (on 54 valid replies)
ITALY BORSELLINO	8 (on 65 valid replies)
ITALY MALIGNANI	7 (on 73 valid replies)
LITHUANIA	3 (on 57 valid replies)
SLOVENIA TSC	3 (on 46 valid replies)
SLOVENIA SPITKZS	6 (on 43 valid replies)
SPAIN	6 (on 63 valid replies)

4.3

Coherence through all the sources

A brand strategy should show a unique and coherent image through all the instruments and sources used for the own communication; otherwise customers could be confused by different images. This is the main axiom of the “integrated communication” philosophy.

This theoretical point can be observed in question number 2 of the questionnaire about image: “Have You collected dissenting opinions?”. The following table shows the percentage of the positive replies, indicating a dissonance in the perceived image.

HTE institute	Yes, there were dissenting opinions about its image
BULGARIA	29 yes on 54 replies 53,7%
ITALY BORSELLINO	5 yes on 36 replies 13,8%
ITALY MALIGNANI	8 yes on 42 replies 35,7%
LITHUANIA	14 yes on 65 replies 21,5%
SLOVENIA TSC	15 yes on 45 replies 23,8%
SLOVENIA SPITKZS	17 yes on 43 replies 39,5%
SPAIN	16 yes on 43 replies 37,2%

4.4

Coherence along time

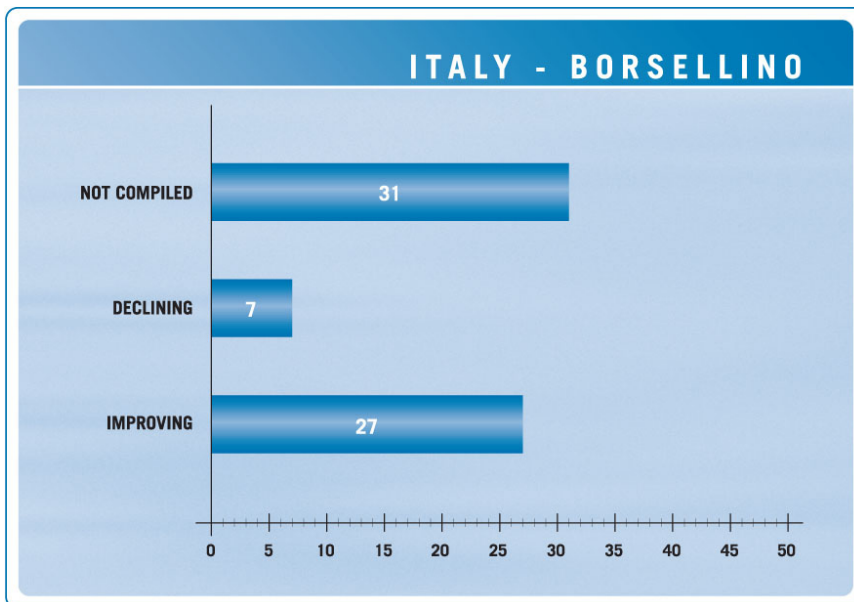
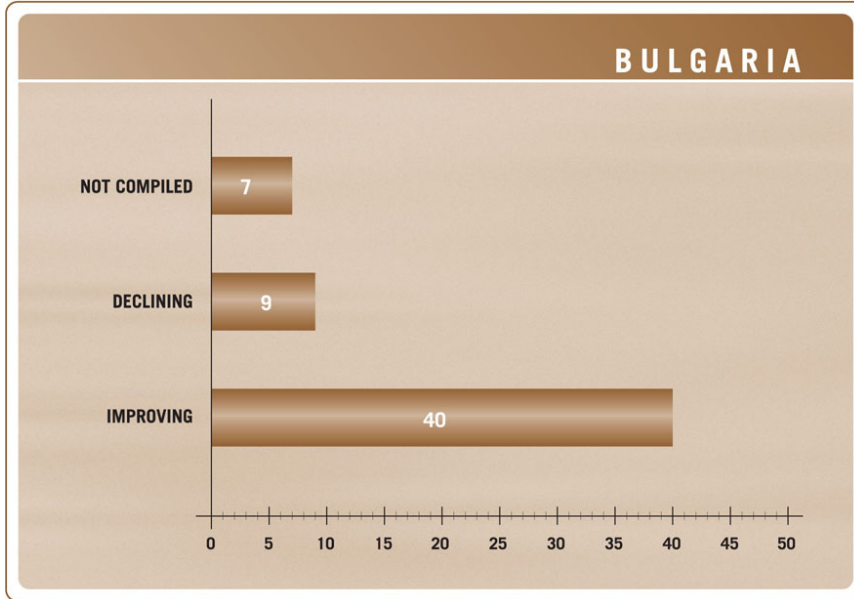
A brand strategy should show a coherent image along time; otherwise users could feel betrayed. This point has been surveyed in questions number 3 and 4 of the questionnaire about image: "Do You believe its image has drastically changed during the last 5 years?" and "How is this change? Improving or declining?".

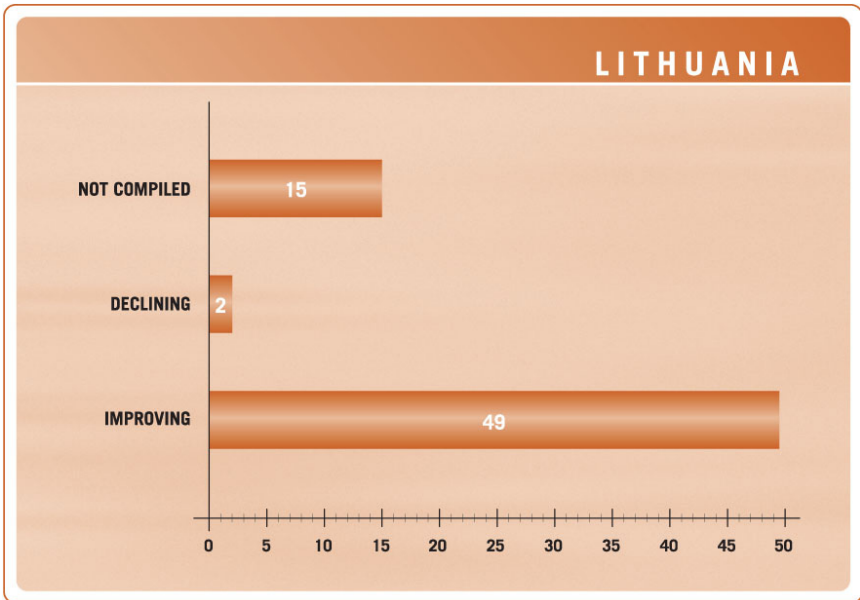
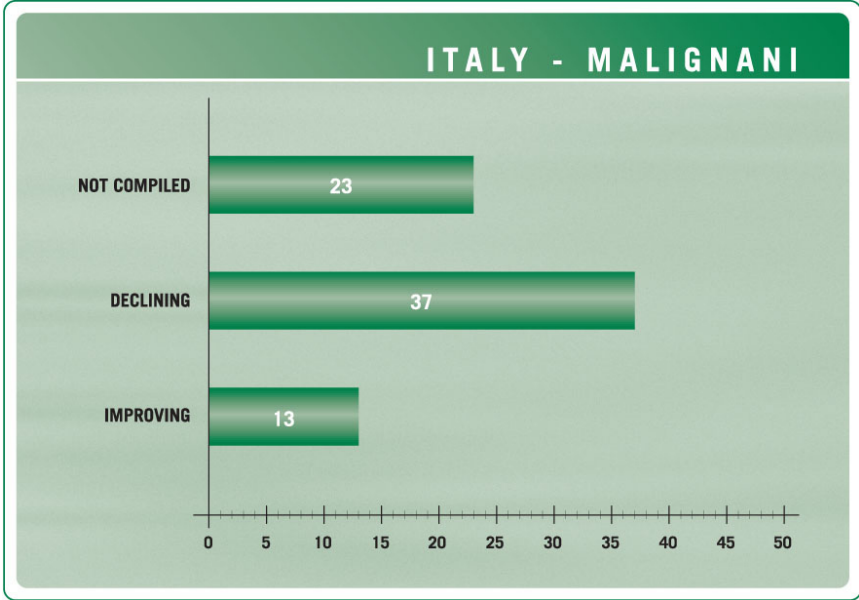
We underlined "drastically", because a little change in the HTE image is normal and desirable (in fact a company should keep abreast of the times), but if there is a radically alteration in the HTE image the consumer could feel deceived. The following table shows the percentage of the positive replies, indicating a disrupt in the narrative universe convey by the HTE.

