

# THE INCU AS A TOOL FOR CAPACITY BUILDING

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## Abstract

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This paper examines and furthers theories, concepts and trends in the development of skills as a starting point for capacity building. It aims to identify and develop the most relevant criteria of a 'network society', stressing the importance of incorporating this concept in the framework of the INCU which can thereby function as a tool for adequate capacity building on the basis of regional standards predefined by the nations involved. The paper provides a systematic analysis of the main points raised in the 'Tuning Educational Structures in Europe' (Tuning Project). That project is widely regarded as representing the major axis of a common educational approach in the European Union (EU). It is argued that the Tuning Project contains some interesting elements that could be used to enhance the PICARD Standards in the future.

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## 1. Introduction

The traditional approach of education and training is based on so-called 'transmission-receiving skills' and those skills, as a rule, are based on memorising concepts. They therefore stress the utilisation of memory in resolving problems and carrying out highly regulated, practical activities.

What we now call the 'information society' poses a series of challenges to this traditional model of education. The sheer quantity of information and the speed at which it is transmitted and updated have combined to render the memory-based approach obsolete.

Countries have gradually become aware of this problem and begun to search for new alternatives that meet the challenges posed by the information age. The Bologna Declaration (1999) and the Communiqué of Prague (2001) may be seen as responses to globalisation, multilateralism and the 'networked society' that support efforts to create educational models that reflect contemporary needs. These models are based on the development of competences and capacity building.

The conditions for adequate capacity building are currently being analysed and discussed by the various stakeholders. In particular, institutions of higher education with links to the customs sector are concerned not only with the difficulties caused by implementing new curricular designs or teaching the skills necessary to understand complex or multidimensional phenomena. They also perceive a need to redefine the content of social values, norms and attitudes transmitted to members of the customs profession in both the public and private sectors.

It is therefore very important to distinguish two aspects of the challenge facing higher education in the modern age. On the one hand, we are faced with a technical and educational aspect, where the protagonists are the professionals in higher education as a whole. On the other hand, however, we are faced with a social and political issue that must be addressed by all stakeholders and in which higher educational establishments have a very important role to play.

Countries also have different ideas of the role that Customs should play in society. In some cases, Customs is primarily responsible for ensuring national security; in others, for collecting taxes or ensuring trade facilitation. However, as a general rule, each country seeks to balance these roles taking into account their national characteristics. This makes it difficult to reach a consensus on the subject, scope and form of capacity building.

In view of this discord, the World Customs Organization (WCO) has established the PICARD program as a means of collaborating with customs universities around the world in order to raise global standards and provide guidance to the various centres of capacity building in training the customs professionals of the 21st century. This collaboration is firmly based on international standards and aims to reflect the requirements of contemporary society.

## 2. Skills development for customs capacity building

This paper will first attempt to identify the scope of capacity building as well as the form it should take in relation to Customs, then, to investigate and further theories, concepts and trends relating to skills development as a starting point for capacity building.

Perrenoud (1999, p. 7) defines competence as ‘an ability to act more effectively in a defined type of situation that rests on knowledge, but is not limited to them’.

Etienne and Lerouge (1997, p. 67) explain the creation of competences as follows:

The creation of a competence depends on an adequate dose [*sic*] between the isolated work of its various components and the integration of these elements in a state of operability. The teaching difficulty lies in dialectically handling these two approaches. But believing that the sequential learning of knowledge provokes spontaneously its operational integration in a competence, is a utopia. (Trans. from French)

Constructivists argue that an individual’s cognitive structures interact with their environment and thereby facilitate learning. ‘Learning’ is the activity that individuals develop in order to lend meaning to the reality that surrounds them. Examples include developing the ability to observe, experiment, interpret results or graphics, mathematical and statistical data, conduct research, identify, understand or solve a problem in some context or communicate, argue or express ideas or results from a scientific approach. These are all examples of skills that integrate and mobilise knowledge, however, they do not constitute knowledge itself.

Competence therefore means the ability to respond to a complex requirement or carry out an activity or task successfully. It is the requirement, activity or task that defines the substance of a competence, including the attitudes, values, knowledge and skills that, taken as a whole, constitute effective action. In other words, it is not possible to reduce competences to their cognitive components (Rychen & Salganick 2001).

According to Catalano, Avolio de Cols and Sladogna (2004) competence does not refer to timely performance. Rather, it is the ability to mobilise knowledge and techniques and reflect on the action in question. It also refers to the ability to construct referential frameworks of action or models of performance that enable diagnosis or productive problem solving not foreseen or prescribed.

