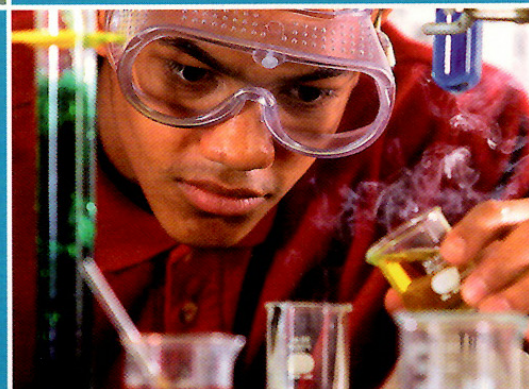
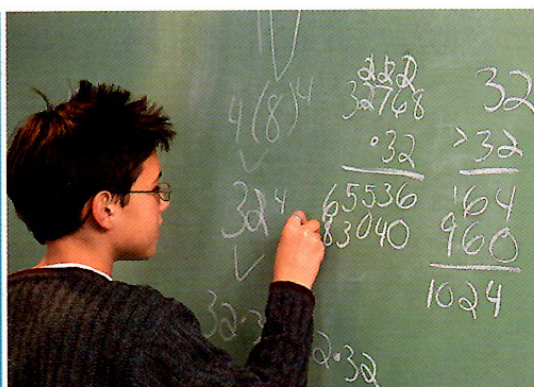


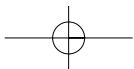
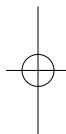
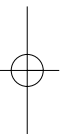
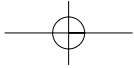
THE DEFINITION AND SELECTION OF KEY COMPETENCIES

Executive Summary



THE DEFINITION AND SELECTION OF KEY COMPETENCIES

Executive Summary



PISA AND THE DEFINITION OF KEY COMPETENCIES

In 1997, OECD member countries launched the Programme for International Student Assessment (PISA), with the aim of monitoring the extent to which students near the end of compulsory schooling have acquired the knowledge and skills essential for full participation in society. Driving the development of PISA have been:

- Its policy orientation, with design and reporting methods determined by the need of governments to draw policy lessons;
- Its innovative “literacy” concept concerned with the capacity of students to analyse, reason and communicate effectively as they pose, solve and interpret problems in a variety of subject matter areas;
- Its relevance to lifelong learning, which does not limit PISA to assessing students’ curricular and cross-curricular competencies but also asks them to report on their own motivation to learn, beliefs about themselves and learning strategies; and
- Its regularity, which will enable countries to monitor their progress in meeting key learning objectives.

PISA assessments began with comparing students’ knowledge and skills in the areas of reading, mathematics, science and problem solving. The assessment of student performance in selected school subjects took place with the understanding, though, that students’ success in life depends on a much wider range of competencies. The OECD’s Definition and Selection of Competencies (DeSeCo) Project, which is summarised in this brochure, provides a framework that can guide the longer-term extension of assessments into new competency domains.

4 The Definition and Selection of Key Competencies

OVERVIEW

What Competencies Do We Need for a Successful Life and a Well-Functioning Society?

Today's societies place challenging demands on individuals, who are confronted with complexity in many parts of their lives. What do these demands imply for key competencies that individuals need to acquire? Defining such competencies can improve assessments of how well prepared young people and adults are for life's challenges, as well as identify overarching goals for education systems and lifelong learning.

A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency that may draw on an individual's knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating.

Individuals need a wide range of competencies in order to face the complex challenges of today's world, but it would be of limited practical value to produce very long lists of everything that they may need to be able to do in various contexts at some point in their lives. Through the DeSeCo Project, the OECD has collaborated with a wide range of scholars, experts and institutions to identify a small set of key competencies, rooted in a theoretical understanding of how such competencies are defined. Each key competency must:

- Contribute to valued outcomes for societies and individuals;
- Help individuals meet important demands in a wide variety of contexts; and
- Be important not just for specialists but for all individuals.

Why are competencies so important today?

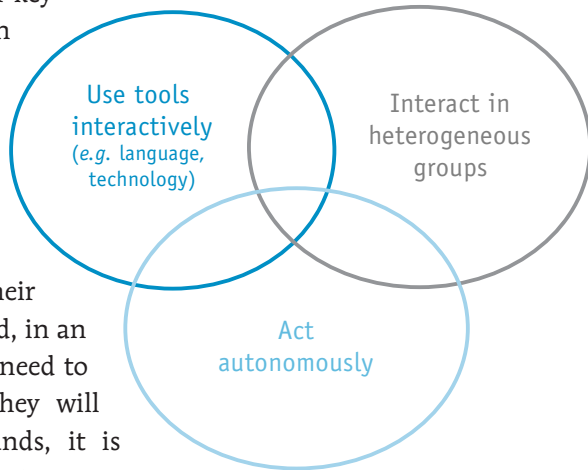
Globalisation and modernisation are creating an increasingly diverse and interconnected world. To make sense of and function well in this world, individuals need for example to master changing technologies and to make sense of large amounts of available information. They also face collective challenges as societies – such as balancing economic growth with environmental sustainability, and prosperity with social equity. In these contexts, the competencies that individuals need to meet their goals have become more complex, requiring more than the mastery of certain narrowly defined skills.