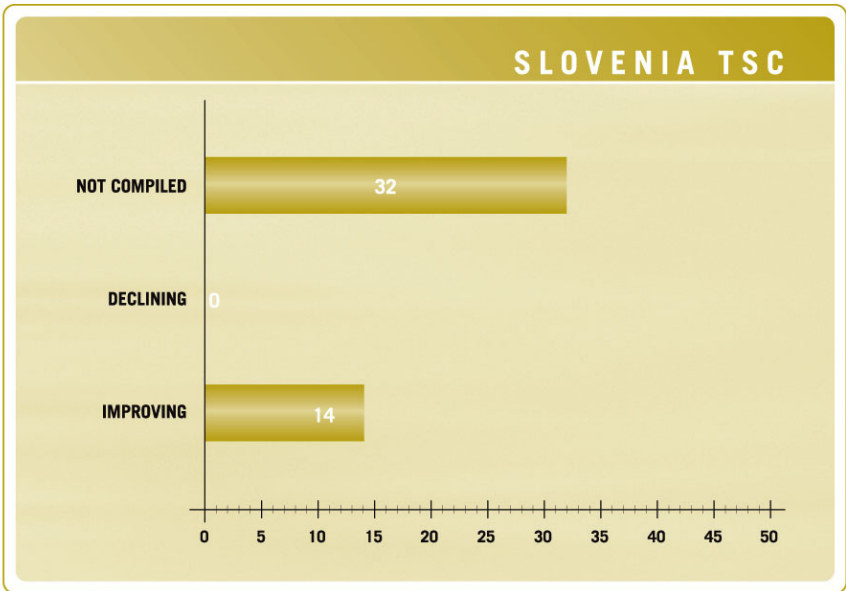
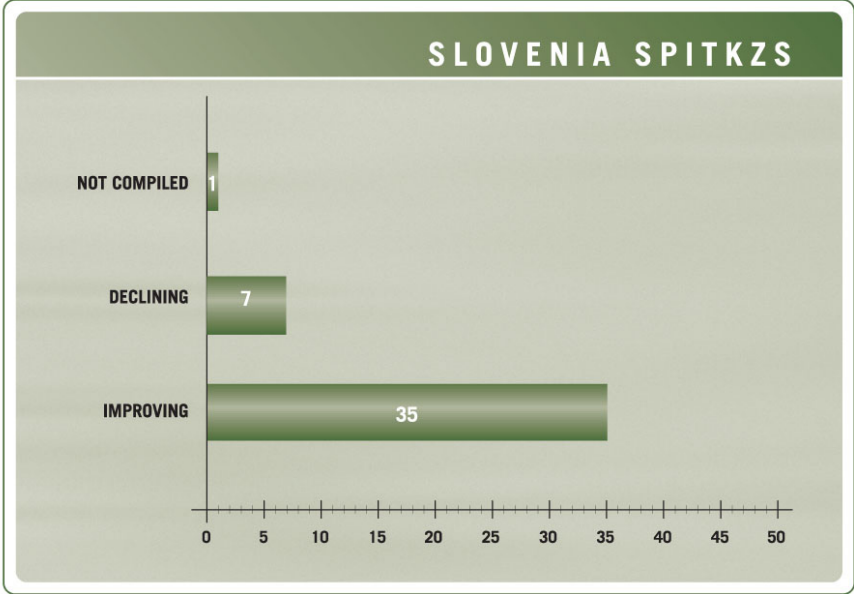
HTE institute	Yes, there was a drastically change
BULGARIA	39 yes on 56 replies 69,6%
ITALY BORSELLINO	30 yes on 64 replies 46,8%
ITALY MALIGNANI	23 yes on 41 replies 56%
LITHUANIA	43 yes on 64 replies 67,1%
SLOVENIA TSC	10 yes on 45 replies 22,2%
SLOVENIA SPITKZS	28 yes on 43 replies 65,1%
SPAIN	25 yes on 58 replies 43,1%

4.4.1 How is this changing? Improving or declining?

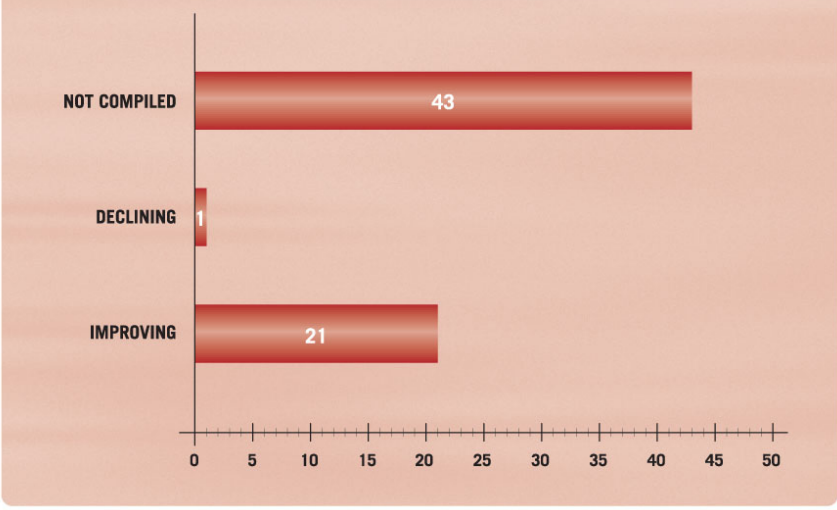
The following tables show a comparison before the number of replies referring an improvement and the number of the replies indicating a decline. "Not compiled" indicates the number of not answered.







SPAIN



4.5

Legitimacy

The legitimacy of a image is a dynamic phenomenon that could be realized only if there is an accord among all the subjects involved. In this way, it has to be both produced (by the organization) and recognized (by the target-audience). And so, only if an HTE institute has an excellent and efficient image (keep along the time), and only if target-audience recognize these qualities, a good grade of legitimacy shall born then.

In this sense, legitimacy can be considered as a concept with two sides. The former is the trust; this is the emotional face of legitimacy (how do you feel about the credibility of the brand). The latter is the reliability; this is the objective and rational face of legitimacy (how do you rationally think about the credibility of the brand).

This theoretical point has been highlighted through the questions number 5, 6, 7, 8, 10; assembled in the following way: point 5 + 7 = "personal" legitimacy; point 6 + 8 = "others" legitimacy; point 10 = "objective" legitimacy.

4.5.1 "Personal" legitimacy

This theoretical point aims to explore the whole construct of legitimacy (investigating its sub-dimensions of trust and reliability) referring to the personal dimension. This is transposed in questions number 5 and number 7 of the questionnaire:

5. How do You evaluate the reliability of the Institute?

7. How much do You trust in this Institute?

In the following table, the first number in the second column represents the arithmetic mean of the question n. 5; the second one represents the arithmetic mean of the question n. 7.

HTE INSTITUTE	Personal legitimacy (from 1 to 7)
BULGARIA	5,0 4,4
ITALY BORSELLINO	5,3 5,4
ITALY MALIGNANI	5,0 5,0
LITHUANIA	5,7 5,5
SLOVENIA TSC	5,3 5,4
SLOVENIA SPITKZS	4,7 4,4
SPAIN	5,6 5,7

4.5.2 "Others" Legitimacy

This theoretical point aims to explore the whole construct of legitimacy (investigating its sub-dimensions of trust and reliability) referring to the opinion of the others (general dimension that includes anybody else except the interviewee). This is transposed in questions number 6 and number 8:

6. How do others evaluate its reliability?

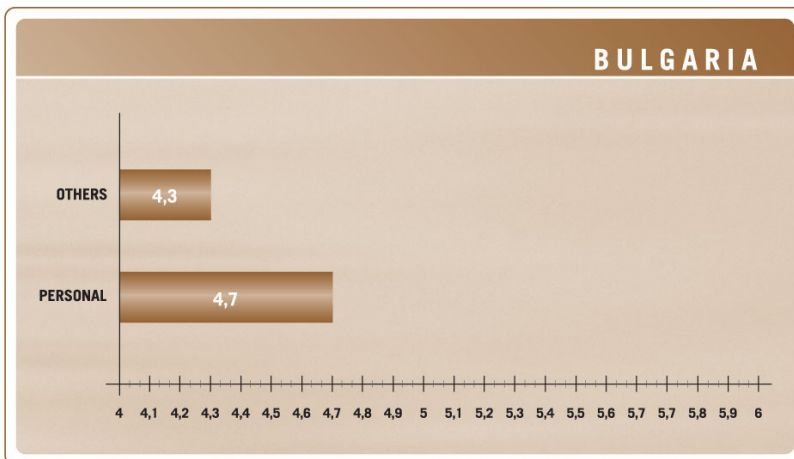
8. How much others trust in this Institute?

