II. KEY COMPETENCIES AND EMPLOYABILITY

The term “employability” relates to portable competencies and qualifications that enhance an individual’s capacity to make use of the education and training opportunities available in order to secure and retain decent work, to progress within the enterprise and between jobs, and to cope with changing technology and labour market conditions.


Introduction

The rapid changes in the structure of employment and in the organisation of work have drastically altered the form and the content of jobs. In recent years a collection of labour capacities have come to light which contribute to performance in a large group of occupations, and are portable from one to another. This section gives a brief conceptual survey and re-examines some of the experiences of developing key competencies in Latin America.¹

1. KEY COMPETENCIES: CONCEPTUAL APPROACH

The transformations resulting from changes in the organisation and content of work have put the spotlight on certain kinds of skills and behaviour in work. In recent years many researchers have focused their attention on describing the kinds of skills and competencies which help the worker cope with the new demands. What is it that enables a worker to assimilate a change from mechanical to electronic technology on the production line? What are the characteristics required for efficient performance in a work ambit where there is a high degree of group interaction? These are just two of the questions that the competencies approach is helping to solve.

¹ These are sometimes called basic competencies, central competencies, or competencies for employability.
Key competencies and educational results: The International Adult Literacy Survey

More and more people are realising that education has the capacity to generate key competencies. The experience of the OCDE since the 1990s illustrates the interest that there is in finding a new group of indicators for people’s real capacities. These indicators must have greater power to explain and to yield information that goes beyond the traditional indicators of schooling, coverage, drop out rate, etc.

In 1994, after a number of studies in the framework of the ‘Definition and Selection of Competencies’ project (DeSeCo), the International Adult Literacy Survey (IALS) was carried out in line with the idea that literacy incorporates something more than just the capacity to decipher written symbols, and therefore exceeds the traditional concept of reading as it is learned at school.

The IALS defined the concept of literacy as ‘The ability to understand and employ printed information in daily activities, at home, at work and in the community – to achieve one’s goals, and to develop one’s knowledge and potential.’ The concept of literacy includes the capacity to carry out tasks based on documents in daily life (for example, the instructions to operate an electrical machine), tasks which involve arithmetical operations such as those which appear every day in written form (for example, calculating simple interest rates), and also being able to understand selected pieces of prose.

The IALS concept of literacy consists of three categories:

**Prose literacy**: The knowledge and skills needed to understand and use information from texts including editorials, news stories, brochures and instruction manuals.

**Document literacy**: The knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables and charts.

**Quantitative literacy**: The knowledge and skills required to apply arithmetical operations, either alone or sequentially, to numbers embedded in printed materials, such as balancing a chequebook, figuring out a tip, completing an order form or determining the amount of interest on a loan from an advertisement.

The IALS was carried out in Chile (1998), and today the results are reflected in a good proportion of the educational plans and programmes which have been designed in that country in recent years.

There is no one universal definition of the notion of “key competency” but there have been many conceptual contributions. It is common to find references to this concept through the utilisation of attributes such as “generic”, “portable”, “key”, “central”, “essential” or “basic”. They all carry the idea that these competencies lie at the core of the individual’s capacities, and they enable him to successfully integrate into labour and social life, which is beneficial not only for the individual but also for society as a whole. In addition, this group of competencies includes the capacity to continually update knowledge and skills in order to keep abreast of constant and rapid change.

In fact, in this conception, systems of basic education play a big role in developing these competencies, and this is clear in various kinds of occupations in the European Union and in the OCDE. As will be seen below, a central group of key competencies are concentrated in the capacities to read, write and operate with numbers. But the concept of key competency goes beyond the simple capacity to translate written symbols into verbal structures since it also involves the capacity to interpret and apply what is read. Essentially this is the concept of reading as a competency in which the ability to read is necessary but not sufficient, since what is also needed is the capacity to interpret, utilize, apply and integrate what has been read. These aspects form part of the concept which has been promoted in the international survey of adult literacy.

However, the concept of key competencies goes beyond literacy, or rather, the concept of literacy as a key competency also encompasses a group of competencies linked to the way the person relates socially, and more recently it has been broadened to include competencies in information and communication technologies and mastery of a second language.

The competencies involved in information and communication technologies are the capacity to utilise and apply computer technologies, networks and computerised systems. The competencies involved in knowing a second language go beyond being familiar with and having knowledge of other cultures; they also involve the possibilities that this presents for personal development and for social interaction.

The analyses carried out in the Latin American region to identify labour competencies have led many countries to describe different groups of competencies. For example, the description of competencies which was produced in Mexico at the request of the Occupational Competency Standardisation and Certification Council (CONOCER) defined three groups: basic competencies, generic competencies and specific competencies (see box). The importance which a group of key competencies for employability have for success in work was also recog-
nized in the FORMUJER programme.³ The common denominator is that these competencies are valuable for performance in a labour context in general, that is to say beyond one single occupation.

Possession of these competencies, which are usually called key competencies,⁴ lies at the heart of the answers to the questions raised above. It is becoming increasingly clear that there are certain skills that make it easier to obtain employment, to remain in it, and to easily adapt to the changing demands of the labour market.⁵ This is more difficult in a situation where there are low levels of schooling, which is the reality for workers in Latin America. That is why, in this region, the concept of key competency has acquired an aura of being closely connected to the basic competencies that are usually derived from education, and which in a number of countries are considered necessary for the exercise of citizenship.

In Brazil, for example, this idea has been fostered to the extent that the training of workers exceeds mere technical content and also includes a dimension of citizens’ rights which goes beyond the ambit of the enterprise: reading, interpreting reality, expressing oneself verbally and in writing, dealing with abstract scientific and mathematical concepts, and working in a group to solve problems. In fact, everything that is usually defined as the profile of a worker in the leading sectors of the economy is tending to become a requirement for life in modern society.⁶

From another perspective, key competencies were defined by Dieter Mertens⁷ in 1974 as the knowledge, capacities and skills of a kind that contribute to an open group of labour activities. Their contribution can be found in (a) the aptitude for a large number of positions and functions, performed alternately or simultaneously, and (b) the aptitude to deal with changes in the course of labour life.

³ This is a regional programme for strengthening vocational and technical training for low income women. The project was financed by the Inter-American Development Bank and coordinated by Cinterfor/ILO in Argentina, Bolivia and Costa Rica. (www.cinterfor.org.uy/mujer)
⁴ In the literature in English these are also called “core skills” or “core competencies”.
⁵ Riordan, Trevor; Rosas, Gianni, Core work skills: ILO perspective and recent developments, Geneva, 2003.
⁷ In Heinz, Walter, Vocational socialisation and competence development: the historical dimension, Luxembourg, Cedefop, 2000.

### Types of competencies:

**Basic competency:** Elemental behaviour which workers have to demonstrate and which is associated with knowledge of a training kind.

**Generic competency:** Behaviour associated with performance that is common to diverse occupations and branches of productive activity.

**Specific competency:** Behaviour associated with knowledge of a technical kind linked to a certain language or productive function.

CONOCER, 2002
Key competencies make it easier for a worker to adapt to changes in the technologies used and in the organization of work, or to take on new responsibilities which require the acquisition of specific skills. They are closely linked to characteristics of a personal and social kind, and they have to do, for example, with skills in communication, the capacity to work in a team, and understanding systems and methodologies of work that involve computer technology.

The name that Mertens\(^8\) gave to this group of basic competencies was “competencies for employability”, since they are necessary for obtaining employment, remaining in it, and for finding new employment. These are not necessarily a collection of technical abilities, rather they reflect attitudes, behaviour and capacities of a general nature, often derived from the application of capacities acquired as a result of education such as understanding written texts and operating with numbers.