“Sustainable development and social cohesion depend critically on the competencies of all of our population – with competencies understood to cover knowledge, skills, attitudes and values.”

OECD Education Ministers

Key Competencies in Three Broad Categories

The DeSeCo Project's conceptual framework for key competencies classifies such competencies in three broad categories. First, individuals need to be able to use a wide range of tools for interacting effectively with the environment: both physical ones such as information technology and socio-cultural ones such as the use of language. They need to understand such tools well enough to adapt them for their own purposes – to use tools interactively. Second, in an increasingly interdependent world, individuals need to be able to engage with others, and since they will encounter people from a range of backgrounds, it is important that they are able to interact in heterogeneous groups. Third, individuals need to be able to take responsibility for managing their own lives, situate their lives in the broader social context and act autonomously.



These categories, each with a specific focus, are interrelated, and collectively form a basis for identifying and mapping key competencies. The need for individuals to think and act reflectively is central to this framework of competencies. Reflectiveness involves not just the ability to apply routinely a formula or method for confronting a situation, but also the ability to deal with change, learn from experience and think and act with a critical stance.

The following pages look first at the demands of modern life and how they lead to this framework, second at the details of the framework itself and third at how the framework can be used both to inform the assessment of educational outcomes and for wider purposes.

Producing this framework: How the OECD developed a collaborative, multidisciplinary approach to defining a set of key competencies

In late 1997, the OECD initiated the DeSeCo Project with the aim of providing a sound conceptual framework to inform the identification of key competencies and strengthen international surveys measuring the competence level of young people and adults. This project, carried out under the leadership of Switzerland and linked to PISA, brought together experts in a wide range of disciplines to work with stakeholders and policy analysts to produce a policy-relevant framework. Individual OECD countries were able to contribute their own views to inform the process. The project acknowledged diversity in values and priorities across countries and cultures, yet also identified universal challenges of the global economy and culture, as well as common values that inform the selection of the most important competencies.

6 The Definition and Selection of Key Competencies

A BASIS FOR KEY COMPETENCIES

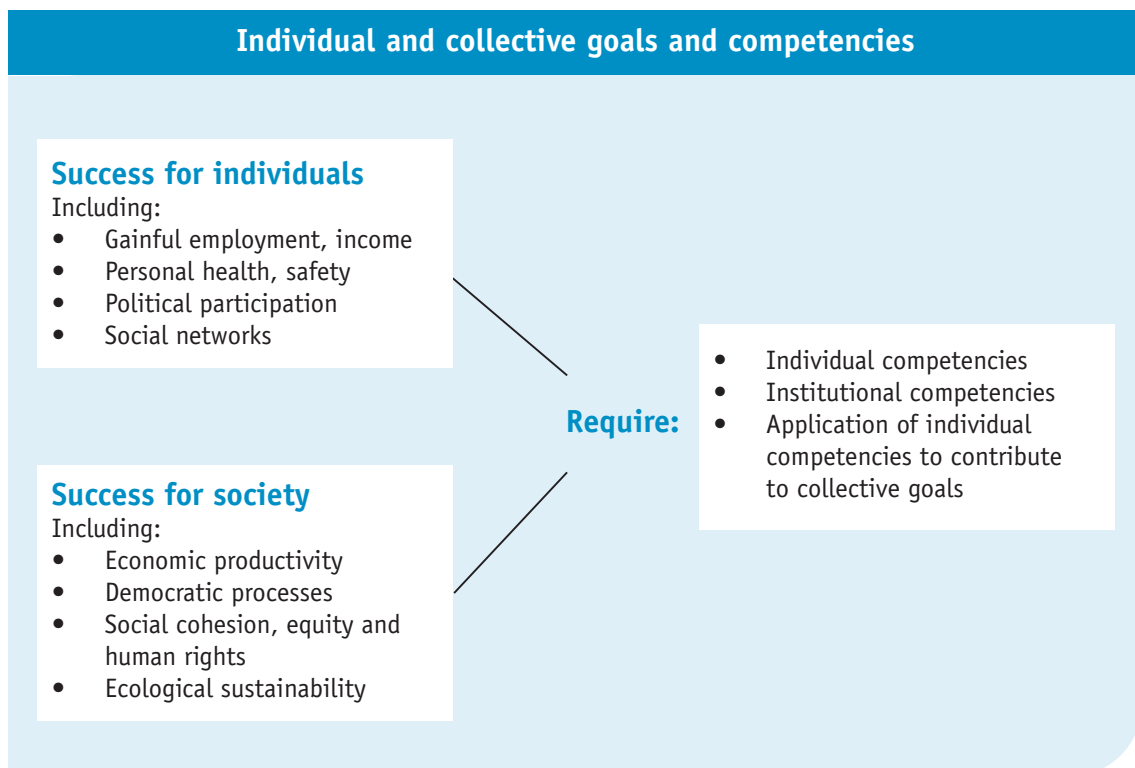
Competence and the demands of modern life

Key competencies are not determined by arbitrary decisions about what personal qualities and cognitive skills are desirable, but by careful consideration of the psychosocial prerequisites for a successful life and a well-functioning society. What demands does today's society place on its citizens? The answer needs to be rooted in a coherent concept of what constitutes key competencies.