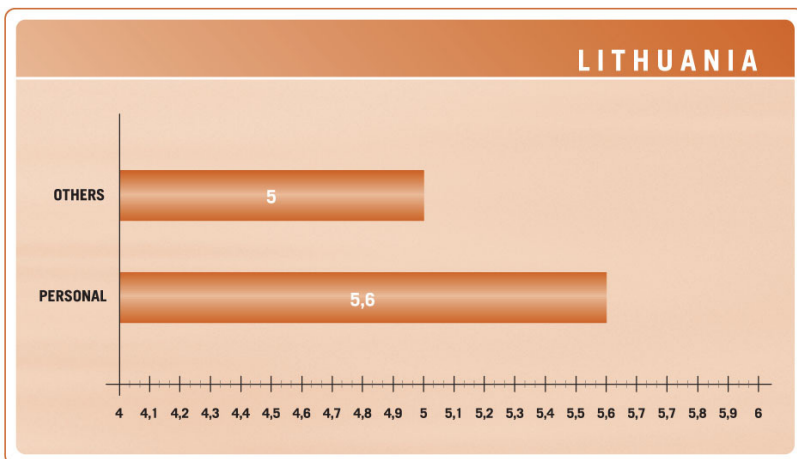
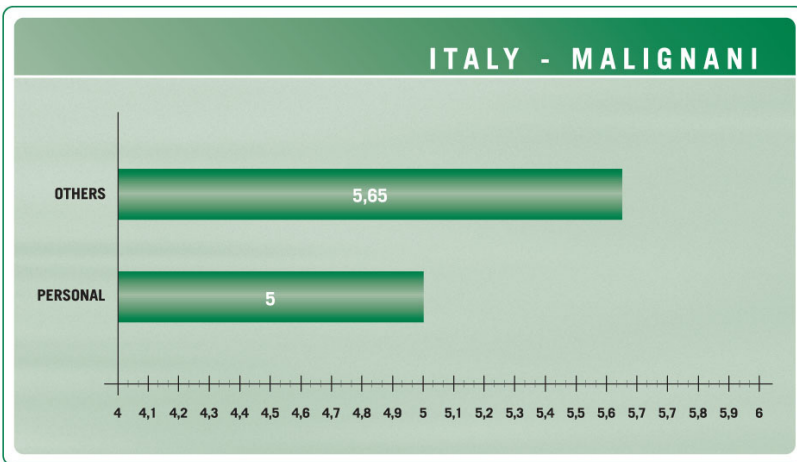
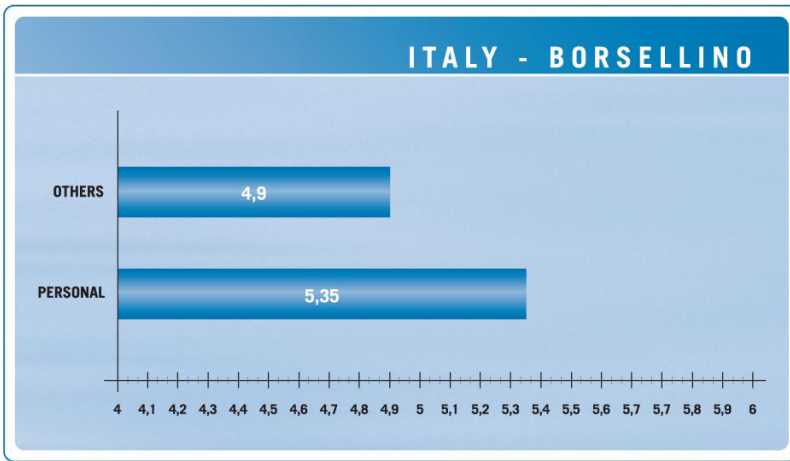
In the following table, the first number in the second column represents the arithmetic mean of the question n. 6; the second one represents the arithmetic mean of the question n. 8.

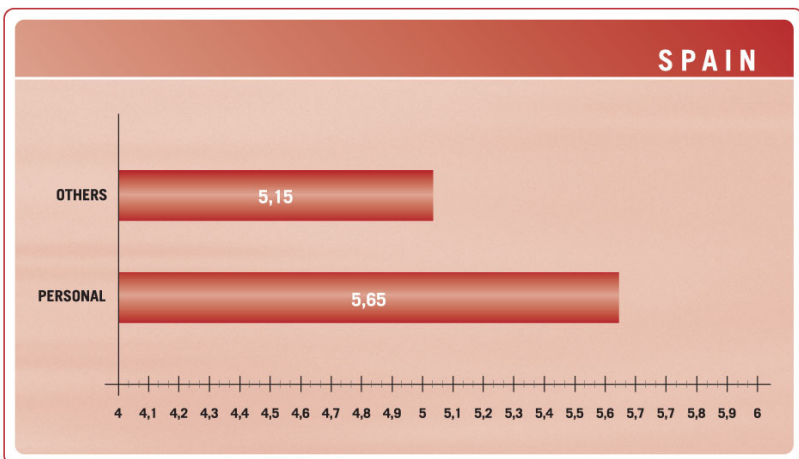
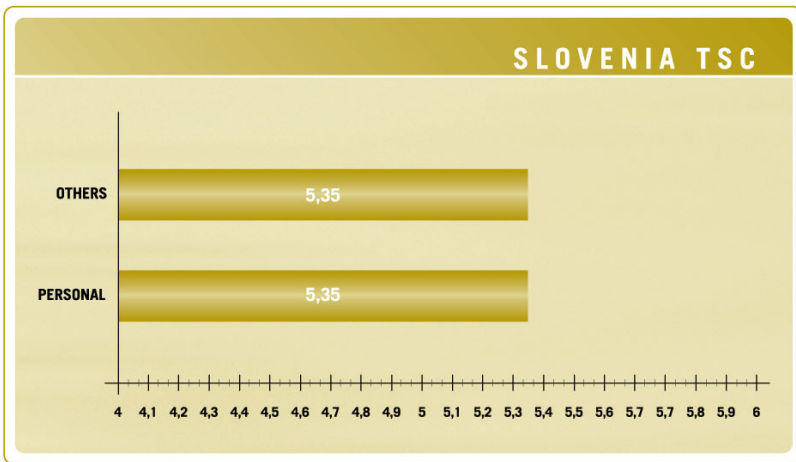
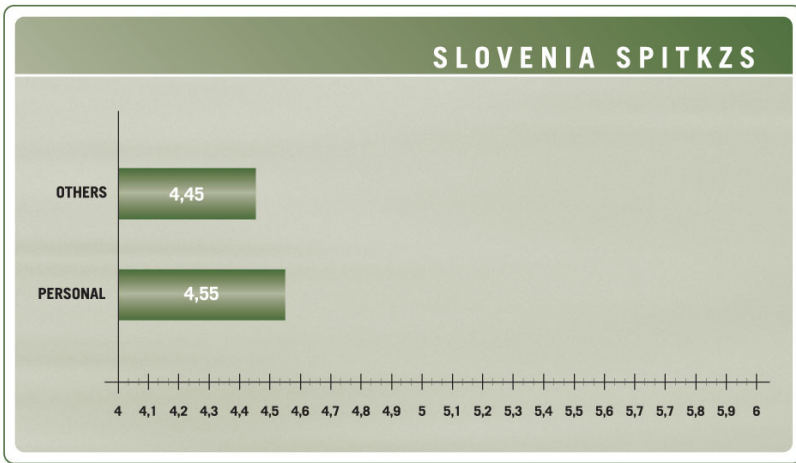
HTE INSTITUTE	Others legitimacy (from 1 to 7)
BULGARIA	4,6 4,0
ITALY BORSELLINO	4,8 5,0
ITALY MALIGNANI	5,7 5,6
LITHUANIA	5,3 4,7
SLOVENIA TSC	5,4 5,3
SLOVENIA SPITKZS	4,3 4,6
SPAIN	5,2 5,1

4.5.3 “Personal” legitimacy in comparison with “others” legitimacy

The following tables show a comparison before the number of replies indicating the two kinds of legitimacy.