Unlike a skill that is capable of being applied in isolation, competences utilise various resources and are used in more complex contexts. The term ‘resources’ refers to skills, experiences, interests and learning as well as various external elements such as peers, teachers, documents, etc. Finally, the need to effectively mobilise and use resources suggests that behaviour associated with a competence does not simply constitute an automatic response. Rather, it implies that students strive to realise a clearly defined objective and use skills as well as intellectual and social concepts judiciously in order to devise an effective response or solution to a problem.

Competence is necessarily linked to an activity (either vocational or educational) whose meaning depends on its applicability to a given situation or family of situations. As a result, competence exists within a specific context. Bastien (1997, p. 32) argues that experts are competent because (a) they manage most common situations efficiently and confidently as well as more complex situations that may suddenly arise, (b) are able, through reflection, to rapidly coordinate and differentiate their action plans and their knowledge in order to cope with new situations.

The use of diagrams indicates that the practical application of the subject of investigation is limited to the schematic portrayal of real situations (Carretero 1993). Diagrams should be regarded as tools that can be used to resolve certain problem situations and are representative of past experiences, perceptions, appraisals and actions. They allow tasks to be performed and problems to be solved that correlate to the schematic portrayal in question.

Knowledge and competence are human constructions rather than direct reflections of reality (Carretero 1993). Construction is based on existing views on the subject or activity (internal or external) to be developed. The constructivist perspective is closely related to skills acquired during action and considers learning to be an active process of constructing meaning.

In this sense, a curriculum that aims to develop skills requires its educational activities to be planned for that purpose. It is therefore necessary to identify the appropriate material and gear activities towards the acquisition of those skills. At the same time, the nature of cultural knowledge suggests that the activities individuals are required to carry out in the workplace on a daily basis cannot be performed in isolation.

The primary objective of capacity building in relation to Customs should therefore be to train students (that is, future civil servants) how to cope in a world characterised by scientific and technological advances, adopt responsible attitudes, make informed decisions and solve everyday problems whilst respecting the needs of others, the environment and future generations.

### **3. Academic networks as instruments for building regional capacities**

Having addressed the main elements of capacity building in terms of the development of skills, it is time to examine the criteria for a 'network society' (which is a highly relevant topic) using service providers as an example. The importance is stressed of incorporating this concept in the framework of the International Network of Customs Universities (INCU) which its members can use as a regional instrument for capacity building on the basis of predefined standards.

It is important to clarify at the outset that education, development and training appear to be no different from other forms of services. The provision of such services can be the responsibility of the state or form the subject of a commercial transaction between a service provider and a third party. There is no reason why services relating to capacity building should not be provided in the same way as other services.

Castells (1998) correctly asserts that globalisation encourages regionalisation. He argues that social networks make an important contribution to consolidating innovation and dynamism in the service industry – thereby ensuring the communication of ideas, movement of labour, cross-fertilisation of technological innovation and an entrepreneurial spirit.

Some researchers argue that the modern system of commerce is neither global nor local but rather 'a new articulation of global and local dynamics' (Gordon 1985). In this sense, Gordon (1985) using the evolution of the Silicon Valley Company as an example, demonstrates the importance of extra-regional relationships for regional services. He argues that:

In this new global context, the crowding at a site, far from being an alternative to spatial dispersion, becomes the principal basis for participation in a global network of regional economies ... In reality, regions and networks are interdependent poles inside the new space mosaic of global innovation.

In this context, globalization does not mean the leveling impact of universal processes but, rather, the sum calculated for cultural diversity in the form of logic and ability to innovate differentiated regions.

Gordon appears to suggest that the answer to the various global problems that confront us today lies in developing cognitive resources, competences and capabilities. The fact that neither these assets nor global problems are limited by geographical boundaries means that a centralised approach is bound to prove inadequate. By forming a network, members acquire an opportunity to pool their assets and thereby develop solutions that are more in tune with their specific circumstances.

Cooke and Simmie (2007) in their studies on European regions in the 1990s, suggest that the growing internationalisation of economic activities across Europe has exposed regions to the effects of international developments. Accordingly, driven by their governments and business elites, they have been restructured to compete in the global economy and, as a result, cooperative networks between regional institutions and companies have sprung up. Regions and localities now form part of international networks that connect their most dynamic sectors.

The passage of time has validated Cooke's and Simmie's arguments. The stability of the European structure is based on regionalisation and capacity building networks in various dynamic sectors. The education sector – directly linked to capacity building – is no exception to these trends. The draft document 'Tuning Educational Structures in Europe' has effectively raised regional standards and promoted the formation of academic networks as a tool for their implementation.