This demand-led approach asks what individuals need in order to function well in society as they find it. What competencies do they need to find and to hold down a job? What kind of adaptive qualities are required to cope with changing technology?

However, competence is also an important factor in the ways that individuals help to shape the world, not just to cope with it. Thus, as well as relating to key features and demands of modern life, competencies are also determined by the nature of our goals, both as individuals and as a society.

The framework described here relates to individual competencies, rather than to the collective capacities of organisations or groups. However, as illustrated in the diagram below, the sum of individual competencies also affects the ability to achieve shared goals.



Individual and global challenges

Individuals need to draw on key competencies that allow them to adapt to a world characterised by change, complexity and interdependence. These competencies need to be appropriate for a world where:

- Technology is changing rapidly and continuously, and learning to deal with it requires not just one-off mastery of processes but also adaptability.
- Societies are becoming more diverse and compartmentalised, with interpersonal relationships therefore requiring more contact with those who are different from oneself.
- Globalisation is creating new forms of interdependence, and actions are subject both to influences (such as economic competition) and consequences (such as pollution) that stretch well beyond an individual's local or national community.

Common values as an anchor

Insofar as competencies are needed to help accomplish collective goals, the selection of key competencies needs to some extent to be informed by an understanding of shared values. The competency framework is thus anchored in such values at a general level. All OECD societies agree on the importance of democratic values and achieving sustainable development. These values imply both that individuals should be able to achieve their potential and that they should respect others and contribute to producing an equitable society. This complementarity of individual and collective goals needs to be reflected in a framework of competencies that acknowledges both individuals' autonomous development and their interaction with others.

Selecting key competencies

The above demands place varied requirements on individuals in different places and different situations. However, as set out above, key competencies are those of particular value, that have multiple areas of usefulness and that are needed by everyone.

The first of these conditions, that competencies should be valued, applies in relation to measurable benefits for both economic and social purposes. Recent research reinforces the view that human capital not only plays a critical role in economic performance, but also brings key individual and social benefits such as better health, improved well being, better parenting, and increased social and political engagement.

The second condition, that competencies should bring benefits in a wide spectrum of contexts, means that they should apply to multiple areas of life. Thus, certain areas of competence are needed not only in the labour market but also in private relationships, in political engagement and so on, and it is these transversal competencies that are defined as key.

The third condition, that key competencies should be important for all individuals, deemphasises those competencies that are of use only in a specific trade, occupation or walk of life. Emphasis is given to transversal competencies that everyone should aspire to develop and maintain.

8 The Definition and Selection of Key Competencies

THE FRAMEWORK

Underlying characteristics of key competencies

A framework of key competencies consists of a set of specific competencies, bound together in an integrated approach. Before looking at the specifics of the competencies in the three clusters shown above, it is worth noting the underlying features reaching across all of these categories.

Moving beyond taught knowledge and skills

In most OECD countries, value is placed on flexibility, entrepreneurship and personal responsibility. Not only are individuals expected to be adaptive, but also innovative, creative, self-directed and self-motivated.

Many scholars and experts agree that coping with today's challenges calls for better development of individuals' abilities to tackle complex mental tasks, going well beyond the basic reproduction of accumulated knowledge. Key competencies involve a mobilisation of cognitive and practical skills, creative abilities and other psychosocial resources such as attitudes, motivation and values.

Despite the fact that competencies comprise more than just taught knowledge, the DeSeCo Project suggests that a competency can itself be learned within a favourable learning environment.

At the centre of the framework of key competencies is the ability of individuals to think for themselves as an expression of moral and intellectual maturity, and to take responsibility for their learning and for their actions.

Reflectiveness – the heart of key competencies

An underlying part of this framework is reflective thought and action. Thinking reflectively demands relatively complex mental processes and requires the subject of a thought process to become its object. For example, having applied themselves to mastering a particular mental technique, reflectiveness allows individuals to then think about this technique, assimilate it, relate it to other aspects of their experiences, and to change or adapt it. Individuals who are reflective also follow up such thought processes with practice or action.

Thus, reflectiveness implies the use of metacognitive skills (thinking about thinking), creative abilities and taking a critical stance. It is not just about how individuals think, but also about how they construct experience more generally, including their thoughts, feelings and social relations. This requires individuals to reach a level of social maturity that allows them to distance themselves from social pressures, take different perspectives, make independent judgments and take responsibility for their actions.