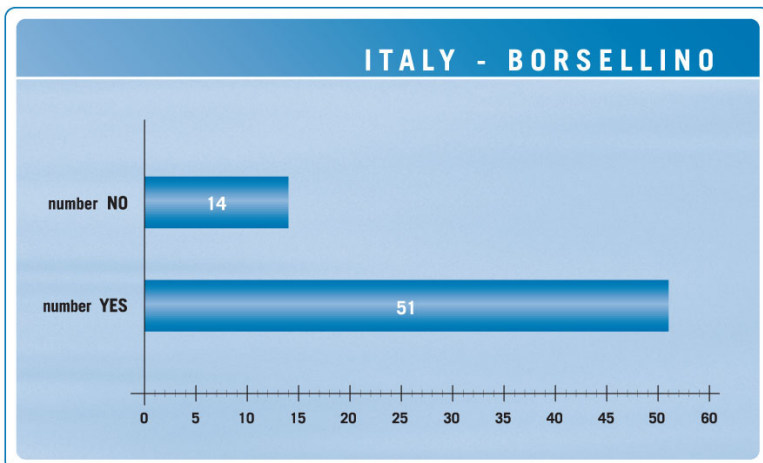
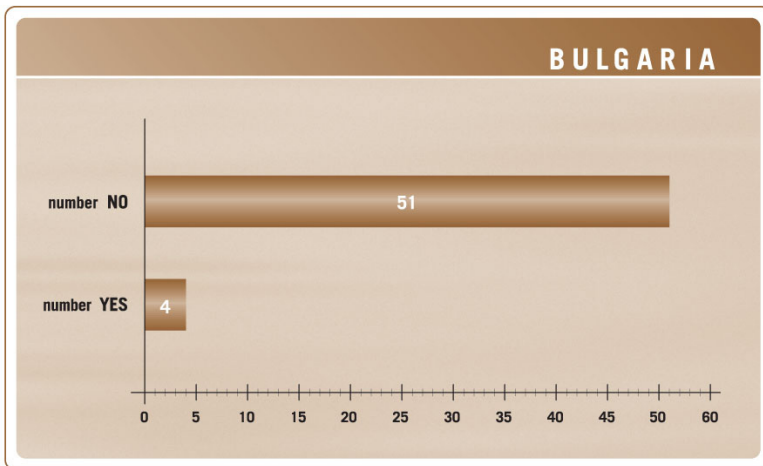




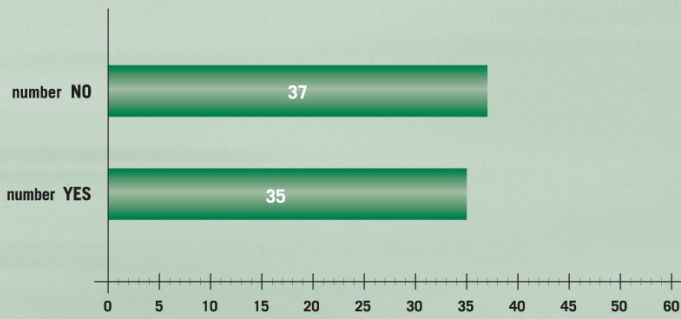


4.5.4 "Objective" legitimacy

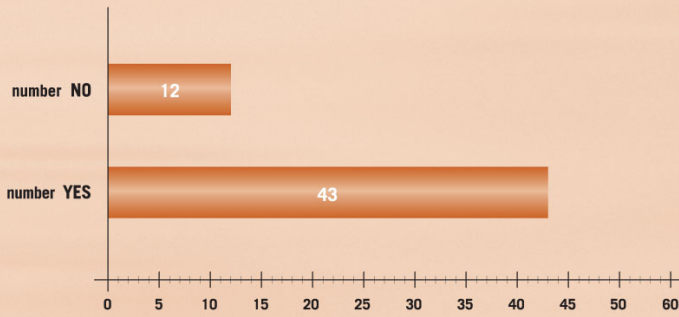
This theoretical point aims to explore if the stakeholders know if the HTE won any awards or prizes. This is transposed in question number 10: "Do You know about prizes or award taken by this Institute?" The following tables show a comparison amongst the number of the "yes" and "no" replies, HTE by HTE.



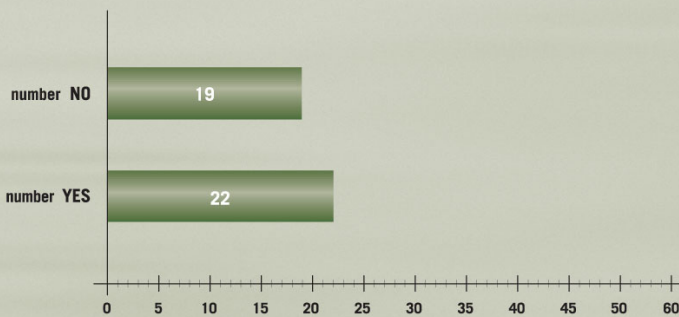
ITALY - MALIGNANI

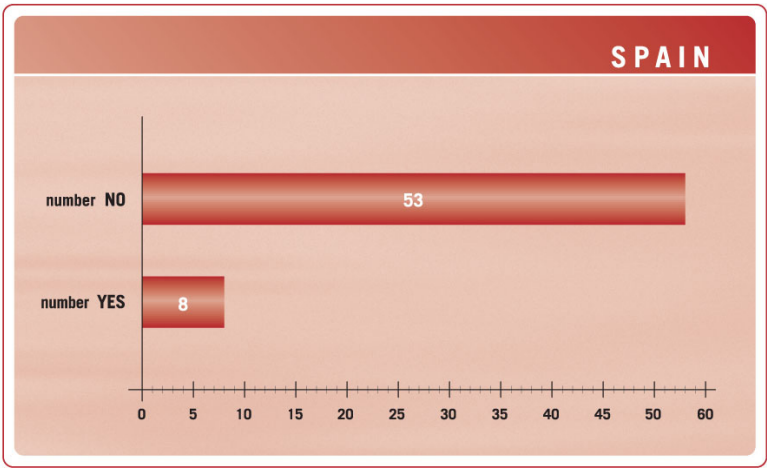
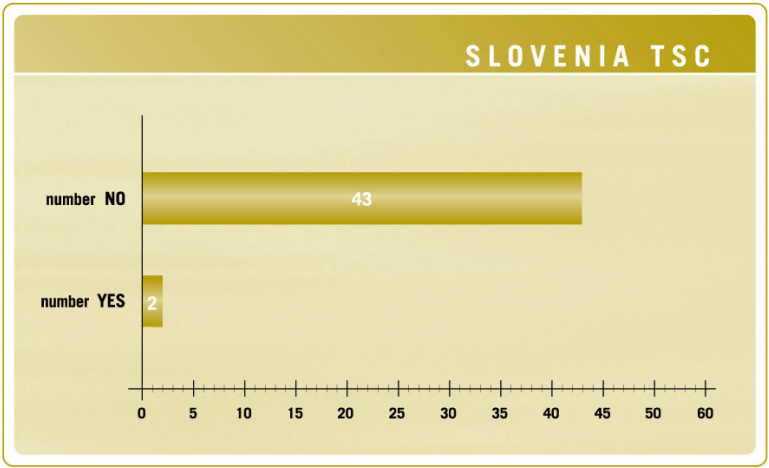


LITHUANIA



SLOVENIA SPITKZS





4.6

The value of the values

Until now we described, for every HTE, if there is a unique and coherent image, and its consequences. In short, we have examined if any HTE has, or not, a brand strategy and an image culture. But it was said, also, that a brand image carries some values that portray its personality.

This consideration can be analyzed thanks to the values combined in the “semantic differential” analysis (the second part of the questionnaire about image).

This kind of method has provided a large amount of data that can be analysed from different prospective. The next table clarifies the different results that can be obtained through data processing.

Since the aim of this report is to display a comparison amongst the data about image collected from the HTE partners in ExPerO, we now proceed in exposing only the second prospective: the analysis of data for each HTE partner.

For this data processing we used the median with the quartiles; the box-plot graphics result the most efficient graphical representation of the data set: a solid box is drawn whose left and right edges correspond to the quartiles, the darker mark inside it shows the median value. A “whisker” is attached to each side of the box, showing the overall range of the data.

To achieve a more intuitive visualization, we have placed the box-plots over the couples of values presented in the questionnaire.