### **4. Synthesis of the model 'Tuning Educational Structures in Europe'**

Having stressed the importance of forming networks and the potential of the INCU as an instrument for effective capacity building, the main points addressed by the document 'Tuning Educational Structures in Europe' (Tuning Project) are now analysed. The Tuning Project is widely viewed as a cornerstone of a pan-European educational approach and contains some interesting elements that could be used to enhance the PICARD standards in future. The following describes the project in general terms, and for further details, readers are referred to the original document published by the University of Deusto and Groningen (Gonzalez & Wagenaar 2003).

The draft uses the gerund 'tuning' to indicate that the project is and always will be in a state of flux because (in the words of the draft document) 'education must be in dialogue with social needs and this is an open and dynamic process'. In this respect, it is also worth pointing out that the verb 'to tune' also means to tune a musical instrument, prepare or exercise.

The Tuning Project seeks to attune educational structures to the challenges outlined in the Bologna Declaration and the Communiqué of Prague. The aim is to contribute to the creation of the European Higher Education Area and improve the quality of programs at European universities.

The project promotes an educational paradigm focused on learning as opposed to teaching. This serves to highlight the importance of the student *acquiring* rather than *receiving* skills, abilities, competences and values. This approach reflects the goal of the Tuning Project to place students in a position to update knowledge throughout their lives. More specifically, this approach reflects not so much the importance of knowledge acquisition in the educational process as the importance of acquiring the framework skills that permit knowledge to be updated in the first place. The growing awareness of the heightened transience of our social circumstances against the backdrop of the demands made on the individual by modern society justifies this shift of emphasis from an educational model that so far has been heavily weighted towards teaching content to one that is primarily geared towards the learning (that is, acquisition) of skill.

The concept of competence emphasises the outcome of learning skills, that is, on what students are able to do at the end of the educational process that places them in a position to continue their learning

activities autonomously throughout their lives for personal and professional purposes. The Tuning Project recognises this and considers the results of learning to be a set of competences including knowledge, understanding and skills that students are expected to master, understand and demonstrate after completing a short or extended process of learning. Competences are divided into generic (that is, independent of the subject of study) and subject-specific skills. They are to be acquired in different study modules or units.

The competences and learning outcomes should be those that one expects to find in a modern course of studies. The curriculum should also be flexible, encourage independent learning and provide performance indicators that can be used on the international labour market.

## 5. Methodology of the Tuning Project

The methodology of the Tuning Project was based on a questionnaire listing a set of competences that sought to ascertain the opinions of three stakeholders in higher education whose support was considered essential to achieving the aims of the Tuning Project: (1) post-graduates who had completed their studies in the previous three to five years; (2) private sector employers, and (3) university scholars.

In order to prepare the questionnaire for graduates and employers, some twenty studies took place in relation to generic skills and competences. The authors drew up a list of 85 different competences and skills considered relevant by private companies and institutions of higher education. They were subject to careful analysis in order to reduce them to a manageable number and avoid overlaps and duplications.

The final result was a list of thirty competences that were structured as follows:

### **Instrumental competences:**

- Capacity of analysis and synthesis
- Ability to organise and plan
- General base knowledge
- Basic knowledge of the profession
- Oral and written communication in one's own language
- Knowledge of a second language
- Basic skills in handling computers
- Information management skills
- Problem solving
- Decision-making

### **Interpersonal competences:**

- Capacity of criticism and self-criticism
- Teamwork
- Interpersonal skills
- Ability to work in an interdisciplinary team
- Ability to communicate with experts from other areas
- Appreciation of diversity and multiculturalism
- Ability to work in an international context
- Ethical commitment

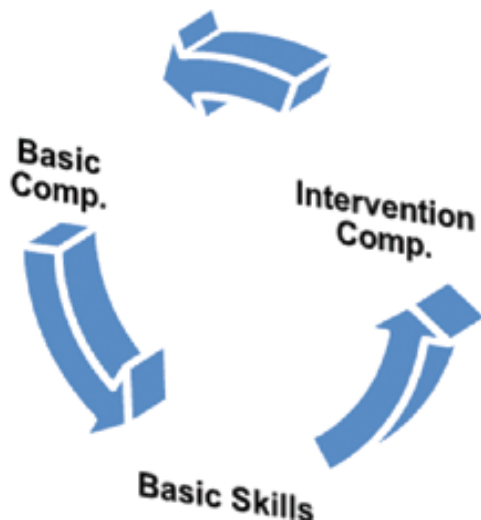
**Systemic competences:**

- Ability to apply knowledge in practice
- Research skills
- Ability to learn
- Ability to adapt to new situations
- Ability to generate new ideas (creativity)
- Leadership
- Knowledge of cultures and customs of other peoples
- Ability to work independently
- Design and project management
- Initiative and entrepreneurship
- Concerns over quality
- Grounds achievement.