Going beyond the either-or: An illustration of reflectiveness

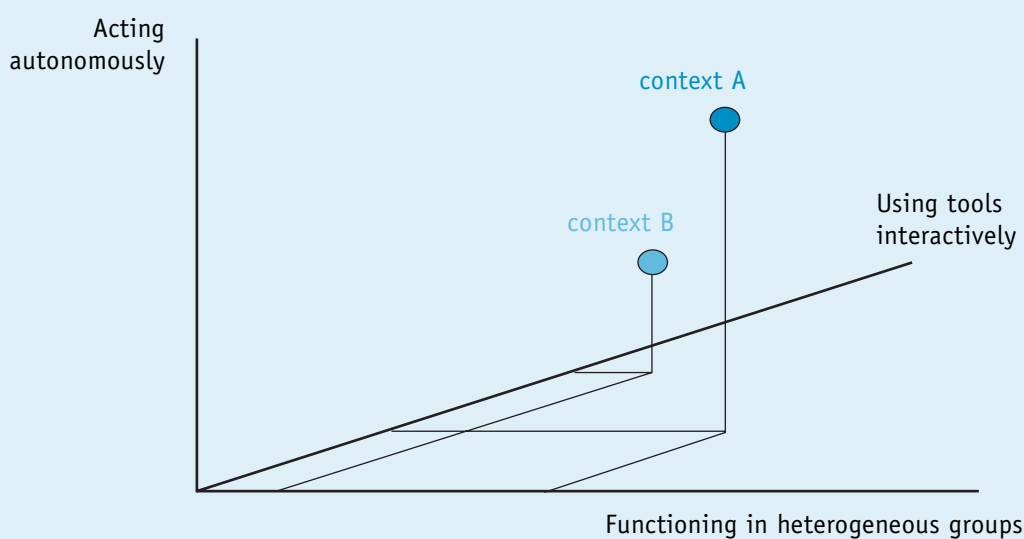
The ability to deal with differences and contradictions is found on many lists of key competencies within the economic and educational sector. Today's diverse and complex world demands that we do not necessarily rush to a single answer, to an either-or solution, but rather handle tensions – between, for instance, autonomy and solidarity, diversity and universality, and innovation and continuity – by integrating seemingly contradictory or incompatible goals as aspects of the same reality. Thus, individuals have to learn to think and act in a more integrated way, taking into account the manifold interconnections and interrelations between positions or ideas that may appear contradictory, but that may sometimes only superficially be so.

Combining key competencies

A further link between the specific competencies described below is that in any one context, one is likely to draw on more than one such competency. In fact, any given situation or goal may demand a constellation of competencies, configured differently for each particular case.

People living in different situations will draw to varying degrees on various competencies according, for example to cultural norms, technological access, social and power relations.

Key competencies are employed in different combinations in varying contexts



10 The Definition and Selection of Key Competencies

Competency Category 1: Using Tools Interactively

The social and professional demands of the global economy and the information society require mastery of socio-cultural tools for interacting with knowledge, such as language, information, and knowledge, as well as physical tools such as computers.

Using tools interactively requires more than having access to the tool and the technical skills required to handle it (e.g. read a text, use software). Individuals also need to create and adapt knowledge and skills. This requires a familiarity with the tool itself as well as an understanding of how it changes the way one can interact with the world and how it can be used to accomplish broader goals. In this sense, a tool is not just a passive mediator, but an instrument in an active dialogue between the individual and his or her environment.

Individuals encounter the world through cognitive, socio-cultural and physical tools. These encounters, in turn, shape how they make sense of and become competent in the world, deal with transformation and change, and respond to long-term challenges. Using tools interactively opens up new possibilities in the way individuals perceive and relate to the world.

Current international assessments, in particular PISA (www.pisa.oecd.org) and the Adult Literacy and Life Skills Survey (ALL, www.ets.org/all), conducted by Statistics Canada, provide empirical evidence on the salience of key competencies in terms of the ability to interact with tools such as written texts.

COMPETENCY 1-A

The ability to use language, symbols and text interactively

This key competency concerns the effective use of spoken and written language skills, computation and other mathematical skills, in multiple situations. It is an essential tool for functioning well in society and the workplace and participating in an effective dialogue with others. Terms such as “communication competence” or “literacies” are associated with this key competency.

Reading literacy and mathematical literacy in PISA and numeracy as defined in ALL are illustrations of this key competency.

Why

- The need to keep up to date with technologies
- The need to adapt tools to own purposes
- The need to conduct active dialogue with the world

What competencies

- A. Use language, symbols and texts interactively
- B. Use knowledge and information interactively
- C. Use technology interactively

COMPETENCY 1-B**The ability to use knowledge and information interactively**

Both the increasingly important role of the service and information sectors and the central role of knowledge management throughout today's societies make it essential for people to be able to use information and knowledge interactively.

This key competency requires critical reflection on the nature of information itself – its technical infrastructure and its social, cultural, and even ideological context and impact. Information competence is necessary as a basis for understanding options, forming opinions, making decisions, and carrying out informed and responsible actions.