Subject	Country by Country	HTE partner	Stakeholder	All
DESCRIPTION	<p>Considering the data provided by every Country (ITALY, SPAIN, ETC...)</p> <ul style="list-style-type: none"> - Not considering the different kind of stakeholders - Not considering the different HTE courses 	<p>Analysis of the data come from each Expero HTE partner (data provided from Spain-Stucom, from Italy-Malignani, from Italy- Borsellino, etc..)</p>	<p>Considering the data provided by every similar publics (all potential students, all trainees stk, etc...)</p> <ul style="list-style-type: none"> - Not considering the Countries - Not considering the HTE course 	<p>Considering the whole data (all Countries for all HTE courses for all stakeholders)</p>
ADVANTAGES AND DISADVANTAGES	<p>These data could be interesting to identify a "Country Bias"; for example: in a Country all the stakeholders use with difficulty the extremes of the value scale.</p> <p>But we have, except for Italy and Slovenia, only one HTE institute for Country. And only one HTE institute is not representative of the reality of a whole Country. In short, we have too few data to do a scientific comparison.</p>	<p>In this way we can see the image values associated at every HTE institution by all its own stakeholders.</p>	<p>In this way we can see if there are common elements amongst all the HTE similar stakeholders.</p> <p>We could find an "HTE stakeholder Bias". (For example: all the potential students tends to give a "theoretical" image value associated to the HTE courses).</p>	<p>In this way we can see if there are common elements amongst all the questionnaires.</p> <p>We could find an "HTE questionnaire Bias". (For example: if the most part of the questionnaires have blank or medium replies between the "Elite and Widespread" semantic differential, then, maybe this semantic differential was not understood.</p>








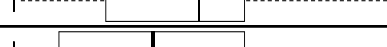
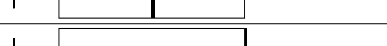

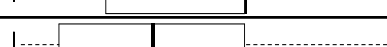
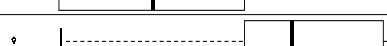
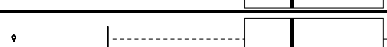




Values of the Bulgaria image personality

Elite		Widespread
Dynamic		Static
Traditional		Innovative
Technological		Handcrafted/
Theoretical		Practice
Merit System		Not Selective
International		Local
Flexible		Rigid
Collaborative		Top – Down /
Funny		Serious
Care To Creativity		Homologation
Reward System		Punish System
Religious		Secular
Individualism		Collectivism
Masculine		Feminine
Structured		De-Structure
Similar To Others		Different From Others

Values of the Italy-Malignani image personality

Elite	◊ ◊ -----	Widespread
Dynamic	-----	Static
Traditional	-----	Innovative
Technological	-----	Handcrafted/
Theoretical	◊ ----- ◊ ◊ ◊ ◊	Practice
Merit System	-----	Not Selective
International	-----	Local
Flexible	-----	Rigid
Collaborative	-----	Top – Down /
Funny	-----	Serious
Care To Creativity	-----	Homologation
Reward System	-----	Punish System
Religious	◊ -----	Secular
Individualism	-----	Collectivism
Masculine	-----	Feminine
Structured	-----	De-Structure
Similar To Others	◊ -----	Different From Others

Values of the Lithuania image personality

Elite		Widespread
Dynamic		Static
Traditional		Innovative
Technological		Handcrafted/
Theoretical		Practice
Merit System		Not Selective
International		Local
Flexible		Rigid
Collaborative		Top – Down /
Funny		Serious
Care To Creativity		Homologation
Reward System		Punish System
Religious		Secular
Individualism		Collectivism
Masculine		Feminine
Structured		De-Structure
Similar To Others		Different From Others

Values of the Slovenia SPITKZS image personality

Elite		Widespread
Dynamic		Static
Traditional		Innovative
Technological		Handcrafted/
Theoretical		Practice
Merit System		Not Selective
International		Local
Flexible		Rigid
Collaborative		Top – Down /
Funny		Serious
Care To Creativity		Homologation
Reward System		Punish System
Religious		Secular
Individualism		Collectivism
Masculine		Feminine
Structured		De-Structure
Similar To Others		Different From Others

Values of the Slovenia TSC image personality

Elite		Widespread
Dynamic		Static
Traditional		Innovative
Technological		Handcrafted/
Theoretical		Practice
Merit System		Not Selective
International		Local
Flexible		Rigid
Collaborative		Top – Down /
Funny		Serious
Care To Creativity		Homologation
Reward System		Punish System
Religious		Secular
Individualism		Collectivism
Masculine		Feminine
Structured		De-Structure
Similar To Others		Different From Others

Endnotes

1 Semprini, A., *La marca*, Milano, Franco Angeli editore, 1996; Floch, J. M., *Sémiotique, marketing et communication, Sous les signes, les stratégies*, Paris, Presses Universitaires de France, 1990.

5. Glossary

*By Barbara Anna Fabbro, Luca Cian,
Lisa Zanin, Zdravko Pečar*

Legend of the most frequent abbreviations

EX-QR: EXpectations of QR.

PER-QR: PERceptions of QR.

HTE: Higher Technical Education.

SR: Satisfaction of Results.

OP: Organizational Process.

STK-I: Internal Stakeholders.

QC: Quality of Competencies.

STK-T: Trainees Stakeholders.

QI: Quality of Image.

STK-E: External Stakeholders.

QR: Quality of Results.

Glossary Summary

Competence	Learning Outcome
Coherence	Learning Process
Coherence along years	Legitimacy of the Image
Coherence among different sources	Matrix
Credit system	Meeting future needs to emerging sectors, occupations and trades
Critical incident	Organizational Processes (OP)
Dropout	Perception
Employability	Qualification
Evaluator	Quality of Competencies (QC)
Expectation	Quality of Image (QI)
Expectation as ideal standard (should happen)	Quality of Results (QR=EX*PER)
Expectation as predictive standard (will happen)	Satisfaction of Results (SR)
Focus Group	School evaluator
HTE course	Semi- structured interview
Image (brand image of an institute)	Stakeholders
Indicator of quality	Training Process

Competence¹

It is a system of knowledge, skills and behaviours, correlated among them, that makes a person able to develop properly the own work.

We define the professional competence as the base unit of the expertise that a worker has got.

It includes:

- 1 To know: capabilities to acquire theoretical knowledge and concepts related to the one's own profession.
- 2 To know doing: practical abilities to perform gestures and activities related to the one's own profession; it's include, also, those things that a person should be able to do when s/he is involved in a given area of work, in learning or social activity.
- 3 To know staying with the others: ethical capabilities, i.e. to possess specific personal and professional values that facilitate the collaboration with the others.
- 4 To know being: the professional behaviours, i.e. to execute a professional behaviour suitable for the own work in the organization.

Coherence

It is one of the most important features, that a brand image should have. Indeed, people usually trust in a brand- image only if it is coherent.

In other words:

- An HTE *image*, to be trusted by people, should be in keeping with what the HTE *really is* (coherence with the service).
- An HTE *image*, to be trusted by people, should be in keeping with its past communications (see "coherence along years")
- An HTE *image*, to be trusted by people, should be coherent in all its different ways of communication (see "coherence among different resources").

Coherence along time

A brand strategy should show a coherent image during the time. A little change in the HTE image is normal and desirable (in fact a company should keep abreast of the times), but if there is a drastically change in the HTE image, the consumer could feel betrayed by the company.

Coherence among different sources

A brand strategy should show a unique and coherent image through all the instruments and sources that it uses; otherwise consumers could be confused by different images. This is the main axiom of the “integrated communication” philosophy.

Credit system

The credit system transfers in HTE courses is a priority aim of the Copenhagen Council 2002, ideated to increase the mobility and to facilitate the access to lifelong learning².

A credit system represents, in numerical form, the amount of learning outcomes achieved by a student. It can have different characteristics according to the relative importance given to the different aspects of the learning outcome (for example: more importance given to the theoretical matters than to the practical activities).

It consists in sharing the vocational/educational process in single units. Each unit has been defined in terms of knowledge, competences and skills. It may be characterised by its size and relative importance, expressed in general by credit points (or credits) or other factors.

Critical Incident

It represents a “micro-indicator” of the Organizational Processes. It is assessed in the SHOULD Area, through a focus group among some members of the school staff, asking to participants to describe some situations happened during the HTE course in which something wrong happened. Analyzing these events is really useful to understand the aspects or the areas that are lacking in the organizational processes.

Dropout, Rate of Dropout

It represents a “micro-indicator” of the QR. It allows monitoring the quality of the educational programs giving attention to who has stopped to attend the HTE course before the final qualification.

The subjects that abandon the studies, especially in the school age, are considered as vulnerable (*drop-outs*); the knowledge about this phenomenon

is very important for addressing the future policy³. At least, this indicator is considered by CQAF⁴ one of the most important indicators of quality in Vocational Courses.

Employability

It is a “micro-indicator” of the QR area. It refers to the real trend of the employment of the ex-students of the HTE course.

It refers to the number of trainees that have found a job in the work areas where they are specialized. This indicator is generally investigated 6 months after the end of HTE course⁵. Increasing the employability of HTE is considered by CQAF⁶ one of the most important indicators of quality in Vocational Courses.

Expectation

From a psychological point of view, the expectation can be defined as a cognitive schema regarding what is going to happen.

The expectations are formed by:

- (a) previous experiences about the same phenomena or something like this,
- (b) validity of previous expectations,
- (c) new contextual information.

But “expectation” is not a monolithic concept; in ExPerO model, we have considered two typologies of expectations: expectation as predictive standard and expectation as ideal standard.