In the ambit of these social competencies, the concept of “soft competencies” has developed to designate elements like self-confidence, orientation to team work, creativity, being able to tolerate frustration, and self-motivation. In the box below some key competencies are cited as examples.\(^9\)

<table>
<thead>
<tr>
<th>Some key competencies:</th>
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<tbody>
<tr>
<td>• Working in a team</td>
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<td>• Critical thought</td>
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<tr>
<td>• The creative solution of problems</td>
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<td>• Communication skills</td>
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<td>• Skills in reporting</td>
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<tr>
<td>• Skills in managing information and technology</td>
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<tr>
<td>• Self-esteem, self-confidence</td>
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By way of an example it is interesting to look at the classification proposed by Bunk,\(^10\) who establishes four kinds of competencies.

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Technical competency: Expert mastery of the tasks and content of the work ambit, and the knowledge and skills necessary for it.

Methodological competency: Knowing how to react by applying the appropriate procedure to assigned tasks and to any irregularities that may occur, finding solutions independently, and appropriately transferring the experience acquired to other problems in work.

Social competency: Knowing how to work with people in a communicative and constructive way, and showing behaviour oriented to the group and interpersonal understanding.

Participative competency: Knowing how to participate in the organisation of the job post and also of the labour environment, the capacity to organise and decide, and the disposition to accept responsibilities.

The National Commercial Training Service (SENAC) in Brazil identified the following competencies in the framework of research entitled “XXI century: the new occupations”:

- Creativity
- Adaptability
- Initiative
- Leadership
- Autonomy
- Versatility
- Capacity to negotiate
- Oral and written communication
- Interpersonal relations
- Knowledge of computers
- Knowledge of English
- Openness to possibilities to work in other places

Another classification that comes close to the concept of key competencies can be found in the work of Gallart and Jacinto.\(^{11}\)

Intellectual competencies: solving problems, handling information, understanding processes and systems, autonomy and responsibility.

Basic competencies: the capacity to read and write, the use and interpretation of symbols and mathematical formulae.

Technical competencies: knowledge of instruments and the functioning of machines, tools and work procedures.

Behavioural competencies: the capacity for verbal self-expression and interaction with work colleagues.

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The new information and communication technologies and key competencies

The fact of working in a context in which new information and communication technologies are increasingly utilised has also generated new demands for competencies. One result of this is that it is easier to work in a team; information and communication technologies make access to information easier and more democratic for larger work teams so it is possible to deal with larger frameworks of data and it is easier to have a vision of the job as a whole. This has generated an interesting paradox: the more that production becomes specialised due to the fragmentation of the industrial fabric, the more the collection of competencies which workers require become generalised.

The role of the individual specialist is gradually losing out to the role of the team worker. In this new context, the contribution of each individual is amplified with the capacities of collective learning and reflection, and group communication and evaluation.

The use of information and communication technologies is generating a demand for competencies of a social kind. These include the following:

• Working and collaborating as part of a team, not only with work colleagues but also with clients and suppliers.

• Listening to and understanding the demands of clients.

• Presenting and explaining one’s own ideas.

• Negotiating in a context that is characterised by competency, plurality and divergence.

To sum up, the conceptual approach to key competencies leads to an interesting mix of skills, capacities, behaviour and applications of knowledge which allow the worker to adapt to changing situations in employment and keep up to date his capacities to deal with the changes that are coming.

This kind of combination has its deepest roots in the capacities transmitted by education, and this accounts for the importance given to schooling as an indicator of the development of competencies. But it also involves skills and behaviour that the worker can apply in different work contexts, which explains the supreme importance which is given to work experience as a generator of competencies.
Key competencies and employability

Concern with the development of key competencies is also connected to the capacity to find and retain employment. The average unemployment rate in Latin America is 9%, and this is mainly made up of the youngest sector of the population. In addition, the informal sector predominates when it comes to generating employment opportunities, which makes it especially important to develop the basic competencies that are transmitted by education as a means by which many young people, as well as unemployed men and women, can re-insert into employment.

A recent study by CEPAL described the positive relation between the number of years in education and access to employment. This relation is maintained when education is measured against income. It is clear that a higher level of education is linked to a higher level of employment and income. However, young people who join the work market early, and also adults who finished studying and did the same, need options to accede to educational mechanisms which will enable them to update their capacities and skills. The idea is not exactly to add to their years of schooling, rather it is to recognise the competencies they have built up during labour life and make efforts to get these recognised and translated into educational achievements which, in turn, will contribute to developing new competencies.

The lifelong learning programmes in the region are aimed at opening the door to adults who began their labour life early and whose competencies are now deficient. The challenge is to develop their basic competencies, giving them contents that are traditionally educational and which will allow them to develop capacities that are valued in employment.

12 The ILO Regional Office for Latin America and the Caribbean estimates that 19 million people are unemployed. The average urban unemployment rate in the region in the early months of 2002 was 9.2%. The impact of these levels of unemployment affects all workers, but women and the young are affected most. (Labour Panorama 2002, ILO).
13 In 2001, some 49.7% of female employment and 43.8% of male employment was in the informal sector.
2. NATIONAL EFFORTS IN THE DEVELOPMENT OF KEY COMPETENCIES

National efforts include experiences which originate in national public authorities, either ministries of labour, ministries of education or national training institutions. Normally these experiences are implemented with national coverage and affect the formulation of training policies. In national training institutions, the focus on key competencies is usually reflected in the production of occupational profiles and the design of training programmes.

2.1. The FORMUJER programme: key competencies for employability (Argentina, Bolivia, Costa Rica)

The serious situation of labour in Latin America as described at the start of this study is precisely one of the reasons why the FORMUJER programme tackled the development of competencies for employability. In the programme it is recognised that “work in the current situation requires subjects who actively construct their labour career, and who have the capacity to identify and value their resources and capacities with an attitude of seeking help and the will to overcome their limitations, and this makes them managers of their own employment opportunities. Similarly, new styles of life and of consumption which are reflected in family relationships have a crucial impact on the formation of new identities, and call for a re-configuration of the relation of men and women with the public and private spheres, and therefore of the relationships of gender themselves.”¹⁵

One of the basic conceptual principles at the heart of FORMUJER is to strengthen employability with a gender perspective, and throughout its execution the programme showed how it is feasible to strengthen the possibilities for obtaining and retaining employment by strengthening people’s basic abilities.

Based on this framework of reference, in FORMUJER the concept of employability is understood as “the aptitude to find, create, retain and enrich a job and move from one to another, obtaining in exchange personal, economic, social and professional satisfaction.”

Among the innovative aspects of the programme what stands out is the emphasis on training for employability and the consequent development of what the gender focus and competency-based training have in common. One of the outstanding methodologies of the FORMUJER programme is the “occupational project”, an activity in which the beneficiaries bring their key competencies into play in the structured planning of alternatives for personal development and labour insertion.

The work of FORMUJER to promote employability is oriented to the following:

• To strengthen people’s capacities so they can improve their possibilities of labour insertion through developing key competencies which reduce the risk of obsolescence and which will permit men and women to remain active and productive throughout their lives, not necessarily in the same position or activity.

• To train for learning that is lifelong and complex, which means learning to learn, learning to do, and learning to be.

• To help people to identify the internal and external obstacles which interfere with their attaining their objectives, to value their skills and knowledge, and also to value the demands and competencies required in the world of work. These include obtaining information and orientation about the educational market and the labour market, in which there are many alternatives, demands and possibilities, and eliminating stereotypes which pigeonhole jobs as female or male, and orchestrating the search for or generation of work.

• To stimulate and strengthen the capacity of each individual to manage his or her own vocational itinerary, which is particularly necessary in the uncertain environment in which professional life takes place and will take place.