Using knowledge and information interactively requires individuals to:

- Recognise and determine what is not known;
- Identify, locate and access appropriate information sources (including assembling knowledge and information in cyberspace);
- Evaluate the quality, appropriateness and value of that information, as well as its sources; and
- Organise knowledge and information.

An illustration of this key competency is scientific literacy, as developed in the framework for the 2006 PISA survey. This seeks to explore the degree to which students are willing to engage in and interact with scientific enquiry, including how interested they are in scientific questions, rather than just their ability to exercise cognitive skills as required.

COMPETENCY 1-C**The ability to use technology interactively**

Technological innovation has placed new demands on individuals inside and outside the workplace. At the same time, technological advances present individuals with new opportunities to meet demands more effectively in new and different ways.

Interactive use of technology requires an awareness of new ways in which individuals can use technologies in their daily lives. Information and communication technology has the potential to transform the way people work together (by reducing the importance of location), access information (by making vast amounts of information sources instantly available) and interact with others (by facilitating relationships and networks of people from around the world on a regular basis). To harness such potential, individuals will need to go beyond the basic technical skills needed to simply use the Internet, send e-mails and so on.

As with other tools, technology can be used interactively if users understand its nature and reflect on its potential. Most importantly, individuals need to relate the possibilities embedded in technological tools to their own circumstances and goals. A first step is for individuals to incorporate technologies into their common practices, which produces a familiarity with the technology that then allows them to extend its uses.

12 The Definition and Selection of Key Competencies

Competency Category 2: Interacting in Heterogeneous Groups

Throughout their lives human beings are dependent on ties to others, for material and psychological survival, as well as in relation to social identity. As societies become in some ways more fragmented and also more diverse, it becomes important to manage interpersonal relationships well both for the benefit of individuals and to build new forms of co-operation.

The building of social capital is important, as existing social bonds weaken and new ones are created by those with the ability to form strong networks. One of the potential sources of inequity in the future could be differences in the competence of various groups to build and benefit from social capital.

Why

- The need to deal with diversity in pluralistic societies
- The importance of empathy
- The importance of social capital

What competencies

- A. Relate well to others
- B. Co-operate, work in teams
- C. Manage and resolve conflicts

The key competencies in this category are required for individuals to learn, live and work with others. They address many of the features associated with terms such as “social competencies”, “social skills”, “intercultural competencies” or “soft skills”.

COMPETENCY 2-A

The ability to relate well to others

This first key competency allows individuals to initiate, maintain and manage personal relationships with, for example, personal acquaintances, colleagues and customers. Relating well is not only a requirement for social cohesion but, increasingly, for economic success as changing firms and economies are placing increased emphasis on emotional intelligence.

This competency assumes that individuals are able to respect and appreciate the values, beliefs, cultures and histories of others in order to create an environment where they feel welcome, are included and thrive.

Co-operating well with others requires:

- Empathy – taking the role of the other person and imagining the situation from his or her perspective. This leads to self-reflection, when, upon considering a wide range of opinions and beliefs, individuals recognize that what they take for granted in a situation is not necessarily shared by others.
- Effective management of emotions – being self-aware and able to interpret effectively one's own underlying emotional and motivational states and those of others.

COMPETENCY 2-B**The ability to cooperate**

Many demands and goals cannot be met by one individual alone but instead require those who share the same interests to join forces in groups such as work teams, civic movements, management groups, political parties or trade unions.

Co-operation requires each individual to have certain qualities. Each needs to be able to balance commitment to the group and its goals with his or her own priorities and must be able to share leadership and to support others. Specific components of this competency include:

- The ability to present ideas and listen to those of others;
- An understanding of the dynamics of debate and following an agenda;
- The ability to construct tactical or sustainable alliances;
- The ability to negotiate; and
- The capacity to make decisions that allow for different shades of opinion.

COMPETENCY 2-C**The ability to manage and resolve conflicts**

Conflict occurs in all aspects of life, whether in the home, workplace or the larger community and society. Conflict is part of social reality, an inherent part of human relationships. It arises when two or more individuals or groups oppose one another because of divergent needs, interests, goals or values.

The key to approaching conflict in a constructive manner is to recognise that it is a process to be managed rather than seeking to negate it. This requires consideration of the interests and needs of others and solutions in which both sides gain.

For individuals to take an active part in conflict management and resolution, they need to be able to:

- Analyse the issues and interests at stake (*e.g.* power, recognition of merit, division of work, equity), the origins of the conflict and the reasoning of all sides, recognising that there are different possible positions;
- Identify areas of agreement and disagreement;
- Reframe the problem; and
- Prioritise needs and goals, deciding what they are willing to give up and under what circumstances.

14 The Definition and Selection of Key Competencies

Competency Category 3: Acting Autonomously

Acting autonomously does not mean functioning in social isolation. On the contrary, it requires an awareness of one's environment, of social dynamics and of the roles one plays and wants to play. It requires individuals to be empowered to manage their lives in meaningful and responsible ways by exercising control over their living and working conditions.