**6. Systematic analysis of competences**

The classification made by the authors of the Tuning Project was altered although the following investigation still largely reflects its competences and instrumental aspects. Accordingly, the competences have been ranked according to basic, intervention and personal competences:

*Diagram 1: Classification of competences according to their basic character*

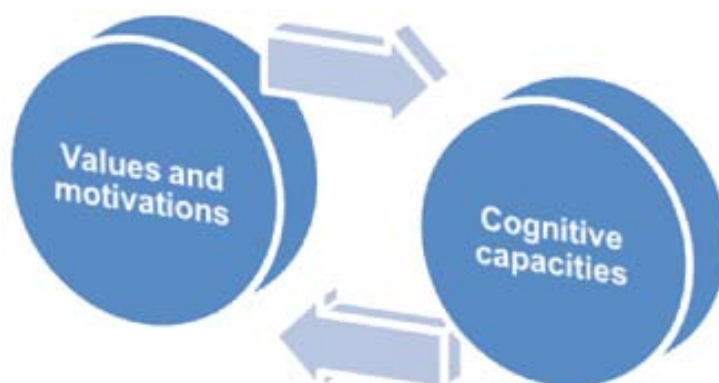


*Source: 'Tuning Educational Structures in Europe' Project*

## 6.1. Basic competences

According to Bajo and others (2007), competence is classified as ‘basic’ if it forms part of other, more complex competences. Basic competences sometimes refer to cognitive abilities whereas others refer to motivational aspects and values. Therefore, basic competences have been divided into (1) values and motivations and (2) cognitive capacities, as shown below:

*Diagram 2: Sub-classification of basic competences*

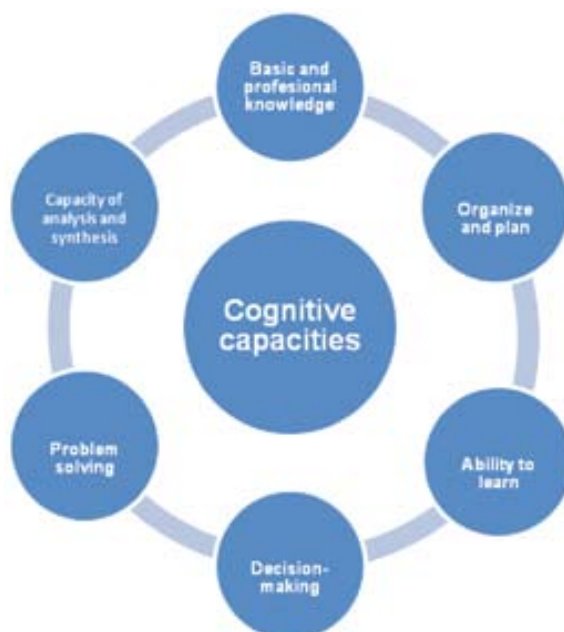


*Source: ‘Tuning Educational Structures in Europe’ Project*

### 6.1.1. Cognitive capacities

As explained above, basic competences are divided into two categories: on the one hand, cognitive capacities (basic and specific knowledge, analysis and synthesis, organising and planning, problem solving, decision making and ability to learn) and, on the other, values and motivations that will be examined later.

*Diagram 3: Sub-classification of competences that utilise basic competences*



*Source: ‘Tuning Educational Structures in Europe’ Project*

**Basic general knowledge and professional knowledge.** Whereas the planning of study emphasises skills rather than content, knowledge is a basic skill that must be acquired in any event and provides the basis for many other skills such as the analysis of situations, problem-solving, decision-making and continuous-learning. Therefore, knowledge acquired during academic studies should be interconnected and include the general principles of professionalism.

**Capacity of analysis and synthesis.** Analysis refers to a process of separating things (ideas, substances, machinery, etc.) into their most basic components. Synthesis represents the opposite process and is concerned with creating a new thing from different elements by joining, merging or organising the available building blocks in different combinations.

Both processes are used to perform everyday tasks or academic exercises: they allow us to construct new knowledge from existing information, simplify problems or identify their relationships and characteristics.