A categorisation made by FORMUJER of the different competencies for employability is as follows:

• Basic competencies to learn how to learn, and to assimilate this as a lifelong process. The outstanding ones are verbal and written expression, applied mathematics, a second language, and also the capacities to place and understand data from the real world in a critical way so as to construct choice-making criteria for taking decisions.
Key competencies and lifelong learning

- **Mainstream competencies**: the capacity to learn to do, in the sense of mobilising and adapting knowledge and capacities to new circumstances. These are particularly significant for women because they widen the spectrum of alternatives and give women horizontal mobility. The outstanding ones are the capacity to anticipate threats and opportunities, to integrate and develop a systematic vision of reality, to organise, to plan and manage tasks, resources and above all time and information, and to acquire a technological culture (working and applying technologies to tasks and in daily life). Among these competencies, special mention should be paid to the capacity to undertake, which is at the basis for formulating the occupational project. This includes developing initiative, strengthening decision-making, the capacity to take risks and to participate through developing leadership and the active implementation of ideas and projects, but also, if democratic leadership is promoted, it contributes to citizenship.

- **Attitudinal competencies**: these involve learning to be, and they strengthen identity and work against self limitation. For women, these competencies are essential for overcoming mental and social barriers which restrict their positioning and empowerment. The priority competencies in this area are personal abilities such as the reinforcement of identity and personal and gender security, responsibility for oneself, playing a role in the process of employment/training itself, and autonomy. There are also interpersonal or social competencies such as working in a group, responsibility and self-regulation, personal relationships, the capacity to negotiate, knowing how to listen and communicate, and emotional discrimination in labour situations.

- **Technical sectoral competencies**: these contextualise and complement the learning to do. For women, these are diversification, valuing old competencies developed in other ambits, and creating new competencies for employment niches that are emerging in the market.

To support the development and strengthening of key competencies, FORMUJER has produced *Training Modules for Employability and Citizenship*, which are oriented to developing competencies like self-confidence, strengthening the feeling of belonging to a group, and improving the capacity to identify and resolve problems (*Employability Module*), strengthening personal autonomy, recognizing and exercising rights and responsibilities, and selected aspects of participation and leadership (*Citizenship Module*).

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These modules have been applied in an integral way in Bolivia. They have served as the basis for preparing different didactic materials, like in Costa Rica where the Manual with Activities to Stimulate Employability from the Classroom was produced. In Argentina, co-executive bodies use them as inputs for constructing the Occupational Project.

FORMUJER included labour guidance as an element in the vocational training process. In the programme there was a methodology called The individual and/or collective occupation project (OP). The OP is a collection of courses of action which individuals define, plan, revise and re-plan with a view to achieving productive insertion or to improving their employment situation. Through supporting and strengthening each person’s capacities to define, produce and manage a viable employment and training OP, the aptitude of women and men to obtain, develop, change or generate their work position will be improved.

The experiences carried out in the FORMUJER framework have shown that people strengthen their employability and exercise of citizenship when:

- they are able to match their capacities, needs and knowledge with the competencies required by the labour context;
- they come to see themselves as creators of their own future, identifying skills, desires, possibilities and difficulties in such a way as to construct their own path in life.18

As of the first quarter of 2003, through the application of FORMUJER’s methodological package of pilot and demonstrative training work, more than 3,000 poor and socially vulnerable women had been trained on the FORMUJER programme in more than fifty occupational profiles, both traditional and innovative, which had been revised and/or updated in cooperation with the productive sector. Evaluations show that there was an increase in employability competencies and in the preparation of occupational projects which empowered the participants, both men and women, to implement productive initiatives as individuals or in groups. These initiatives have taken place through a very varied range of connections including municipal and community bodies and other IADB programmes.

18 Extract from the Cartilla sobre Proyecto Ocupacional prepared by the Punha Cooperative and included in the paper in preparation Proyecto Ocupacional, material de apoyo para formadoras y formadores which will be published shortly by the FORMUJER Programme/Argentina.
The FORMUJER programme has shown that training for the neediest sectors of the population is not effective when it is oriented exclusively to training in occupations. On the contrary, it needs to be developed in an exercise of analysing the potential of the beneficiaries and applying their capabilities to facilitate their own development and success in the search for employment. In this, the key competencies approach has proved to be extremely useful.

2.2. “Chile Califica” and the development of key competencies

This programme was designed as a lifelong learning programme based on an open structure which is aimed at different stages in training.

The project only began in 2002 so there has not yet been any advanced execution, but its formulation clearly allows an understanding of the importance of basic education as a generator of competencies for employability. In the strategy of execution, priority has been given to pilot applications which include the organization of “technical education networks” which have sectoral orientation. The objective is to create a coordinated modular educational offer that will generate options that are coordinated around an educational curriculum able to facilitate progress in formal education and training for work in a determinate region.

This focus on pilot applications that have strong sectoral and regional roots is clearly seen in projects in which the “Chile Califica” services are coordinated, such as in the mining cluster in the Antofagasta region or the horticultural chain which facilitates the joint work of most of the institutions of education, training and production linked to the horticultural, fruit producing, forestry and wood producing sub-sectors in the Maule region.

The “Chile Califica” programme makes available to enterprises in these regions services which contain its four lines of action: the levelling of studies, the improvement of technical training, labour training, and the certification of labour competencies. Entrepreneurs who participate in the programme are always conscious of

<table>
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<th>The reference for key competencies in computing:</th>
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<td>The “Computer Driving Licence” for competencies in the area of information technology, has been adopted as a standard in at least 22 European countries. It is aimed at raising the level of knowledge about information technologies and the level of competency in computer applications. In some countries there is an attempt to generate an offer of basic training geared to this standard, which would allow all citizens to participate in the information society.</td>
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how important it is to develop the key competencies of their workers to improve sectoral and national competitiveness.

Mention should also be made of another step forward in the key competencies approach, which is the explicit intention of the programme to produce a package of “digital” key competencies. This consists of helping to develop a training and certification offer in a group of competencies that are of fundamental importance for work with information technologies. The Ministry of Education has expressed interest in raising the level of workers’ digital literacy, and it is very likely that through the programme the offer of training and competency recognition in this area will be promoted.

The social programme of information technology training in Chile.

One of the areas that is usually emphasised when it comes to analysing changes in occupation profiles is computing. In fact, working with information technologies has become a key competency in many occupations and it is being incorporated into more and more labour activities. Competencies in the computer field are a kind of “way in” which defines inclusion or exclusion with respect to a large part of labour life.

Because of this, the Chilean government has advanced various strategies to improve computer literacy on its “2006-2010 Digital Agenda”, a collection of measures designed to make Chile a digitally developed country.19 This project is closely linked to policies for trade development and integration, and it is complemented in other areas like education, in which the teaching of the English language is being promoted.20

When it comes to information technologies, training and certification in key competencies are being promoted for a “wide spectrum” of labour performance. This experience has been included in the SENCE social training programmes which are aimed at micro-enterprises and independent and unemployed workers in the framework of the “Chile Califica” programme.

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19 In Chile, 71% of the population do not know how to use internet, 63.2% cannot use word processors, and 67.8% do not know how to use balance sheets (CIDE). One in ten Chilean homes is connected to internet and 39% of Chileans have a mobile phone, but Chile is in 25th place in the world ranking for using information and communication technologies (www.icdl.cl)

20 The Ministry of Education is promoting the “English opens doors” plan as one of a group of measures to improve the quality of education and to develop the skills to meet the challenges of globalisation. This initiative involves setting standards and carrying out periodic tests. In addition, a long term professional development plan for teachers has been defined, and standards have been set for quality teaching. (www.mineduc.cl)
In this programme the International Computer Driving License\textsuperscript{21} (ICDL) is being used as a base. This is made up of seven modules which contain the computer competencies which are considered necessary for operating basic information technologies. The modules include basic concepts of information technology, managing files, word processing, balance sheets, data bases, presentations, internet and communications. The idea is to disseminate this digital licence widely among groups of secondary school students, micro entrepreneurs, young workers and adults in general.