Individuals must act autonomously in order to participate effectively in the development of society and to function well in different spheres of life including the workplace, family life and social life. This is because they need to develop independently an identity and to make choices, rather than just follow the crowd. In doing so, they need to reflect on their values and on their actions.

Acting autonomously is particularly important in the modern world where each person's position is not as well-defined as was the case traditionally. Individuals need to create a personal identity in order to give their lives meaning, to define how they fit in. One illustration of this is with respect to work, where there are fewer stable, lifelong occupations working for a single employer.

In general, autonomy requires an orientation towards the future and an awareness of one's environment, of social dynamics and of the roles one plays and wants to play. It assumes the possession of a sound self-concept and the ability to translate needs and wants into acts of will: decision, choice and action.

COMPETENCY 3-A

The ability to act within the big picture

This key competency requires individuals to understand and consider the wider context of their actions and decisions. That is, it requires one to take account of how they relate, for example, to society's norms, to social and economic institutions and to what has happened in the past. One needs to recognise how one's own actions and decisions fit into this wider picture.

This competency requires individuals, for instance, to:

- Understand patterns;
- Have an idea of the system in which they exist (i.e. understand its structures, culture, practices, and formal and informal rules and expectations and the roles they play within

Why

- The need to realise one's identity and set goals, in complex world
- The need to exercise rights and take responsibility
- The need to understand one's environment and its functioning

What competencies

- A. Act within the big picture
- B. Form and conduct life plans and personal projects
- C. Defend and assert rights, interests, limits and needs

it, including understanding laws and regulations, but also unwritten social norms, moral codes, manners and protocol. It complements an understanding of rights with knowledge of the constraints on actions;

- Identify the direct and indirect consequences of their actions; and
- Choose between different courses of action by reflecting on their potential consequences in relation to individual and shared norms and goals.

COMPETENCY 3-B

The ability to form and conduct life plans and personal projects

This competency applies the concept of project management to individuals. It requires individuals to interpret life as an organised narrative and to give it meaning and purpose in a changing environment, where life is often fragmented.

This competency assumes an orientation toward the future, implying both optimism and potential, but also a firm grounding within the realm of the feasible. Individuals must be able, for instance, to:

- Define a project and set a goal;
- Identify and evaluate both the resources to which they have access and the resources they needs (*e.g.* time and money);
- Prioritise and refine goals;
- Balance the resources needed to meet multiple goals;
- Learn from past actions, projecting future outcomes; and
- Monitor progress, making necessary adjustments as a project unfolds.

COMPETENCY 3-C

The ability to assert rights, interests, limits and needs

This competency is important for contexts ranging from highly structured legal affairs to everyday instances of assertiveness of individuals' own interests. Although many such rights and needs are established and protected in laws or contracts, it is ultimately up to individuals to identify and evaluate their rights, needs and interests (as well as those of others) and to assert and defend them actively.

On the one hand, this competency relates to self-oriented rights and needs; on the other hand, it also relates to the rights and needs of the individual as a member of the collective (*e.g.* actively participating in democratic institutions and in local and national political processes). The competency implies the ability, for instance, to:

- Understand one's own interests (*e.g.* in an election);
- Know written rules and principles on which to base a case;
- Construct arguments in order to have needs and rights recognised; and
- Suggest arrangements or alternative solutions.

USING A COMPETENCY FRAMEWORK TO SHAPE ASSESSMENT AND TO INFORM LIFELONG LEARNING

International surveys and the assessment of key competencies

In recent years, new international surveys have for the first time been measuring directly the degree to which young people and adults have the knowledge and skills that they need in order to face life's challenges. In particular, PISA and ALL allow the outcomes of learning to be compared across national cultures.

Even though assessment continues to be carried out primarily through pencil and paper tests and focuses to a large extent on the ability to interact with language, symbols and text (competency 1-A above), considerable progress has already been made towards measuring whether young people and adults possess necessary competencies. For example, as shown in PISA's definitions of reading, mathematical and scientific literacies, PISA aims to identify the degree to which individuals have the reflective approach to knowledge and learning that underlies the competency framework.

PISA definitions of:

Reading literacy

The capacity to understand, use and reflect on written texts, in order to achieve one's goals, develop one's knowledge and potential, and participate in society.

Mathematical literacy

The capacity to identify and understand the role that mathematics plays in the world, make well-founded judgments, and use and engage with mathematics in ways that meet the needs of one's life as a constructive, concerned and reflective citizen.

Scientific literacy

The capacity to use scientific knowledge, identify scientific questions and draw evidence-based conclusions, in order to understand and help make decisions about the natural world and the changes made to it through human activity.

While it is not easy to assess fully the extent to which students are motivated to use knowledge reflectively, a starting point is to assess whether they are capable of reflecting on the deeper meaning and construction of written texts. Thus, the PISA assessment of reading reports not only on whether students can locate and interpret information but also on whether they can reflect on and evaluate what they have read. PISA places student performances in reading at one of six proficiency levels: a student with only the ability to make a simple connection between information in a text and common, everyday knowledge is classified at Level 1 on this scale, while a student who can critically evaluate hypotheses and deal with concepts that are contrary to expectations can expect to reach the highest level, Level 5.