Expectation as ideal standard (should happen)

This kind of expectation is what the customer would like to obtain in the next match with the service or with the company. This kind of expectations refers to the models of Service Quality. These expectations are not something like a pure desire, because they are anchored on past experiences. They are surveyed asking “how the service should be”.

In ExPerO project this kind of expectations was taken in consideration to measure QR.

Expectation as predictive standard (will happen)

This kind of expectation is focalized on the sure forecast about what is going to happen in the next match with the service or with the company. This kind of expectation is used in the Customer Satisfaction studies, as it is more linked to the emotions created by confirmation or not confirmation of what was foreseen. They are surveyed asking "how the service will be".

In ExPerO project this kind of expectation was taken in consideration to measure SR.

Focus Group

The focus group is a qualitative research tool that comes from ethnographic method. It is used to observe small groups involved in a discussion about a specific argument. The discussion is regulated by a moderator (the researcher), helped by an observer (co-researcher). The observed group should have from 6 to 10 subjects. Indeed, the aim is to create an interaction situation about a discussion topic and to observe the group dynamics. The focus group is useful to collect information about attitudes, representations, values linked to the discussed topic. Then, it is useful to listen at the explications given by the participants about their opinions.

HTE course

HTE is the acronym of Higher Technical Education. It consists in a training/educational level placed into vocational or technical high education (Vet). Its morphology is very heterogeneous among institutes and Countries. It usually is from 6 months to 2 years long, and it includes different curricula in order to respond to the different needs and requests of the work local contest. It aims to offer a high technical qualification, thought a not academic way, being more linked to the working local environment.

The HTE *curricula* are very flexible; they are tailored for the characteristics of the professional profile and for the productive requirements of the local firm.

HTE courses are provided in Vet schools or in other tertiary education institutions (like Universities) and, in some cases, in further education institutions.

Image (brand image of an institute)

Brand image has been defined as a vector of meanings, able to give a symbolic and value dimension to the object of reference; in spite of that, values and symbols communicated should be continuously connected with the material and concrete nature of the service, in order to avoid a generation of mistrust.

The image is particularly considered in ExPerO project for its capacity to influence expectations and perceptions about the learning outcome.

The brand image, moreover, becomes the social memory of the service, able to give it identity, thus to differentiate it from other similar services.

Indicator of quality

To evaluate something is not enough to just observe the reality, but it is necessary also to know what to observe. The indicator consists in a piece of information, selected among many others, related to the object of the evaluation.

In evaluating a system or a reality, one should distinguish different indicators whose it is composed. In this way, “quality indicators” are the qualitative or quantitative variables that could adequately represent the performance of a quality factor. To monitor indicators permits to know the status of the system, its quality and, finally considering and deciding what to do. They are feedbacks that permit to control constantly the quality level of a process.

Learning Outcome⁷

Learning outcome is what a student knows, understands and is able to do after the completion of a learning process. It is the main aim of a training service, and its quality level is strictly linked to the school processes, to the competences of the organizational actors and to the socio-economical surroundings.

At least, the learning outcome is an integrated system of competencies, acquired during the HTE training, formed by trainee’s knowledge, capabilities and professional behaviours, that answers concretely to work needs.

Learning Process

Learning is a cumulative process where a person gradually assimilate useful information to improve the own knowledge, skills and behaviours.

This process could derive both from informal contexts (for example through leisure activities) and from formal structured context (as schools or workplace).

One of the most used categorizations⁸ about the different typologies competencies distinguish among:

- *Formal Competencies*: refers to "... the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous 'ladder' of full-time education for children and young people, generally beginning at age five to seven and continuing up to 20 or 25 years old"⁹). In some Countries, however, these age limits need to be extended.
- *Non-formal Competencies*: comprises "any organised and sustained educational activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place both within and outside educational institutions, and cater to persons of all ages." (UNESCO 1997, p. 41). It can be provided also by organizations or services (without give a certification) able in completing the formal system; some example are artistic, music and training course or private lessons.
- *Informal Competencies* consists in all learning activities and/or situations that cannot be classified as formal or non-formal education. Informal learning activities are characterised by a relatively low level of organization, and may take place at the individual level (e.g., self-directed learning) as well as in groups of people (e.g., at the workplace or within the family). It is not necessary intentional, and so usually it could not be recognized.

Legitimacy of the Image

The legitimacy of a image is a dynamic phenomenon that could be realized only if there is an accord among all the subject involved. In this way, it has to be both produced (by the organization) and recognized (by the target-audience). So, only if an organization has an image with an excellent coherence of product, coherence along years and coherence among different resources, and only if target-publics recognise these coherences, then a certain grade of brand legitimacy shall born.

Matrix

It consists in a managerial tool able to graphically synthesize the quality of learning outcome of HTE courses. It is based on three dimensions (HTE course,

stakeholders type, indicator of quality), those can also be analyzed year per year (fourth dimension).

Thanks to this tool, it is possible to make a cross comparison among different stakeholders and/or among different HTE courses.

Meeting future needs to emerging sectors, occupations and trades

To meet the future needs is a process aimed to adapt the characteristics of the HTE courses to the change of the demands of the labour markets and of the employability. Indeed, the development of markets requires the continuous updating of the professional profiles¹⁰ and its skills, knowledge and professional behaviours.

The aim is to tailor the courses to the future needs of the market demands, so that will be easier for the trainees to make use of their professional qualification acquired at the end of the course. This indicator is considered by CQAF¹¹ one of the most important indicators of quality in Vocational Courses.

Organizational Processes (OP)

It is a macro-indicator about the learning outcome and it is included in IS area. The organizational processes refer to all the processes needed to manage an HTE course. As each system, also HTE refers to various internal processes aimed to manage the course and to build the learning outcome. OP consists in: planning of the lessons, coordinating the activities about school-work-stage, managing of internal and external communications, managing the credit system, managing the work-load of teachers and students.

The organizational processes include also the organization and the management of the material resource (like documents, classrooms, tools and financial performances) and immaterial resource (like human resources, their roles, responsibility and interactions). The internal stakeholders and trainees assess the organizational process through some micro-indicators as: programme, methodology, timetable, work load of student and of teachers, evaluations process, initial selections, human resources, organization, financial performance, resource, and critical incident. Only internal stakeholders and trainees, indeed, take part at the training and, in this way, have the possibility to directly analyze and evaluate those processes.

Perception

It is the process used by people to select, organize and translate stimuli and information in order to create a meaningful vision of the world. Everyone receives these stimuli through the five senses and then each one organizes and memorizes these data in a personal way (through the cognitive schemas). In brief, perception is the subjective meaning of the reality.

Qualification¹²

It is a formal expression of an individual knowledge, skills and competences. Qualifications are recognized at local, national or professional level and, in certain cases, at international level.

A qualification is achieved when a competent body/institution determines that an individual's learning has reached a specified standard of competences. The qualification assessment can take place through a programme of study and/or a work place experience and/or any type of formal, non formal or informal learning pathway. A qualification confers an official recognition of value in the labour market and in further education and training processes.

Quality of competencies (QC)

It is a macro indicator about the quality of the learning outcome, and it is included in IS area. The stakeholders involved are teachers, as they plan the *curricula* and the lessons. Among their tasks there is also to evaluate the performances of the trainees, i.e. to weight the quality of the outcome of the processes about teaching-learning. We believe that is also important to involve the students in self-assessment activities, in order to compare these results with the marks assessed by the teachers, in a dialectical and constructive way.

QC consists in the measurement of the competencies acquired by the trainees in the different matters, by considering their marks, in the oral, written and practical tests. It is obtained starting from the definition of an evaluation standard (for example considering the mean of the marks) and it is represented by a percentage index (%).

Quality of Image (QI)

It represents the macro indicator (located between the IS and SHOULD areas) referring to the image construct. It provides the operative dimensions through which we can measure the quality of the image.

It is composed by the following factors:

- The image oneness.
- The coherence through all the sources.
- The coherence along time.
- The coherence with the service.
- The trust.
- The values.

Quality of Results (QR=EX*PER)

It is an indicator of the quality of the learning outcome, which consists in two micro elements: expectations and perceptions (by the external stakeholders) about the HTE learning outcome.

In this way, the first step consists in picking up data about the external stakeholders' ideal expectations on the HTE learning outcome (indicator EX in SHOULD area).

The second step consists in picking up data about the External stakeholders' perception on the HTE learning outcome (indicator PER in IS area).

Finally, the school evaluator, after a careful analysis and comparison about the EX and PER data, expresses a quantitative (numerical) judgement about how PER has fulfilled EX. For elaborating a systematic analysis of the results, the school evaluator can use the hypertext to obtain a graphical representation of it.