\subsection*{2.3. The development of key competencies in the Competency Training and Certification Programme in Argentina}

The labour competencies certification programme in Argentina\textsuperscript{22} is working on the design of training curricula and the process of competency certification in four sectoral areas: the graphics industry, metalworking, the automobile mechanic area, and traditional pastry-making. The project is oriented to establishing the institutional and methodological foundations for developing a national system of labour competency certification, using pilot training and verification experiences based on the labour competencies approach.

One of the most interesting areas of work in this programme is the development of materials to help remedy deficiencies in basic competencies, especially for adult workers. Because the adult population is weak in basic competencies, it has been decided that the competencies certification programme should design and develop the following:

\begin{itemize}
  \item Instruments for diagnosis which will make it possible to evaluate the degree of consolidation of basic competencies in the target population.
  \item Modules which will guide teachers and help them to take compensatory action to develop and/or strengthen these basic competencies.
\end{itemize}

The coordination unit of the project has organized the work so that the modules would have the following characteristics:

\begin{itemize}
  \item they would be to “compensate”, not to teach illiterate people;
\end{itemize}

\textsuperscript{21} International Computer Driving Licence (ICDL). International licence from the European Computer Driving License Foundation (ECDL).

\textsuperscript{22} This project is co-financed by the IDB and the participating organizations, namely the Union of Automobile Mechanics and Associated Workers, the Argentine Federation of Pastry, Confectionary, Ice Cream, Pizza, Biscuit and Fast Service Workers, the Association of Metallurgical Industries in the Province of Rosario, and the Gutenberg Foundation in the graphics industry. This three-year programme started in 2001.
they would be based on strengthening the communicative capacities of reading and writing, and the capacity for logical mathematical thought;

they would be based on developing these capacities in problem situations contextualised in the occupational dynamic;

they would set out to strengthen basic competencies in at least three levels of difficulty (level 1 – up to 6 years of general schooling completed, level 2 - up to 8 years of general schooling completed, level 3 – up to 10 years of general schooling completed);

they would develop the compensatory modules with material basically aimed at the vocational training teacher. This teacher is conceived as the facilitator of this strengthening process.

In the area of developing logical mathematical thought, the focus was put on the following basic competencies:

- the ability to handle fractions;
- skill in using and calculating with decimal numbers;
- skill in utilising different measurement unit systems;
- skill in the reading and interpretation of graphs and tables;
- the capacity to apply proportions in different contexts;
- skill in using and calculating percentages;
- skill in managing and interpreting formulae;

In the area of developing skills for communication and expression, the focus was on the following basic competencies:

- to manage in situations in which language is used;
- to recognise different kinds of obstacles to verbal and non-verbal communication;
- to recognise the changes that occur in language when it is used in different circumstances;
- to widen vocabulary through the use of synonyms and different ways of saying the same thing;
- to identify the actions which are involved in speaking;
- communication, taking into account the circumstances of the place, time and persons involved;
- using non-verbal communication as a complement to the verbal language when giving information to a superior;
• distinguishing verbal language from written language;
• recognising the changes that occur when narrating the same fact in a verbal or in a written way;
• recognising the changes that occur when recounting what another person has said;
• recognising variations in the way things are said in accordance with who is speaking and the circumstances, place and time in question;
• recognising differences in the use of verbal and written language;
• recognising the meaning of phrases in accordance with the situations in which they are used;
• reading and commenting on texts;
• interpreting a written text and writing short texts appropriate to the situation;
• recognising the use of different ways of speaking in accordance with different situations and circumstances;
• recognising changes in the transmission of information;
• recognising the action that is carried out in speaking.

2.4. “CONOCER” in Mexico and mainstream competencies

One of the first tasks of the Occupational Competency Standardization and Certification Council (CONOCER) in Mexico was to carry out an analysis of key competencies, these being understood as types of labour behaviour that are portable and can be applied in different work situations.

CONOCER proposed setting up a national system for the standardization and certification of labour competencies because it had to have a “competencies” map, a standardized national reference for competencies in the world of work, for its matrix of qualifications with the twelve occupational areas and five competency levels. Obviously generic competencies can be transferred from one occupational area to another. This posed the interesting challenge of whether it was possible to identify the generic competencies. If it was, then a great deal of work

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23 The Council was set up in 1995 in the framework of the Technical Education and Training Modernisation Project (PMETyC), which had financing from the World Bank. For further information see www.conocer.org.mx
**Types of competencies in CONOCER:**

**Basic:** Those that have to do with knowledge of a training kind, like reading, writing, mathematical arithmetic and verbal communication.

**Generic:** Those that have to do with performance that is common to different organizations and branches of productive activity, including the skills to analyse, interpret, organise, negotiate and do research.

**Specific:** Of a technical nature, connected to a specific productive function.

and duplicated effort could be saved when the time came to describe the competencies in each of the occupations in different areas. The generic competencies already identified could be used, and in each occupation they could simply be added to the basic and specific competencies.

This is how CONOCER came to develop its *Study of the Identification and Initial Diagnosis of the Basic and Generic Labour Behaviour Required in the Mexican Workforce*. The aim was to use this to obtain information about behaviour that was common in the labour market and in basic and generic competencies. This yielded information to support the work of the standardization committees, the bodies in charge of producing technical and labour competency standards. An important point in the use of this study was that the same study had been done in Canada and the United States; this would eventually make it easier to compare results, which was highly desirable given the expectation that there would be regional integration within the NAFTA.

The main results of this study were:

- A database of common behaviour
- Models of relations between different kinds of behaviour
- Levels of performance, with their associated knowledge, skills and dexterities
- High performance behaviour
- Diagnosis of the qualification levels of the workforce
- Recommendations for the offer of technical education and training

In the first phase the study was oriented to identifying a significant range of generic labour behaviour. The areas identified were as follows:

1. Administration and information
2. Coordination and administration of activities
3. Reading material in order to use the information
4. Client service
5. Communication

---

*Behaviour Required in the Mexican Workforce.*
6. Use of technology  
7. Interaction with work colleagues  
8. Quantitative operations  
9. The management, storage, preservation and manufacture of materials and products  

The second phase consisted of setting scales for the depth and scope of types of behaviour:

1. Reading  
2. Writing  
3. Applied technology  
4. Verbal communication  
5. Finding information  
6. Mathematics  
7. Organisational environment  
8. Interpersonal relations  
9. Decision making  

In this way a performance scale was defined for each kind of behaviour, giving information about the depth and scope of that item. For example, for “client service” the scale runs from the minimum level which only involves “verbal communication” up through more complex behaviour such as “finding information” and “decision making”.

Once the different competencies have been established, a data base will be available with information about the basic and generic competencies. This will be extremely useful in the work of constructing technical competency standards, and above all in avoiding the duplication of efforts involved in having to analyse the same generic competency in different occupations.

3. OTHER EXPERIENCES WITH KEY COMPETENCIES

This section includes some experiences of a more sectoral and specific nature, normally centred on one occupation or family of occupations. A project aimed at strengthening basic competencies that is led by a workers’ union in Brazil has also been included because of its originality.
3.1. Basic and management competencies in SENAI in Brazil

The National Industrial Training Service (SENAI) is the national training institution for the industrial sector in Brazil. SENAI is running a national strategic project about vocational certification based on competencies. In the framework of this project three kinds of competencies have been defined: basic, specific and management.

**Basic competencies** are essential for occupational performance and encompass the technical and scientific bases, both general and multivalent, on which the specific management competencies relative to professional qualification are based.

**Specific competencies** encompass technical skills which allow the individual to work efficiently with objects and variables which are directly involved in creating the product. This means mastery of the pertinent content, knowledge and skills.

**Management competencies** are made up of organisational, methodological and social capacities. Organisational capacities allow the individual to coordinate different activities in work, participate in organising the work environment, administrate the technical, social and economic aspects in a rational and cooperative way, and to use the material and human resources appropriately and safely. Social capacities involve responding to established relations and procedures in the organisation of work and being able to integrate efficaciously, horizontally or vertically, cooperating with other people in a communicative and constructive way. These capacities are portable to different work situations and contexts.