A further step in assessment is to move beyond identifying cognitive abilities and to measure attitudes and dispositions. PISA has initially done this primarily by asking students about their attitudes to learning and their motivations in a separate questionnaire. This gives information on, for example, the degree to which students exercise autonomy in learning by controlling the learning process – for example, checking what they have learned against their goals.

The 2006 PISA science assessment explores the relevance and importance that students attach to scientific issues in questions posed alongside those that test their cognitive abilities. Moreover, the ALL survey has experimented with assessing individuals' ability to co-operate with others, working in teams, although so far it has been difficult to translate this into a workable assessment within an international survey.

The value of the DeSeCo Project's overall framework as presented here is that it can provide a reference point for the further development needed to obtain more complete measures of key competencies in all three categories (using tools interactively, interacting in heterogeneous groups, acting autonomously). Possible future avenues for such development include:

- The construction of profiles of competencies, to reflect the fact that each competency is not used in isolation and that a constellation of competencies is required in any one context. One way in which such profiles might be produced is by looking at a portfolio of outcomes for each student rather than at individual competencies in isolation;
- Greater use of information and communication technology in testing to produce more interactive testing instruments; and
- Exploration of the contribution of key competencies to social and economic well-being.

Key competencies and lifelong learning

The above framework applies equally to the competencies that need to be nurtured at school and those that can be developed throughout the course of life. It therefore also provides a single frame of reference for school-based assessments and assessments of adult competencies. Central to the concept of lifelong learning is the assertion that not all of life-relevant competencies can be provided by initial education, because:

- Competencies develop and change throughout the lifespan, with the possibility of acquiring or losing competence as one grows older;
- The demands on individuals can be expected to change throughout their adult lives as a result of transformations in technology and in social and economic structures; and
- Developmental psychology shows that competence development does not end at adolescence but continues through the adult years. In particular, the ability to think and act reflectively, central to the framework, grows with maturity.

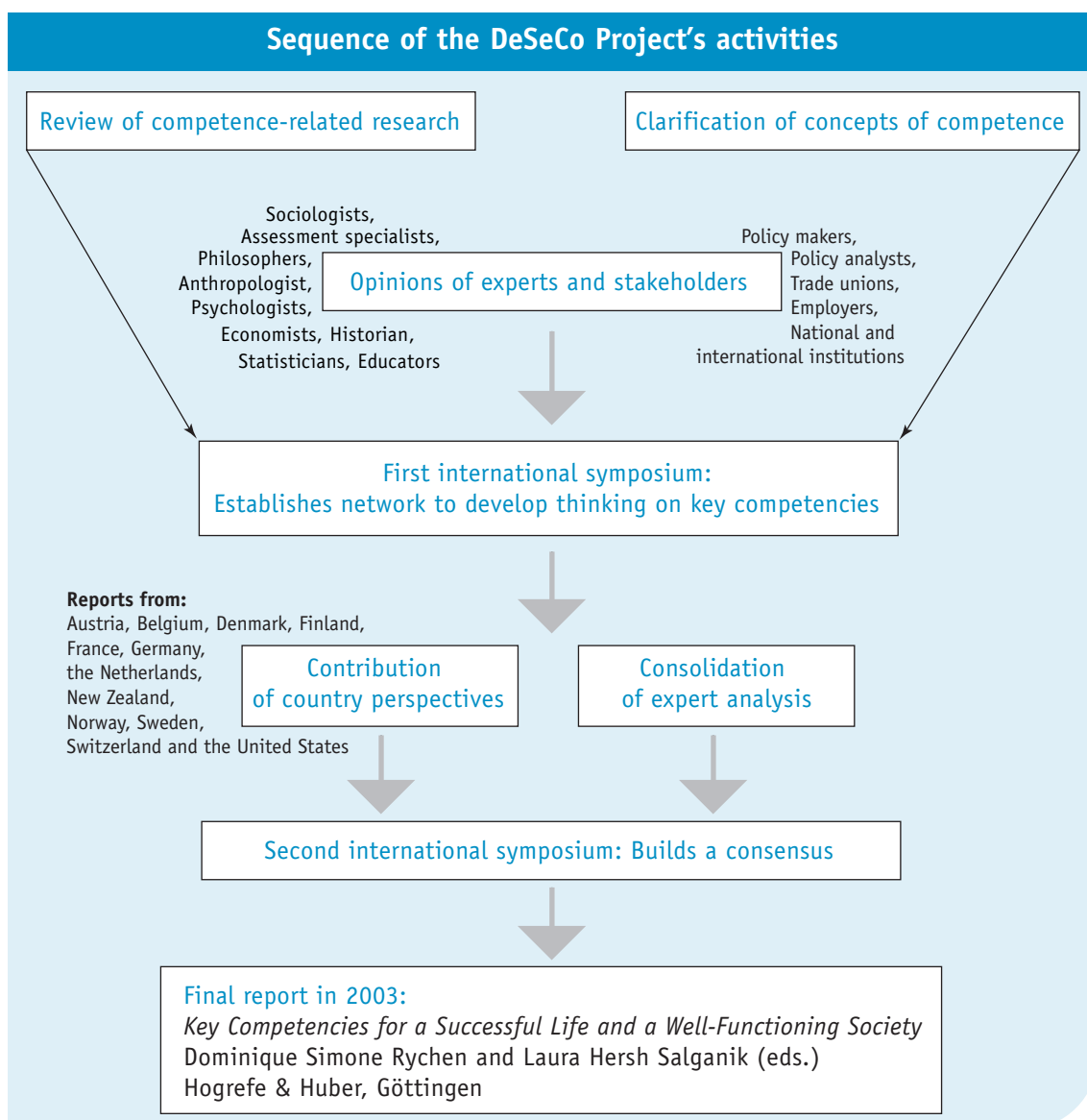
This understanding has important implications for both education and assessment. An evolutionary model of human development provides a theoretical foundation for the purpose of adult education. Furthermore, it offers a compelling rationale for assessing the competencies of individuals throughout life against a common set of criteria, and thus to design a coherent overall assessment strategy that spans young people and adults.