Satisfaction of the Results (SR)

It is an indicator of the quality of the learning outcome; it investigates students' satisfaction about the results of the learning outcome.

To do this, according with the most recent Customer Satisfaction studies, it measures only the performance perceived, and so it is located in the IS area. It is based on the micro indicators: competencies, employability, credit system.

School Evaluator

In the ExPerO context, the school evaluator is the person (single or collective) responsible of the evaluation of the quality of the HTE course. The school evaluator has to know the theoretical model and to acquire diagnostic and evaluative capacities. S/He has to operate with the aim to improve the quality of

results, monitoring the weakness and strength points of the learning outcome. At least, the school evaluator should not force positive judgments, because his/her work has only a diagnostic utility.

Semi- structured interview

In the semi-structured interview the topic is previously decided, but the interviewer has a discretionary power in deciding which questions he/she formulates and which kind of answers are required (open or close answers). Interviewer usually has a schema of subjects to ask without a strict order. The interviewer will adapt the interview to the situation and s/he will add all opportune changes to gain the purposes. This type of interview represents a useful acquaintance's tool, if it is used by an expert interviewer.

Stakeholder

Stakeholders are bodies, entities or people that have an interest about the HTE; and, with their decisions and behaviours, they are able to influence HTE activities and results.

In ExPerO we have individuated the following groups of stakeholders for HTE: trainees and trainees with special needs, teachers of theoretical subjects, teachers of vocational subjects, administrative staff, managerial staff, tutors, potential trainees, former students, families of trainees with special needs, associations for people with special needs, local companies, excellent companies, customers of companies, Ministry of Education, European policies, public authorities at local levels, industrial associations, work associations, professional unions, universities.

We have classified them on the basis of their direct or indirect involvement in the educational process:

- *Internal stakeholders.* They participate in the creation of the learning and directly determinate its processes and results. They are mostly the staff of the school organization (teachers, administrative employees, school employees, school managers, headmaster and his/her staff). They have an essential interest in the organizational achievement.
- *External stakeholders.* They have a direct or indirect interest in the result of the process. Usually they do not actively participate in the process, but they can influence it even with minor direct actions. They are companies,

their customers, the various related associations/bodies (Chamber of Commerce, Unions) the families of special needs students, their association, the Ministry and EC institutional bodies.

- *Trainees stakeholders.* They are simultaneous internal and external stakeholder, but they are contemporary different from them. They are first of all “users” of the educational service; they are directly involved in the process and determinant in performing the learning outcome. Without trainees’ motivation to learn and without an educational aim to achieve, the learning process would be empty and unsuccessful. The trainee is the foremost beneficiary of the service school (learning outcome).

Training Process

It is the most important process among the organizational processes of a school or of an educational institute. To produce training results it is necessary to define and realize the teaching and learning plan. The training is not an improvisation; it is needed to be led and managed. The training actions are planned on the basis of the aims of the HTE and of the students characteristics and needs, through accurate methodological choices. Therefore, it is a learning/teaching way with different levels of accountability and consciousness. It is articulated in 5 steps (analyse of the training needs; plan the aims, goals, and outputs; define the curricula, methodologies, tools, times, spaces, ICT and others actions; act the training intervention in the practical context; evaluate the result of the training and to modify or repeat the process), aimed to facilitate the analysis and the evaluation of the learning outcome.

Endnotes

1 This definition is based principally on the UNESCO report of the International Commission on Education for the Twenty-first Century chaired by J. Delors (1996).

2 Document of the European Commission about the quality of the European schools, based on the "COPENAGHEN PROCESS" January 2003- September 2003.

3 Document of the European Commission about the quality of the European schools, based on the "COPENAGHEN PROCESS" January 2003- September 2003.

4 Document of the General Direction for the education and culture, related to the development of the European policies about the vocational training, based on the Conclusion of the European Council (28th May 2004), regarding the quality guarantee in the vocational training courses (CQAF- Quality Assurance in Vocational Education and Training).

5 Document of the European Commission about the quality of the European schools, based on the "COPENAGHEN PROCESS" January 2003- September 2003.

6 Document of the General Direction for the education and culture, related to the development of the European policies about the vocational training, based on the Conclusion of the European Council (28th May 2004), regarding the quality guarantee in the vocational training courses (CQAF- Quality Assurance in Vocational Education and Training).

7 ExPerO's definition based on Bologna working group on qualifications framework, February 2005, p. 39 and on considering CEDEFOP Terminology of vocational training policy, 2004, p. 101.

8 Documents of the European Commission "Toward a European Framework of qualifications for the permanent training", results of the consultations of the Ministry of work and social policies (December 2005), beginning from the documents for consultation of European Qualifications Framework (July 2005).

9 UNESCO, 1997, p. 41 ISCED (International Standard Classification of Education of the UNESCO).

10 Document of the European Commission about the quality of the European schools,

based on the "COPENAGHEN PROCESS"
January 2003- September 2003.

11 Document of the General Direction for the education and culture, related to the develop of the European policies about the vocational training, based on the Conclusion of the European Council (28th May 2004), regarding the quality guarantee in the vocational training courses (CQAF- Quality Assurance in Vocational Education and Training).

12 The term "qualification" can have several meanings. So, looking ahead to the European framework for qualifications, this definition is based on the work of the OECD, the third follow-up report 2005 of the "framework of actions for the lifelong development of competencies and qualifications".

6. ExPer0 Theoretical Model Evaluation

By Alicia Berlanga Garde – Govaq Spain

Introduction

Inside the ExPer0 project there were scheduled two evaluation times related to products. The former stated at half project and the latter at the end of the project. We hereby propose the final evaluation. It has been elaborated by Govaq, a Spanish company of quality certification consultants, recognized by AENOR and IQNet



6.1

General Overview

The following document aims at reporting the evaluation of the ExPerO Theoretic Model taking into consideration several criteria which will be further introduced but which have been considered key aspects to make the model applicable, transferable and future considered as a quality tool for improvement of the Vet System.

6.1.1 Evaluation Methodology

Taking into consideration the ExPerO project proposal, Govaq was intended to carry out an evaluation of the ExPerO model to verify the possibility of making the model “certificable” or to evaluate the feasibility of being included as a quality model/standard.

To carry out this evaluation Govaq defined the following methodology:

- a) To carry out a study on the state of the art of quality models in education and European Commission guidelines.
- b) To define the inputs for the evaluation (quality models, European Commission guidelines, certification bodies expertise and priorities, others).
- c) To define the evaluation criteria.
- d) To carry out a first evaluation of the model based on weaknesses, strengths and recommendations.
- e) To provide the evaluation results to an authorised and recognised certification body for feasibility on a possible certification/standardization.
- f) To carry out a final evaluation of the model based on weaknesses, strengths and recommendations for future implementation.

6.1.2 Inputs for Evaluation

After a research on the state-of-the-art of several models, and taking into consideration Govaq's expertise on the subject, the following inputs have been defined:

- Quality models: As the model is focused on the quality of the learning outcome, the SERVQUAL MODEL is the one focuses on the core aspect of the service, mainly on delivery, tuition and evaluation. Nevertheless, International Quality models cover a wider range of processes and activities of an education service and Govaq considers it relevant to be outlined. The Quality models which will be referred are ISO 9001:2000 and the European Foundation for Quality Management. Both of them are widely used in education and not only for management purposes but also as assessment and evaluation tools for the improvement of core processes. ISO 9001:2000 emphasizes the need of procedures to settle the basis of good management/governance. Meeting requirements and satisfying them is the focus of this model. EFQM model defines quality criteria and an important indicator-based approach which facilitates the evaluation of the whole educational service.
- European Commission guidelines: The Common Quality Assurance Framework is currently one of the main inputs to be considered as it has been loudly required by education and training institutions. CEDEFOP has been seeking quality researches and programmes in order to implement the EC priorities and strategies which have been funded by Leonardo da Vinci programmes and other initiatives. This is to say, that the CQAF is the outcome of a long path towards a quality model in education and training and must be deeply considered from now on.
- Certification bodies expertise and priorities: IQnet is an international association of certification bodies with the following aims:
 - To recognize and promote certificates issued by IQNet partners
 - To meet customer needs by offering innovative, value-adding services
 - To provide assessment and certification services to global customers on a worldwide basis.

Within this consortium, AENOR (Spanish main certification body) has been invited to evaluate the feasibility of the ExPerO model certification/standardization (<http://www.iqnet-certification.com/>).

6.1.3 Criteria for Evaluation

Taking into consideration the inputs above referred, some criteria have been defined for the evaluation of the ExPerO Theoretic Model as a model to be certified. These criteria will be analysed in each core chapter of the model and will be scored from 1 to 3, where one is not applicable, 1 is somehow applicable and 3 is full application of the criteria.