The table below shows some basic competencies and management competencies taken from the “Construction foreman” occupational profile produced by SENAI in the regional department of Sao Paulo.24

It is very possible for the management capacities shown in the table to be transferred to other occupations. Besides that, they also allow the competent worker to perform better. Vocational training for key competencies seems to focus on occupational competency is the mobilisation of the knowledge, skills and professional attitudes necessary for performing typical activities or functions in accordance with the standards of productivity and quality required by the nature of the job. Occupational competencies include basic competencies, specific competencies and management competencies.

SENAI, 2002.

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24 This profile is in the process of being drawn up, and it is included just as an example.
identifying them during the process of drawing up occupational profiles, and developing pedagogic strategies that allow them to be generated throughout the training process. A central theme here is the role which work practice could play in generating these competencies.

### OCCUPATIONAL PROFILE: Construction foreman

**LEVEL:** Qualification of technical level

**GENERAL COMPETENCY:** To participate in the planning and the work, and to supervise the production planned, coordinating the work, facilitating and creating safe conditions for the activities carried out on the job, and controlling environmental protection measures.

**COMPETENCY UNIT:**
Supervision of the stages of the job

<table>
<thead>
<tr>
<th>BASIC COMPETENCIES</th>
<th>MANAGEMENT COMPETENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To know the methods and means of work (equipment, tools, materials, instruments)</td>
<td>• To relate the carrying out the work to the total production in its different phases</td>
</tr>
<tr>
<td>• To know the specifications of the different materials, equipment, tools and instruments</td>
<td>• To control the execution of the work with management tools and instruments and those to do with costs, deadlines, quality and productivity</td>
</tr>
<tr>
<td>• To communicate on the level of the interlocutors in question</td>
<td>• To manage conflicts</td>
</tr>
<tr>
<td>• To read and interpret technical texts and legal language</td>
<td>• To be the leader</td>
</tr>
<tr>
<td>• To make reports</td>
<td>• To have initiative</td>
</tr>
<tr>
<td>• Basic knowledge of geometry applied to civil construction</td>
<td>• To be pro-active</td>
</tr>
<tr>
<td>• Utilising software applied in civil construction</td>
<td>• To have the capacity to persuade and negotiate</td>
</tr>
<tr>
<td></td>
<td>• To have empathy</td>
</tr>
<tr>
<td></td>
<td>• To be creative</td>
</tr>
<tr>
<td></td>
<td>• To know how to delegate</td>
</tr>
<tr>
<td></td>
<td>• To have self control</td>
</tr>
<tr>
<td></td>
<td>• To know how to evaluate and self-evaluate</td>
</tr>
<tr>
<td></td>
<td>• To orient and effect compliance with safety norms on the job</td>
</tr>
</tbody>
</table>

*Source: SENAI, Regional Department of Sao Paulo*
3.2. Key competencies in the application of ProMES in the sugar industry in Mexico

There is an interesting application of the key competencies approach at the enterprise level in a Mexican sugar mill. This is the application of the Productivity Measurement and Enhancement System (ProMES), and it involves the development of human resources based on labour competencies. The experience started in 1996 and three objectives were set: the first was to help change the work culture, the second was to give effective training, and the third was to bring about an inclusive effect which would encompass each and every worker in the mill.  

The training objective included the learning concept known as “Action Reflecting Learning”. In this, group work sessions are used to externalise experiences, and this brings about the verbal expression of implicit knowledge. Later, as a product of this externalisation and reflection, the people are able to draw conclusions and conceptualise based on their reflections about the activity and the group’s problems. In this way a process of formal learning takes place, but it is not structured and it brings into play many competencies that have to do with reflection, analysis and the way people construct their own concepts.

### THE MANAGEMENT OF TRAINING IN THE ProMES MODEL

<table>
<thead>
<tr>
<th>INSTRUMENTS</th>
<th>DEVELOPMENT OF COMPETENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProMES committees</td>
<td>Solving problems and managing the process</td>
</tr>
<tr>
<td>Guides to self-study and evaluation</td>
<td>Comprehension and mastery of key competencies</td>
</tr>
<tr>
<td>Courses in technical skills</td>
<td>Specific competencies. Specialisation</td>
</tr>
<tr>
<td>Tutoring in the operation</td>
<td>Operational skills</td>
</tr>
</tbody>
</table>

*Source: Mertens and Wilde, op.cit.*

---

The key competencies for organisation are worked on using guides for self-study and evaluation which centre on competency units such as:

- Communication in work teams and between workers and supervisors
- Cleaning and safety on the job
- Labour relations
- Awareness and commitment on the part of workers to use personal protection equipment
- Worker awareness about product cleanliness
- Worker participation in achieving the objectives in their areas

It is clear that the collection of competencies here correspond to many of the characteristics most frequently required in a job, but besides identifying these key competencies the learning process gives rise to new forms of relating within the group, between the group and supervisors, and among supervisors and managers. These forms of relating are more objective ways of communicating, and they involve dealing clearly with problems that are detected, working jointly in search of solutions, and suggesting alternative solutions during the process. Here again the ProMES system provides a stimulus for developing an important group of key competencies, this time at the level of the enterprise, but which are fully portable to other productive activities in transformation industries.

3.3. Key competencies in civil construction in Argentina

Following an initiative from GTZ in agreement with the INET and the Construction Workers‘ Union (UOCRA), work was done on designing profiles and technical vocational training curricula in the area of civil construction.

This work developed the concept of the “portability” of a competency, this being understood as the potential that the competency has to be carried over and applied in various contexts. The portability of competencies comes up particularly in the framework of an “occupational family”, a concept adopted to show the affinity there may be between different groups of occupations by virtue of belonging to the same sector, having certain technological and technical principles in common, and sharing a certain “training affinity” or knowledge base which would facilitate learning.

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26 The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) (German Agency for Technical Cooperation) is a German state agency which gives counselling to persons and institutions in 142 countries. In 1997 it began a project to support the National Institute of Technological Education (INET).
According to the study, the capacity to transfer competencies from one occupational field to another is based on three pillars:

- the **basic and fundamental competencies** which come from general schooling;
- the **mainstream competencies**, when they generate constructive methodological capacities;
- the **specific technical competencies** in a field which, because of its pertinence, generates the possibility of constructing capacities at a higher level of abstraction and understanding in a way that favours the strengthening of generic capacities in an occupational field.

In the study, training is assigned the role of an activity to mobilise knowledge so as to facilitate the portability of a competency. “The portability of a competency is related to its capacity for contextualisation of the knowledge which may be developed in the subjects.”

Hence training should develop a series of capacities which would in turn foster the ability of the worker to transfer his or her competencies from one context to another.

The capacities which favour the portability of competencies are capacities for the following:

- Communication
- Rational thought: analytic-synthetic, causal-final, algorithmic-heuristic, abstract-metaphoric
- Creative thought
- Management
- Responsibility
- Sociability
- Trustworthiness

The study also defines the concept of **mainstream competencies** as capacities developed by individuals as citizens and workers, that is to say they are cognitive and problem-solving capacities which, by their very nature, can be applied in diverse fields of social and labour life. Some of these are as follows:

- To be pro-active and to have initiative, autonomy and creativity in organisation, planning and approach
- A global and systematic approach: dialogue between disciplines
- Critical awareness
- Diagnosis
Key competencies and lifelong learning

- Adaptability to different productive or occupational contexts
- Managing uncertainty and the unforeseen
- Construction based on decisions
- Disposition to self-control
- Cooperation
- Disposition to teaching
- Disposition to learning
- Taking responsibility for tasks, processes, missions

The generic competencies which the study establishes for the construction sector are given in the table below.