Owing to the fact that it is often possible to divide or create things in different ways, the capacity of analysis and synthesis also requires a plan or at least an idea of what the end-result should be. Therefore, this competence is linked to cognitive competences such as problem-solving, decision-making and planning.

**Ability to organise and plan.** Planning includes envisaging and implementing a sequence of events in order to reach a goal. More specifically, a plan must be devised that divides the various activities into phases.

Organisation refers to the process of arranging different components in order to create the desired structure. This competence takes into account the components' characteristics and groups together those that are similar, that is, those that serve the same purpose or have the same structure.

**Problem-solving.** A situation is deemed to be a problem when it is initially unclear how to progress from that particular situation to the desired result. It is this lack of clarity that distinguishes the ability to solve problems from other competences. A problem consists of an initial state, a final statement and set of operators or processes that convert the initial state into the desired outcome (Newel & Simon 1972).

Everyday problems tend to be ill-defined and either lack components or offer a variety of different solutions. Many academic activities can be conceived as being problem-solving as they incorporate the basic elements of a problem. Indeed, tasks that involve planning or decision-making may represent problems if the objective can be achieved in a number of different ways.

Problems can be solved using structured methods such as algorithms or heuristics. However, only the algorithmic method ensures that a single solution to a problem will be found: an algorithm carries out a systematic search of all possible alternatives in accordance with pre-defined parameters. However, if the problem contains too many variables or offers too many variations it may not be possible to find a solution within an acceptable timeframe. Even in the case of simple problems, both laypeople and experts prefer to implement heuristic methods (that is, elementary rules), despite the fact that they do not guarantee a quick and easy solution.

One example of heuristics is the means-end strategy (Anderson 1993) in which a person attempts to reduce the gap between the initial state and desired result by creating an effective intermediate state (that is, a situation that approximates the goal).

**Decision-making.** Decision-making consists of selecting one or more course of actions from a broad set of alternatives. In order to make a choice, the individual must first establish what represents a good choice (that is, formulate criteria), identify the required characteristics and the extent to which they must be present in the preferred option. Furthermore, managing and making a selection from the available alternatives requires the individual to take into account the significance of their respective features (Garnham & Oakhill 1996).



The most important aspect of decision-making is the assessment of each alternative, their respective characteristics and their influence on the outcome. Decision-making tasks also differ according to the variety of options and features. The complexity of some tasks may make it necessary to utilise other competences such as organisation and planning.

**Capacity to learn.** In general, the capacity to learn utilises some of the instrumental skills that have already been discussed (that is, analysis, use of general and specific knowledge, search for relevant information, ability to solve problems, decision-making, etc.). However, this capacity to learn is also characterised by the utilisation of several meta-cognitive skills.

A student's capacity to learn is reflected in their ability to construct awareness in an active way (Mayer 2002). In cognitive terms, this means creating a logical, mental representation in text or speech. Students must proactively construct what they learn by selecting information and organising it into consistent structures that link up with existing knowledge stored in memory. For example, a student must judge whether the paragraph makes sense and whether it supports or contradicts previous statements or existing knowledge. Monitoring strategies require students to self-check, re-read the material, identify inconsistencies and paraphrase content.

### 6.1.2 Motivations and values

As with basic skills, motivations and values can be broken down into four sub-categories: motivation to achieve, initiative and enterprising spirit, concern about quality, and ethical commitment. Diagram 4 illustrates their arrangement.

*Diagram 4: Sub-classification of competences based on basic competences*



*Source: 'Tuning Educational Structures in Europe' Project*

**Motivation to achieve.** The motivation or need to achieve refers to the tendency or desire to do things as quickly and/or as effectively as possible. Originally, the motivation to achieve was conceived as a stable inner psychic feature of individuals, although social variables (such as the economic system or predominant religion) were also thought to influence its development. Later on, achievement became viewed as reflecting the specific role that an individual plays in decision-making, which depends both on the value that the individual attaches to the goal as well as the subjective assessment of the chances of success.

Thus, it was discovered that an individual’s motivation to succeed was at its highest level when tackling moderately difficult rather than very difficult tasks (where chances of success are almost non-existent). Nowadays, it is generally believed that achievement depends on certain cognitive processes, as evidenced by an individual’s explanations or assessment in response to success or failure.