Criteria defined are the following:

1. Structure as a quality model (based on quality models input)
2. Processes definition
3. Terms definition
4. Educational and training sector approach
5. Implementation process of the Expero model user-friendly and clear description
6. Relevant as for quality models
7. European dimension

6.2

Final Evaluation of the ExPerO Theoretic Model

As it has been done in the 1st Evaluation, the final model has been analysed chapter by chapter considering the same structure:

- Introduction: to overview the chapter.
- Strengthens: to outline excellent remarks of the chapter.
- Weaknesses: to outline aspects to be improved.
- Recommendations: some suggestions to take into consideration.
- Criteria evaluation and score: to apply the criteria in order to achieve a quantitative result.

6.2.1 Learning outcome vs Training process

– INTRODUCTION

This chapter has a relevant importance as it confronts two core aspects in quality: the learning outcome and the training activity/organizational process. The learning outcome should not be seen only as a result of the training process, but as a result of other influences. This concept is highly representative of the lack of motivation of Quality models implementation in education and training as, historically, these models have been focused towards assurance and management core processes and not as a whole.

– STRENGTHENS

The focus of the model towards the learning outcome, as there's a lack of a quality model in that sense.

The definition of training activity and education, which remark the sense of "other inputs in the process", not only the "training activity".

The model states trainees as co-workers. This point of view is really innovative as the customer-based approach is upside down in ExPerO proposal. This collaborative approach is considered a key factor of success of this model.

The consideration, as important inputs, of Portfolios of Competences, human development of students and the acknowledge reality. Accreditation is a basis now for quality achievement in the European Area of Higher Education.

– WEAKNESSES

The 3 class “processes” approach (strategic, core and support processes) should be included.

– RECOMMENDATIONS

Under the classification of process, draw a process map or graphic.

– CRITERIA EVALUATION AND SCORE

<i>Criteria</i>	<i>Score</i>	<i>Remarks</i>
Structure as a quality model	3	The “versus” aspect is a strength
Processes definition	3	A graphic chart would facilitate its comprehension
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	
European dimension	2	Remark differences met between countries in the brief notes

6.2.2 The Stakeholders

- INTRODUCTION

“Stakeholders” is a chapter with a wide specification of Quality historical background and evolution of concepts. This chapter is relevant to allocate the reader towards the actors involved in the processes and their relevancy depending on the point of view or acting corner.

- **STRENGTHENS**
 - The stakeholder definitions and the final definition adopted by ExPerO model.
 - The evolution of concepts and background of quality approaches.
 - The absolutely needed openness of the wide range of stakeholders in schools.
 - The value of “network creating” that the “stakeholder approach” provides.
 - The stakeholder classification between trainees, internal stakeholders and external stakeholders.
 - The specific consideration of “past students” and “excellence companies” is considered very relevant.

- **WEAKNESSES**

HTE has also other stakeholders such as: Ministry of labour, companies where trainees carry out practices/stages, suppliers, Indirect stakeholders can also be evaluated by general and official indicators. Several statistics are published yearly related to indirect stakeholders which should be undertaken, and obviously mentioned in the Model.

- **RECOMMENDATIONS**

Draw or figure the “customer related approach” and the “stakeholder approach”

- **CRITERIA EVALUATION AND SCORE**

Criteria	Score	Remarks
Structure as a quality model	3	Stakeholder classifications are relevant
Processes definition	-----	Not applicable in this chapter
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	
European dimension	3	Highly covered

6.2.3 Quality of the service

Expectation and perception

– INTRODUCTION

The chapter introduces deeply some cognitive concepts needed for further understanding the model and its specificities.

– STRENGTHENS

Taking as a reference of quality the dual relation between “expectation and perception” is valuably considered as strength. SERVQUAL model emphasizes this relation and is core for the evaluation of the quality of the learning outcome, rather than other definitions of satisfaction.

– WEAKNESSES

No weaknesses have been found within this chapter.

– RECOMMENDATIONS

A graphic chart of the “factors that generate expectations” would make this chapter more user-friendly, as well as further figures explaining the expectation/perception duality.

– CRITERIA EVALUATION AND SCORE

<i>Criteria</i>	<i>Score</i>	<i>Remarks</i>
Structure as a quality model	3	Good input “expectation-perception” for the structure of the model
Processes definition	-----	Not applicable in this chapter
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	
European dimension	-----	Not applicable in this chapter

Quality of Service (QS) versus Customer satisfaction (CS)

– INTRODUCTION

The chapter introduces the differences between two main aspects which will be core in the ExPerO model.

– STRENGTHENS

The clear differentiation between Quality of Service (QS) versus Customer satisfaction (CS)

– WEAKNESSES

Training process should be also part of the evaluation area. It can't be improved if it's not "evaluated" and the training processes also affect, maybe indirectly, to the quality of the learning outcome.

– RECOMMENDATIONS

No further recommendations.

– CRITERIA EVALUATION AND SCORE

Criteria	Score	Remarks
Structure as a quality model	2	Separation of the expero model introduction
Processes definition	-----	Not applicable in this chapter
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	Highly covered
European dimension	-----	Not applicable in this chapter

6.2.4 The 2 areas of the model: Should and Is

- INTRODUCTION
The chapter introduces two important differences, considered as separate parts, of the model.
- STRENGTHENS
The definitions are clear.
- WEAKNESSES
No weaknesses have been found within this chapter.
- RECOMMENDATIONS
A graphic chart of the evaluation and assessment schema.
- CRITERIA EVALUATION AND SCORE

<i>Criteria</i>	<i>Score</i>	<i>Remarks</i>
Structure as a quality model	3	Good input "assessment-evaluation" for the structure of the model
Processes definition	-----	Not applicable in this chapter
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	Highly covered
European dimension	-----	Not applicable in this chapter

6.2.5 Macro Indicators

- INTRODUCTION
The chapter introduces the learning outcomes as an integrated system of acquired competencies and introducing the indicators in a macro-level.
- STRENGTHENS
The competency approach.

The definition of each “indicator”, clear and relevant.
 All the indicators found are considered as relevant in a quality model.

- **WEAKNESSES**
 The link with other quality models or European guidelines should be more covered.
- **RECOMMENDATIONS**
 No recommendations.
- **CRITERIA EVALUATION AND SCORE**

<i>Criteria</i>	<i>Score</i>	<i>Remarks</i>
Structure as a quality model	3	Highly covered
Processes definition	-----	Not applicable in this chapter
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	Highly covered
European dimension	2	Not applicable in this chapter

6.2.6 Stakeholders and five Macro Indicators

- **INTRODUCTION**
 The chapter introduces the relation between indicators and stakeholders.
- **STRENGTHENS**
 The links found between the macro areas, indicators and stakeholders
- **WEAKNESSES**
 Too much text. A grid explaining this entire chapter would be more effective.
- **RECOMMENDATIONS**
 A graphic chart with the relation of indicators and stakeholders would clarify the chapter comprehension.

– CRITERIA EVALUATION AND SCORE

Criteria	Score	Remarks
Structure as a quality model	3	Could be improved with grids
Processes definition	3	Highly covered
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	-----	Not applicable in this chapter
Relevant as for quality models	3	Highly covered
European dimension	3	Highly covered

6.2.7 Graphical draft of the model

– INTRODUCTION

A chart with the ExPerO model is presented.

– STRENGTHENS

The double area, round-circled, which introduces the type of quality measure to undertake: evaluation or assessment

– WEAKNESSES

No weaknesses have been found within this chapter.

– RECOMMENDATIONS

No further recommendations.

– CRITERIA EVALUATION AND SCORE

<i>Criteria</i>	<i>Score</i>	<i>Remarks</i>
Structure as a quality model	3	Highly covered
Processes definition	3	Highly covered
Terms definition	3	Highly covered
Educational and training sector approach	3	Highly covered
Implementation process of the Expero model user-friendly and clear description	3	Highly covered
Relevant as for quality models	3	Highly covered
European dimension	3	Highly covered

6.3

Conclusions and Some Further Tips

The model has a wide potentiality as there are no models focused on the learning outcome. But it's relevant to consider all the processes and activities which evolve the learning outcome to obtain as much information as possible on the level of quality offered. The evaluation stage is a core step for quality. The assessment stage is the quality basis to achieve excellence.

The chart model has been discussed and simplified. A lot of variables considered have been summed up.

Definitions and theoretical background is more that excellent. Some further explanations and European practices have enlarged the dimension of the model.

To sum up, the model is in the line of the expectations of the stakeholders, the requirements of the EC and project proposal, the needs of the consortium and the interests of the educational and training sector.

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