**GENERIC COMPETENCIES IN THE CONSTRUCTION SECTOR**

<table>
<thead>
<tr>
<th>GENERIC COMPETENCIES</th>
<th>DEVELOPMENT INSTRUMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpret written or verbal technical information which is presented</td>
<td>Identify codes and symbols</td>
</tr>
<tr>
<td></td>
<td>Read plans</td>
</tr>
<tr>
<td></td>
<td>Identify construction techniques requested</td>
</tr>
<tr>
<td></td>
<td>Establish materials requested</td>
</tr>
<tr>
<td></td>
<td>Establish the limits and range of the demands of the position</td>
</tr>
<tr>
<td>Transfer technical information from documents to the building site</td>
<td>Execute technical information</td>
</tr>
<tr>
<td></td>
<td>Plan sub-process activities</td>
</tr>
<tr>
<td></td>
<td>Communicate sub-process activities to the work team</td>
</tr>
<tr>
<td>Select technological resources, tools, materials, safety elements and work techniques in line with criteria of cost, quality and safety</td>
<td>Identify resources considering criteria of cost, quality, productivity, safety and time</td>
</tr>
<tr>
<td>Evaluate the application of safety and quality norms, and establish guidelines for continual improvement</td>
<td>Identify safety and quality criteria pertinent to the sub-process</td>
</tr>
<tr>
<td></td>
<td>Develop methodology for its application</td>
</tr>
<tr>
<td></td>
<td>Develop evaluation standards for the introduction of continual improvements</td>
</tr>
<tr>
<td>GENERIC COMPETENCIES</td>
<td>DEVELOPMENT INSTRUMENTS</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Establish technical cooperation and functional relations with the agents in the</td>
<td>Listen to problems, ideas and proposals from other sectors</td>
</tr>
<tr>
<td>other sub-processes</td>
<td>Exchange information</td>
</tr>
<tr>
<td></td>
<td>Give and request help</td>
</tr>
<tr>
<td></td>
<td>Explain problem situations</td>
</tr>
<tr>
<td></td>
<td>Work in coordination with others</td>
</tr>
<tr>
<td>Manage the material and human resources necessary to progress in the job in line</td>
<td>Identify magnitudes of the elements</td>
</tr>
<tr>
<td>with the conditions of quality, safety and time established</td>
<td>Relate the information obtained to the job</td>
</tr>
<tr>
<td></td>
<td>Apply systems of control for the site store</td>
</tr>
<tr>
<td></td>
<td>Evaluate the performance of the work group</td>
</tr>
<tr>
<td></td>
<td>Establish training action</td>
</tr>
<tr>
<td>Administer the work in accordance with the budget established</td>
<td>Determine the characteristics and quantity of inputs, tools and equipment</td>
</tr>
<tr>
<td></td>
<td>Select the purchasing system</td>
</tr>
<tr>
<td></td>
<td>Evaluate progress in the job with the values budgeted and paid</td>
</tr>
<tr>
<td></td>
<td>Pay salaries and wages in line with legal standards</td>
</tr>
<tr>
<td></td>
<td>Establish work schedule</td>
</tr>
<tr>
<td>Manage the commercial relations which make it possible to obtain work to do</td>
<td>Negotiate the characteristics of the job, budget and payment conditions with third</td>
</tr>
<tr>
<td></td>
<td>parties</td>
</tr>
<tr>
<td></td>
<td>Negotiate costs, terms of payment, and the delivery of inputs and equipment with</td>
</tr>
<tr>
<td></td>
<td>suppliers</td>
</tr>
<tr>
<td></td>
<td>Receive payment of the appropriate amount for each service and control compliance</td>
</tr>
</tbody>
</table>

*Source: Ocupational families and key qualifications in construction, INET/GTZ.*
3.4. Key competencies in the software and internet services industry in Argentina

A recent study in Argentina\(^{28}\) about the dynamics of the supply and demand for competencies in one of the so-called “knowledge industries” in the “new economy” can serve as a good reference for analysing the mix of key competencies which are in demand in this sector.\(^{29}\)

Technical competencies are necessary in this area but not sufficient to be able to operate effectively. The sector has a high propensity to change on the technological level and as regards the content of work and organisational structure. The workers in this sector have always been well qualified, but they have to operate in an ambit in which they are exposed to continual changes in structures and in network procedures with colleagues, and there is pressure from clients for immediate replies. In short, in view of what is required, technical training alone is not enough for competent performance.

The key competencies for this sector include the capacity to communicate with clients and consumers, to manage expectations, to influence and negotiate, to be a manager so as to be able to handle work teams, projects, clients, suppliers and resources, and also the capacity to analyse and solve problems.

One of the most sought-after competencies in this sector is the capacity to work in a team. Enterprises consider this an essential tool to be able to cater to clients and to the market. Competency in problem solving is also important.

One of the important characteristics of this study is that it contains a list of competencies that are connected to entrepreneurship. In this, the people who were polled stated where they acquired their competencies. It should be made clear that there are many small and middle-sized enterprises in this sector; in fact more than 80% of the enterprises have less than 30 workers.

The list of key competencies for entrepreneurs in the computer sector include the following:\(^{30}\)

- problem solving
- motivation for business
- capacity for social relations


\(^{29}\) According to this study, in the year 2000 the software industry employed some 15,000 people and generated around USD 2 thousand million in sales.

\(^{30}\) This study was based on a survey in the IADB/DBJ/UNGS project “Entrepreneurship. Comparative Study in Latin America and Asia”.

• capacity to take risks
• negotiating skills
• capacity for team work
• creativity
• aptitude for hard work
• competencies for planning
• communication skills
• the ability to motivate people

In most cases, it turns out that these competencies were acquired through work experience. The people surveyed also said that education was the main generator of “technical knowledge”. Thus the key competencies match up with the experiences of the entrepreneurs themselves, who believe that they acquired and developed their competencies through work experience.

3.5. Key competencies and new training programmes for young people

In Latin America the vocational training of young people is especially important, and one of the reasons for this is the pressure that this age group is putting on the demand for employment and labour training and updating. The unemployment rate for young people is not only the highest for any group (over 15% on average), but also it is usually two or three times higher than the national average in almost every country in the region. In total young people account for more than half of all unemployment in Latin America.31

Youth unemployment almost always goes hand in hand with a wide range of weaknesses which cause the key competencies of these young people to deteriorate. These shortcomings are deficient cognitive and educational competencies, a lack of social skills, no integration into contact networks, a lack of the capacity to deal with, face and propose efficacious solutions to problems, and lastly, a deterioration in the competencies that have to do with self-esteem and the search for self-development.

This deficiency in key competencies often originates from adverse circumstances such as extreme poverty, social marginalisation and early school drop-out.32 In the region, the systems of education and work training are increasingly

32 Young people who are considered “poor” rarely have more than 8 years of education, Gallart, Maria Antonia. (coordinator), Formación, pobreza y exclusión: Los programas para jóvenes, Montevideo, Cinterfor/ILO, 2000.
having to face the challenge of handling this group and facilitating the development of knowledge and key competencies which would help them with labour insertion and to retain employment.  

In the 1980s the programmes that focused specifically on the problem of youth unemployment concentrated on “technical” or “specific” competencies, and sought to develop operative capacities that were usually specific to the ambit of one occupation. Today, on the other hand, there is more awareness among those who formulate active employment policies, and also among training institutions, that it is important on youth training programmes to develop skills for employability.

Many training programmes have begun to tackle the question of how to develop a group of competencies about which there can be a consensus as to their importance for improving employment possibilities and creating the capacity to adapt to continual changes in the labour market.

A superficial analysis of some experiences in the Latin American region shows that training has been geared to various groups of key competencies, which are sometimes called basic competencies, and these are borne in mind when the time comes to execute training.

There is a wide-ranging and varied debate about where to set the conceptual limits between key competencies and technical competencies, and also the limits between competencies and skills. Here we present a proposed classification of key competencies. It is intended to serve as a reference for describing the experiences which we will describe below, and it is useful because each of the experiences tends to emphasise one or more of the five groups in this classification.