**Initiative and enterprising spirit.** This sub-category of values and motivations can be regarded as the ability to set goals for oneself or others, to take decisions in situations of uncertainty, and articulate the means by which the goal can be achieved. In situations where there are no clear goals or recommendable courses of action, the exercise of initiative depends on the ability to solve problems in uncertain situations, especially the ability to consider the situation from different perspectives and identify possible alternatives. In situations of uncertainty, where various alternatives are clear but their consequences are not, enterprise depends on the ability to assess the probability of success of each option. If objectives are clear, the situation requires alignment between means and ends and therefore resembles a typical problem-solving situation.

**Concern about quality.** The concern about quality is more than a competence; rather, it represents a goal to achieve and a value that must be incorporated in the student’s motivational system. As with all learned motivations, this can only be achieved through a delicate process of interaction between an individual’s level of aspiration and the actual result reached as a result of their conduct.

**Ethical commitment.** This competence lends itself to different interpretations. On the one hand, it can be understood in terms of a value system that should permeate education within the European Union (EU). On the other hand, a more restrictive interpretation argues that ethical commitment simply emphasises the acceptance of rules governing interactions on the labour market and that are usually contained in codes of professional conduct.

## 6.2. Competences of intervention

Competences of intervention combine one or more basic components and are applied to one’s physical and social environment or one’s own thinking (see Diagram 5).

Diagram 5: Sub-classification of competences from the competences of intervention



Source: ‘Tuning Educational Structures in Europe’ Project

Competences of cognitive intervention include the ability to apply knowledge to practice, to adapt to new situations, generate new ideas, criticise and self-criticise, to work independently and carry out research.

**Ability to apply knowledge to practice.** The application of knowledge acquired into practice can only occur if the necessary transfer processes are in place. The transfer of knowledge or skill acquired is defined as the use of knowledge acquired in a particular situation in order to perform a task that is new to the individual.

In this context, competence refers to the application of knowledge and skills acquired academically to real-life situations and problems. This process is termed 'remote transfer' because it involves the ability to apply knowledge to tasks and situations that are quite different from those involving learned knowledge ('transfer' in this case refers to the application of knowledge between very similar tasks).

The transfer of knowledge does not occur automatically but requires effort and training. It depends on the individual identifying the similarity between new and familiar problems. In turn, the recognition of similarities depends on an individual's experience. As a rule, experts only regard problems as similar if they can be solved using common principles whereas students consider problems to be similar on the basis of common, superficial characteristics (Kimball & Holyak 2000).

**Ability to adapt to new situations.** Studies show that experts use their knowledge flexibly by tailoring it to specific characteristics and context of a problem. They do this because they are able to identify organisational aspects in a more general way. The ability to adapt to new situations largely depends on meta-cognitive skills, the relationship between the self-assessment and self-awareness of one's own abilities. This ability also forms part of so-called 'practical thinking' (Sternberg & Ben-Zeev 2001).

**Ability to generate new ideas (creativity).** From a cognitive standpoint, creativity involves a series of processes that leads to the discovery of a problem and the formulation and implementation of innovative and appropriate solutions (Urban 2003). In this context, 'problem' is defined broadly. Accordingly, composing a piece of music or designing a piece of clothing can be considered problems.

**Capacity of criticism and self-criticism.** Recent research on critical thinking (Halpern 1998) has highlighted the complexity of this competence: it consists of cognitive abilities and important motivational aspects related to motivation. In defining 'critical thinking', it is important to distinguish the following elements:

- components of grounds and attitude
- components of skill
- transfer from one context to another (explained above)
- meta-cognitive oversight.

**Ability to work independently.** The ability to work independently may be regarded as a by-product of the competences just examined, namely the capacity for criticism and self-criticism as well as the ability to generate new ideas. Both represent necessary components of the ability to work independently but, at the same time, they are not sufficient to generate autonomous working conditions. This competence also requires initiative and enterprise as well as the basic skills of information management.

**Research skills.** Research represents a form of creative competence and involves carrying out a series of investigations with the aim of identifying a problem or phenomenon and then searching for and evaluating the available explanations. Research ability therefore draws on a range of more basic skills such as analysis and synthesis, activation of specific knowledge, ability of inductive and deductive reasoning, and divergent thinking. However, it is characterised by the sequence of processes instigated by the researcher.

### 6.3 Social competences

The competences of intervention in a social context include interpersonal skills, leadership and teamwork (see Diagram 6).

Diagram 6: Sub-classification of competences based on social competences



Source: ‘Tuning Educational Structures in Europe’ Project

**Interpersonal skills.** The proper interpersonal functioning (how we behave with others, our social behaviour and social skills) is a prerequisite for developing a satisfactory personal and professional life. Social competence is not a single, continuous and linear trait but rather a set of different skills used for different purposes.