HOW THIS FRAMEWORK WAS DEVELOPED

A collaborative, multidisciplinary effort among experts and countries

The OECD's DeSeCo Project was designed to bring a wide range of expert and stakeholder opinion together, to produce a coherent and widely shared analysis of which key competencies are necessary for the modern world. It complements and is linked to two large international assessments of these competencies, PISA and ALL.

As illustrated in the diagram, this process started by bringing together existing research and expert opinion, fed in different national perspectives and used international symposia to consolidate an agreed framework. These phases took place between the inception of the project in late 1997 and the publication of its final report in 2003.



Four major activities were at the heart of the project:

- An analysis of existing studies of competencies considered how concepts had been used and defined. It found a considerable degree of inconsistency, pointing to the need for an overarching framework.
- A clarification of the concept of competence aimed to build a common understanding of key concepts.
- The initial selection of a set of key competencies by experts, basing their choices on research. This involved scholars, experts from many different disciplines, who worked together to find common ground that could contribute to defining key competencies with policy relevance.
- Consultation of countries within the OECD to review how each had defined and selected competencies themselves. This allowed the theoretical perspectives of experts to be related to the actual articulation of national education needs and priorities.

A central question underlying this process was whether it is possible to identify a set of competencies that can be considered as key across countries that differ in culture and perspective, or even across cultures that coexist within individual countries.

On the one hand, it was necessary to acknowledge how even common values can be interpreted differently in different cultures. On the other hand, those involved in the DeSeCo Project pointed out that certain countries have been able to identify common values even while acknowledging their differences. The project was able to identify an agreed set of fundamental ideals with which a framework of key competencies needs to be compatible. This reflects a commonality of aspiration while accepting a diversity of application.

Although this exercise was undertaken in the context of OECD countries, similar challenges may apply to other countries and close co-operation was therefore sought with UNESCO in defining the framework.

Visit the DeSeCo Project on the Web

www.oecd.org/edu/statistics/deseco

www.deseco.admin.ch

Key DeSeCo publications

Key competencies for a successful life and a well-functioning society (2003)

D.S. Rychen and L.H. Salganik (eds.)

Contributions to the second DeSeCo symposium (2003)

D.S. Rychen, L.H. Salganik, and M.E. McLaughlin (eds.)

Defining and selecting key competencies (2001)

D.S. Rychen and L.H. Salganik (eds.)

Projects on competencies in the OECD context: Analysis of theoretical and conceptual foundations (1999)

L.H. Salganik, D.S. Rychen, U. Moser and J. Konstant

THE DEFINITION AND SELECTION OF KEY COMPETENCIES

Executive Summary

Today's societies place challenging demands on individuals, who are confronted with complexity in many parts of their lives. What do these demands imply for key competencies that individuals need to acquire? Defining these competencies can improve assessments, such as the OECD's Programme for International Student Assessment (PISA), that look at how well prepared young people and adults are for life's challenges, and can help to identify overarching goals for education systems and lifelong learning.

The OECD has collaborated with a wide range of scholars, experts and institutions to identify a small set of key competencies that help individuals and whole societies to meet their goals. The Definition and Selection of Competencies (DeSeCo) Project has now produced a three-part framework of such competencies. Individuals must be able to:

Use tools interactively – deploying both physical tools such as information technology and socio-cultural ones such as language, to interact with their environment;

Interact in heterogeneous groups – engaging with others from a range of backgrounds in an increasingly interdependent world; and

Act autonomously – taking responsibility for managing their own lives in relation to a broader social context.

This summary sets out the specific competencies that are required under each of these headings, and explains how these are relevant to modern life, as well as how the framework can guide the longer-term extension of assessments into new competency domains.



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