---

## Classification of key competencies

<table>
<thead>
<tr>
<th>COMPETENCY AREA</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Language, communication, logical mathematical thought.</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Observation, analysis, identifying the parts of a problem, suggesting creative solutions, critical thought, the planning and management of projects. Adaptation to the context.</td>
</tr>
<tr>
<td>Self learning and self knowledge</td>
<td>Being informed, motivation to learn, learning to learn, concern with one’s own development, knowledge of one’s capacities, transferring knowledge from one context to another.</td>
</tr>
<tr>
<td>Social</td>
<td>Working in a team, the capacity to negotiate, construct arguments and interaction. Getting others to understand one’s point of view. Self-confidence, seeking and maintaining networks of social contacts.</td>
</tr>
<tr>
<td>Motivation for work</td>
<td>Initiative, responsibility at work, commitment and interest at work.</td>
</tr>
</tbody>
</table>

*Source: Adapted from *Defining and Selecting Key Competencies*. Rychen. Salganik. *Competencias Transversales*, Masariegos, Sopena and others.*

**Basic competencies for social insertion:** A recent UNESCO study analysed the interface between basic competencies and technical competencies on various regional youth training programmes. That study presented three experience which are reviewed below.

The first was an experience promoted by the Centre for Research and Development in Education (CIDE) in Chile. This experience was based on the idea...
that there is a deficiency in basic competencies in Chile, a state of affairs that was brought to light when the International Adult Literacy Survey was carried out in that country.\(^7\) It was based on the conviction that rather than technical competencies, what labour performance demands is a series of basic skills that have to do with written and verbal communication and logical mathematical thought. According to the CIDE model, these competencies can be developed through a focus on solving problems, and they involve six main skills.

The six skills in the model are shown in the table below.

**CIDE: Basic skills:**

<table>
<thead>
<tr>
<th>SKILLS</th>
<th>DESCRIPTION OF CAPACITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDENTIFY</td>
<td>COMPREHENSION OF VERBAL AND WRITTEN LANGUAGE</td>
</tr>
<tr>
<td>Identify key words in a determinate situation</td>
<td>Identify data</td>
</tr>
<tr>
<td>Identify relevant information to be able to respond to specific questions</td>
<td>Identify the question or questions</td>
</tr>
<tr>
<td>Recognise the context in which a situation is framed</td>
<td>Recognize the problematic situation in context</td>
</tr>
<tr>
<td>ANALYSE</td>
<td>Break down the situation or text into its parts</td>
</tr>
<tr>
<td>Discriminate and differentiate relevant and irrelevant aspects</td>
<td>Identify the variables involved in the problem</td>
</tr>
<tr>
<td>Determine the variables which impinge on the situation</td>
<td>Establish the needs for information when this is not complete</td>
</tr>
<tr>
<td>Determine what is necessary to be able to understand the situation</td>
<td>RELATE</td>
</tr>
<tr>
<td>Establish the relation between the data and the question</td>
<td>Combine all the variables in the problem simultaneously and successively</td>
</tr>
<tr>
<td>Determine the nexus and situations among the objects involved in the problem</td>
<td>Relate the data to previous knowledge about the situation</td>
</tr>
</tbody>
</table>

International Adult Literacy Survey (IALS), OCDE (1998). This survey found that more than half of Chilean adults do not understand written texts and are only able to make basic inferences about what they read. (www.ocde.org)
The second experience described in the UNESCO study was carried out by the Uruguayan organization “Foro Juvenil” (Youth Forum). In this, the development of basic competencies was linked to social elements which have a positive impact on capacities for relating and interacting. The experience was based on the idea that the lack of social competencies among young people, which has its roots in factors like poverty, the immediate environment and the consequent absence of social networks which could stimulate contact and interaction, is a barrier to labour insertion.

The “Foro Juvenil” model involves the successive development of social competencies in four stages which run parallel to the training process. These stages are shown in the table below. The pedagogic model reinforces the competencies of reading, writing and mathematical calculations in the training context.

---

<table>
<thead>
<tr>
<th>SKILL</th>
<th>DESCRIPTION OF CAPACITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPREHENSION OF VERBAL AND WRITTEN LANGUAGE</td>
<td>LOGICAL MATHEMATICAL THOUGHT</td>
</tr>
<tr>
<td>PLAN</td>
<td>• Select and plan an alternative which will subsequently provide a solution for a problem, determined in line with the requirements of the stated situation</td>
</tr>
<tr>
<td>EXECUTE</td>
<td>• Make the situation known, either verbally or in writing, depending on the situation and the demands</td>
</tr>
<tr>
<td>EVALUATE</td>
<td>• Verify whether the planned objective was achieved • Revise, check, and return to the variables which influenced the process (if the objective was not achieved)</td>
</tr>
</tbody>
</table>

Source: Adapted from Milos, Pedro, op. cit., UNESCO (2003).
“Foro Juvenil”:
Social skills in function of the stages of the training process

<table>
<thead>
<tr>
<th>TRAINING PROCESS</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial level</td>
<td>• Acceptance of Rules</td>
</tr>
<tr>
<td></td>
<td>• Adaptation</td>
</tr>
<tr>
<td></td>
<td>• Respect for others</td>
</tr>
<tr>
<td>Process level</td>
<td>• Valuing rules and norms</td>
</tr>
<tr>
<td></td>
<td>• Flexibility</td>
</tr>
<tr>
<td></td>
<td>• Respect for diversity</td>
</tr>
<tr>
<td>Affective base level</td>
<td>• Contact with reality</td>
</tr>
<tr>
<td></td>
<td>• Personal modality</td>
</tr>
<tr>
<td></td>
<td>• Self respect</td>
</tr>
<tr>
<td>Result level</td>
<td>• Personal and social development</td>
</tr>
<tr>
<td></td>
<td>• Responsibility</td>
</tr>
<tr>
<td></td>
<td>• Initiative</td>
</tr>
<tr>
<td></td>
<td>• Cooperation and group work</td>
</tr>
<tr>
<td></td>
<td>• Self knowledge, self esteem, maturity</td>
</tr>
</tbody>
</table>

Source: Adapted from Milos, Pedro, op. cit., UNESCO (2003).

The third experience comes from the Vocational Training Network of the Archbishopric of San Isidro in Argentina. This concentrates on a group of basic competencies which are usually provided by education, but the added value here is that there is an attempt to develop them through the formulation of “technological projects.”

The design and formulation of the project fosters the development of a group of skills that underlie the organisation of an activity for young people which, like the project, requires the projection of objectives, targets, resources and time. The competencies include working in a team, organising, reflecting about reality, problem solving, seeking information, adopting safety and hygiene measures at work, etc.

39 The Vocational Training Network of the Archbishopric of San Isidro was set up in 1985 through an agreement with the General Board of Culture and Education of the Province of Buenos Aires.
Archbishopric of San Isidro
Competencies developed during the preparation of a technological project

<table>
<thead>
<tr>
<th>PHASES OF THE PROJECT</th>
<th>SKILLS INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problematic situation</td>
<td>• Identifying the problem situation which will be solved through the project</td>
</tr>
<tr>
<td></td>
<td>• Characterising the real starting point of the situation</td>
</tr>
<tr>
<td>Strategic situation</td>
<td>• Formulation of a strategic situation which will allow the problem to be solved (the path to solve the problem)</td>
</tr>
<tr>
<td>Design</td>
<td>• Draw up a specific plan of form and content, including the activities which will lead to achieving the expected results and the competencies involved</td>
</tr>
<tr>
<td>Organisation and management</td>
<td>• Programme the running of the project</td>
</tr>
<tr>
<td></td>
<td>• Define tasks and functions</td>
</tr>
<tr>
<td>Application</td>
<td>• Execution of the project</td>
</tr>
<tr>
<td></td>
<td>• Carrying out the tasks in line with the programme</td>
</tr>
<tr>
<td>Evaluation</td>
<td>• Analysing what was learned and correcting errors</td>
</tr>
</tbody>
</table>

Source: Adapted from Milos, Pedro, op. cit., UNESCO (2003).