Thus, a student may be able to relate to others well in everyday life but lack skills for a successful job interview. Interpersonal skills also depend on the situation: familiarity with the interlocutor, gender, the purpose of the conversation or meeting, and so on. This element is closely linked to the personality of the individual.

**Leadership.** For many people, to be a leader is to hold a series of characteristics that are found in very few individuals and for this reason, they are unique. That said, leadership is generally based on the mutual influence between a leader and their followers. The defining characteristic of leaders is the ability to influence others to a greater degree than they are influenced by themselves. Arguably, any person has certain leadership qualities and, as a result, leadership constitutes a relevant general competence.

The ability to influence others may come from different sources of power, for example, occupying a certain position (legitimate power), having the capacity to mediate punishments (coercive power), the ability to provide rewards or achieve valuable results (power of reward), possession of valuable expertise (expert power), or identification with the leader (referential power). A single person can perform a leadership role by virtue of owning one or more of these power sources. It is also obvious that the kind of leadership depends on the source(s) of power over subordinates.

**Teamwork.** Some elements to consider for teamwork and the ability to work as part of an interdisciplinary team are:

- Communication: this refers, in particular, to the ability to evaluate the arguments of others from their point of view as well as the ability to express one’s own opinions and feelings clearly and honestly.

- Different ability of team members: it is crucial to recognise that each member of a team contributes to its success and performance according to their own abilities and characteristics. The differing ability of team members is one of the potentialities of teamwork.
- Clearly defined goals and objectives.

Team achievements should be assessed in terms of attaining the relevant goals. Therefore, it is important that the goals be clearly defined at the outset and at the same time, any elements that may prevent or hinder these goals from being achieved must be analysed as well as strategies devised to eliminate such obstacles. Clear targets allow the inevitable conflicts that arise in the team to be solved more easily (as the members think about the goals they are trying to achieve).

## 6.4 Cultural competences

It is also necessary to examine the cultural capacity to appreciate diversity, knowledge of cultures, and intercultural work (see Diagram 7).

*Diagram 7: Sub-classification of competences based on social competences*



*Source: 'Tuning Educational Structures in Europe' Project*

**Appreciation of diversity and multiculturalism.** Countries throughout the world are increasingly characterised by multiculturalism and diversity. University education must be sensitive to this reality, take it into account and seek to profit from it. Fostering diversity requires the following groups to be taken into account: ethnic minorities, women, disabled people, people of different sexual orientation, different age groups, and so on.

The multicultural perspective on education can be understood in many ways. Some believe that change must be reflected in the curriculum by including new materials and perspectives that take into account the needs of the groups traditionally under-represented (as above).

Others regard it as something more diffuse that is reflected in teaching styles or the classroom environment, which favours members of certain groups and disadvantages others. A third group goes further, considering the multicultural approach to be something institutional and systemic and as such, that it should be reflected in tests and standardised assignments, scholarship policy, admission systems, etc. It is even possible to envisage multiculturalism and diversity as offering an alternative approach to education that challenges the foundations of society and system of education itself (in terms of the supremacy of a single social class and the capitalist system, the exploitation of certain groups, etc.). In this sense, the formation of networks and promotion of cooperative agreements make it easier to exchange students, teachers, literature, etc., thereby enabling familiarisation with the cultures and ideologies of different nations.

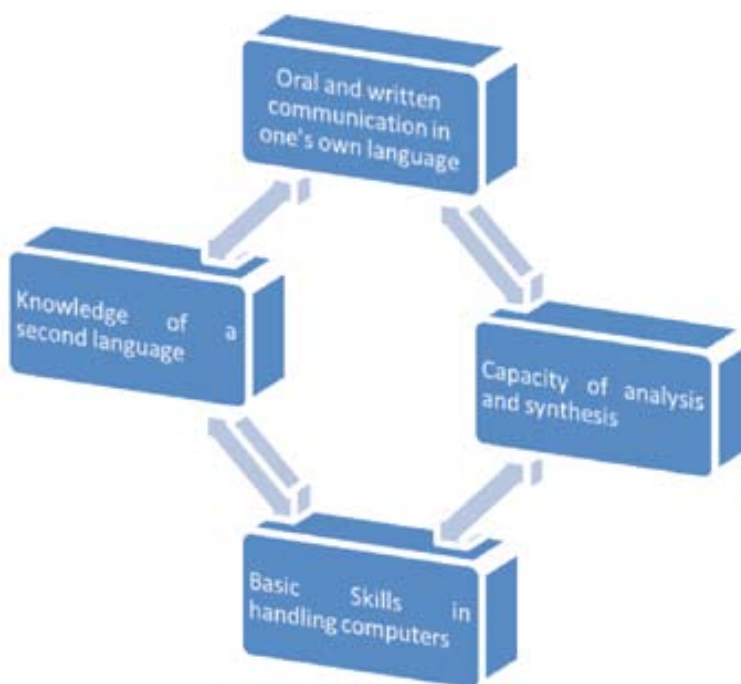
**Ability to work in an international context; acquiring knowledge of the cultures and customs of other countries.** The world is involved in a construction process that involves many nations, communities, cultures and languages. This process is based on the equal exchange of ideas and traditions as well as the mutual acceptance of people with different histories. In the case of the EU, this will involve more than 450 million people in the near future. It is therefore important to ensure that students acquire the skills to understand and communicate with others.