Social competencies and entrepreneurship: The Don Bosco Industrial Polygon (PIDB)\footnote{40} is a private educational institution in El Salvador whose educational activities include running an interesting combination of formal education and a programme to train young people for productive life. The process of setting up the PIDB began in 1986 with an effort to salvage a marginal area adjacent to the Don Bosco secondary school in the city of San Salvador. In that area, a group of cooperative enterprises were set up. There were different kinds of businesses such as automobile repairs, shoemaking, tool making, printing, aluminium, plastics, clothes making, baking and carpentry. Eventually the need to offer training to the members of these enterprises led to the setting up of an institution to support enterprise development: the Technical Institute of Entrepreneurial Workers (ITOE), which is part of the PIDB effort.

The PIDB runs a work programme for juvenile delinquents who in most cases had been in urban gangs and had been sentenced by the legal system. The PIDB offers them an option of training, rehabilitation and social insertion during the period that they are serving their sentence. The PIDB training model uses the ITOE to develop competencies in business undertakings, creativity and initiative, with the emphasis on solidarity and working in a team. This was chosen in preference to simple training in basic competencies, and it has helped enormously in re-socialising the beneficiaries. In this regard, the ILO Recommendation can be quoted in the sense of helping and supporting people to develop and put into practice their entrepreneurial capacities so as to create decent jobs for themselves and for others, through education, training, lifelong learning and other policies and programmes.\(^\text{41}\)

Competencies that have to do with self development are also dealt with through the use of an inductive methodology based on the young people’s own personal history. The aim is to help them to recognize their own potential, and raise their self esteem and self confidence. This component gives the young people the capacity to set their own targets, and to be able to take advantage of their educational and entrepreneurial experience in the PIDB.

Other key competencies that have to do with living in a community and creating social networks are being stimulated by the way the PIDB works. It is in effect an institution connected to community development in the immediate area, and its work philosophy gives it a fluid relationship with the young people and with the community they come from. The development of these kinds of competencies is essential in cases where poverty and marginalisation are so severe that they affect the young people’s social conduct and make an intervention necessary. This is not necessarily academic intervention, but rather it is geared more to a specific collection of social competencies.

**Competencies for employability: the “Preparado” programme in Chile.**
The “Preparado” programme\(^\text{42}\) has the perspective of competencies for employability. It has identified a group of competencies and is seeking to have them introduced into the regular curriculum in educational establishments, in secondary technical vocational education and in technical training for adults. The focus is employability, understood as the capacity to obtain employment, retain it and progress in the organization contributing with it.\(^\text{43}\)

\(\text{41}\) ILO Recommendation concerning the development of human resources, 2004.

\(\text{42}\) This organisation comes under the Ministry of Economy, Promotion and Reconstruction in Chile, and it is promoted by the Chile Foundation and financed by the Corporation for the Promotion of Production (CORFO).

Different strategies can be used, and this depends on the kind of educational establishment in question and the target population. The programme is expected to contribute to improving possibilities to find work, either as an employee or in self-employment.

The competency areas defined by the “Preparado” programme are communication, entrepreneurship and the ability to start an undertaking, project planning and management, working in a team, problem solving, learning to learn, developing a career, and the use of technologies. Each of these areas is made up of various competencies, and examples of three of them are given in the table below.

### Three areas of competency in the “Preparado” programme

<table>
<thead>
<tr>
<th>AREA</th>
<th>COMPETENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>• Express oneself clearly, both verbally and in writing</td>
</tr>
<tr>
<td></td>
<td>• Communicate in non-verbal language</td>
</tr>
<tr>
<td></td>
<td>• Be assertive</td>
</tr>
<tr>
<td>Entrepreneurship and undertaking</td>
<td>• Adapt to a new situation</td>
</tr>
<tr>
<td></td>
<td>• Translate ideas into action</td>
</tr>
<tr>
<td></td>
<td>• Be creative</td>
</tr>
<tr>
<td>Project planning and management</td>
<td>• Set objectives</td>
</tr>
<tr>
<td></td>
<td>• Gather, organise and analyse information</td>
</tr>
<tr>
<td></td>
<td>• Develop and manage projects</td>
</tr>
</tbody>
</table>


### 3.6. Basic competencies and citizenship: The CUT “Integrar” programme in Brazil

The trade union organization CUT in Brazil designed the INTEGRAR programme for coordinating work on vocational re-training and competency certification with recuperative schooling and certifying basic teaching.

The programme helped both employed and unemployed workers. For unemployed workers the emphasis was on school levelling and acquiring the fun-

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For further information see: www.preparado.cl

The average schooling of a worker in the metallurgical sector is three and a half years. This programme is financed with resources from the Workers’ Protection Fund (FAT), and follow-up is done by the Ministry of Labour and Employment in Brazil.
damental competencies for life as a citizen, the latter being a competency that is often absent from the daily lives of men and women workers because of their low educational levels. This is a perspective of social inclusion in which the competencies to participate as a citizen, and competencies for life, widen and enrich the traditional conception of employability.

INTEGRAR’s regular courses ranged from the typical subjects of basic education to familiarisation with the rudiments of computer skills in classrooms that are equipped with computers, and even to so-called “pedagogic laboratories”. These laboratories were a source of information about industries, public bodies, civil organizations and areas of the city, and they suggest alternatives for generating employment and income, and cultural events. This facilitates learning, and training for citizenship, and the full exercise of the individual’s rights.

In addition, the programme was geared to competencies for employability, and it held “Pedagogic Workshops for Sustainable Development” whose function was to train unemployed people and organise them to construct projects to generate work and income. Workers, members of the community and the local union all took part in the workshops and worked to identify and analyse alternatives to escape from unemployment.

The courses were open and they consisted of modules, so they could be interrupted and then re-entered later on. The total content was 14 modules, which could take 700 hours spread over ten or twelve months.

Technical areas included in the INTEGRAR programme:
- productive re-structuring
- applied mathematics
- measurement control
- reading and interpreting diagrams
- computers

Basic areas included in the INTEGRAR programme:
- Portuguese
- English
- Geography
- History
- Physics
- Chemistry
- Biology
- Basic mathematics
Although the programme does not use the term “competencies”, it is clear that many of the areas included on the list amount to key competencies, above all the “technical areas” in the first group.

The programme awards a certificate of completion of basic education (which normally lasts 8 years in Brazil), and it has been suggested that certification be awarded for competencies acquired through work experience, in addition to the certification of basic education already awarded.

**SOME CONCLUSIONS**

The application of the key competencies approach is growing and is being taken into account more and more in Latin America and the Caribbean. There are different conceptual approaches, each with its own slant on the question and each centred on a slightly different area.

The first of these is the link between core skills and employability. This conception emphasises the capacity of certain kinds of competencies to be applied in various labour contexts regardless of the particular job in question. This conception has sparked off a lively debate and it is strongly opposed by those who maintain that employability cannot be a final aim that is attributed only to the worker. This is the main position taken by the unions when they wish to defend the idea that ministries of labour and education should facilitate conditions to improve access to training and promote the lifelong learning of workers.

The second approach associates key competencies with solid basic training. This perspective emphasises the problem of low levels of schooling among most adult workers in the region. The focus here is on trying to raise basic competency levels, and it has been made the central core of the lifelong learning programmes that are under way in Chile, and in the training of adults throughout the region.

There is a third approach which stresses the key competencies required to perform successfully in a particular occupational sector. This is the case of competencies that are essential for specific sectors like industry or construction, and also competencies that are key for enterprises.