One of the early steps towards acquiring this skill is to learn a foreign language. According to the EU, each citizen should be able to communicate effectively in at least two languages other than their mother tongue. This may well be an ambitious goal but the progress made in some countries shows that it is perfectly feasible. University education should contribute to this goal by including into their programs students with different origins. Customs is no exception in this respect, considering that it is an area inextricably linked to international affairs, and must include this element as one of its pillars.

### 6.5 Specific skills

Finally, specific skills concern the ability to perform a series of specific tasks and, as such, tend to be instrumental. Diagram 8 illustrates the relationship between these skills.

*Diagram 8: Sub-classification of competences based on specific skills*



*Source: 'Tuning Educational Structures in Europe' Project*

### **6.5.1 Oral and written communication in one's own language**

Good oral and written communication skills facilitate the achievement of many goals both in the academic environment and in the workplace. The results of learning and problem-solving processes are usually communicated to teachers, peers, directors and heads by means of written and/or oral presentations.

Although the techniques and strategies that make up good communication skills should form part of the fundamentals that students should acquire at the outset of their education, activities undertaken within each subject should also practise and improve these skills. This is why it is necessary to understand the processes that form the basis of communication.

### **6.5.2 Knowledge of a second language**

Typically this competence refers to the four basic skills previously discussed and that students also use in their native language:

- reading comprehension
- oral comprehension
- spoken communication
- written communication.

### **6.5.3 Skills of information management**

The ability to manage information consists of a group of skills that can be grouped into different phases:

1. Search phase: Students need to be familiar with the structure and organisation of the library or libraries to be used. They must know how to search for information using dictionaries, encyclopedias, magazines and books. They must also be familiar with the major web pages and databases related to their discipline and how to navigate them. Ideally students should also know the main web pages related to their field of study.
2. Selection phase: The sheer amount of online information makes it impossible to consult all sources in their entirety. At this stage of the management process it is very important that the researcher knows the quality and relevance of the information accessed. For example, the quality of journal articles should be assessed on the basis of the impact factor and frequency with which they are cited. The assessment of relevance requires a distinction to be drawn between the journals that publish articles and theorists who specialise in empirical research or review articles or methodological issues. It is important to be familiar with the major journals that deal with the subject of interest or problem to be solved.
3. Storage phase: This refers to the ability to summarise the relevant information in the form of tags or files stored on a computer. It also includes the ability to create and organise files on certain issues or present data derived from a scientific investigation in the form of a spreadsheet.
4. Phase of retrieving information for later use: This is linked to the former phase because good organisation enables the individual to create keys that facilitate the recovery of all information related to a concept or a particular topic.

#### 6.5.4 Basic IT skills

Graduates should have a working knowledge of the following IT applications:

- standard operating systems
- word processing
- databases
- spreadsheets
- statistical packages
- internet research tools.

### 7. Conclusions

Despite the complexity of competences and skills, it is obvious that skills development should be used as a basis for capacity building, and in that process, it should be recognised that capacity building is a service and the entities associated with it are service providers.

From the above examination of competences (both generic and subject-specific), it is apparent that they should play a central role in the design of educational programs. As well, the creation of standards should be based on cognitive elements agreed upon by INCU members.

Conducting a comparative analysis of the competences and skills that feature in the PICARD Standards and that are addressed in the Tuning Educational Structures in Europe Project would help to identify opportunities for curriculum development. It is suggested that the results of the Tuning Project should be widely disseminated and, if possible, explained in detail and depth by all those responsible for and interested in the topic of higher education.

Convergence must be achieved whilst fully respecting diversity. This can encourage further reflection and thereby improve the quality of higher education. Thus, it is my view that the INCU is an ideal forum for effective capacity building.

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