The Question of Definition

In exploring the global perspective there is an issue related to the terminology used as although many of the skill sets are similar the term used to describe them this across the world.

In conducting any worthwhile research one needs to use each of the terms used below.

• work skills
• lifelong learning skills
• life skills
• soft skills
• essential skills
• cross-sectional skills
• key competences

Australia

• key competencies
• soft skills
• employability skills
• work smarts

United States

• 21st century skills
• necessary skills
• employability skills

Competencies in the Vocational Education and the Curriculum

Research into the implementation of vocational education programs discovers that globally a number of different approaches are been taken to integrate transversal skills.

• The ‘United Nations’ Approach - focus on “life skills” and “living together in society”

• The “Interdisciplinarity” / cross- cutting capacities approach - the development of generic competencies (e.g. learning to learn)

• The Standards Approach - focuses on the introduction and assessment of minimum ‘know-how’ and competencies at each level - with employability as an end-point (e.g Australian Qualifications Framework)

• Interaction of Achievements and Terminal Competencies Approach - also known as ‘basic competencies approach” or “integration pedagogy” - provides cognitive, gestural and emotional capability, enabling him or her to act in complex situations as a responsible citizen.
The problems with implementation

The main issue globally seems to be the need to move from a teaching and training culture to a learning culture:

- An immersive environment that stimulates true learning
- Failure is encouraged as part of a growth and innovation cycle and is essential to learning
- Hierarchical structures and silos replaced by ‘fluid’ processes and organic structures
- Individual differences are nurtured and ‘validated; in the form of micro-credentialing and skill mapping to work-related competences

New Pedagogy

- Authentic Learning Contexts
- Focus is on the learning NOT the courses or curriculum
- A paradigm shift in the thinking about what constitutes teaching, learning and the role of a ‘teacher’
- Focus is on the ‘whole’ student
- Curriculum delivery is augmented by innovative technologies
  - Using mentors, role models and experts to enhance learning programs
- Students are in control of their learning pathways
- ALL learning is captured, assessed and articulated in a range of formats and contexts
- Lifelong Learning
- Development of self-efficacy in students
- Acknowledgement that learning happens 24/7 not just in the classroom
- ALL learning can be captured, validated and translated into competencies through our system
- The learners are in control of their learning pathways

Assessing competencies

Assessment of know-how

Since the introduction of teaching by objectives in education, the types of know-how are assessed at school in accordance with systematic procedures, whether through questionnaires, exercises or practice.

Assessing generic competencies

The assessment of generic competencies in teaching is today the subject of very few instrumented devices. They are still often assessed through a subjective appreciation given by the teacher. Assessing situational competencies

Apart from technical and professional training, where these assessments are common practice, there is not, in the world of primary or secondary general education, any deep-rooted tradition of assessing situational competencies. In recent years, however, particularly in a number of French-speaking countries, they are beginning to be assessed by means of complex situations presented to the learner — situations of producing a complex written submission, solving a problem, etc. Furthermore, such complex situations are increasingly making their appearance on international standardised tests.

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EuroPass

Decision No 2241/2004/EC of the European Parliament and of the Council established a framework to address the challenges relating to job seeking, engaging in learning and career management. The aim of that Decision was to achieve better transparency of qualifications and competences through a portfolio of documents known as ‘Europass’, which individuals can use on a voluntary basis. That Decision also established national bodies, known as National Europass Centres, in order to implement the Europass framework.

DECISION (EU) 2018/646 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 April 2018 agreed on a common framework for the provision of better services for skills and qualifications (Europass) and repealed the Decision No 2241/2004/EC.

In summary it says:

‘Individuals, when looking for a job, or making decisions on learning, studying or working, need access to information and guidance on what opportunities are available, on how to assess their skills and on ways to present information about their skills and qualifications.’

It goes on:

‘Clear and widely disseminated information, a shared understanding and improved transparency of skills and qualifications are important in order to address those challenges.’

Then it says that all governments should have measurements for formal and informal learning of this type by 2018.

The intention of this legislation is to ensure that all EU countries focus upon Transversal Skills as an essential component in all education and training in particular all vocational training and apprenticeships.

Global Implementation

When researching how different countries are implementing transversal skills it is clear that the incorporation of these skills in TVET is occurring at a varied pace and in varied ways. Regionally and within countries, there is no clear-cut agreement on the definition or understanding of the scope of transversal skills for TVET. Indeed, the concept is more elaborate and more explored in some countries over others. The changes in the focus of the EU repealing the original act No 2241/2004/EC and replacing it with a new act more favourable to the development of Transversal Skills in 2018 means that as of the current date of writing this report EU countries are still at the stage of implementing the original directive.

While some countries have developed, and are now implementing and refining the concept of transversal skills as a result of other research, others are only beginning to examine and develop this new skill dimension at policy levels and pilot it in educational practices. This regional diversity should not be considered a weakness or obstacle but rather a strength and opportunity in devising and promoting transversal skills for different needs and aspirations and a direct result of the long implementation phases required in changing the educational entitlements for learners.

A first analysis of country experiences, which form the basis for this study, do however reveal some competencies that fall under the transversal skills umbrella and are common to most, if not all, countries in the region.

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European Implementation

In Europe most nations are building transversal skills into all vocational education pathways including apprenticeships. As stated above most countries are at a mid-development stage as it takes time to amend the curriculum guidelines and implement the changes and have not had time to fully consider the new EU directive. The reviews below are a guide to the current situations as reported by each country earlier this year.

Key Transversal Competences and Vocational Education and Training in Austria

Key competences (referred to as interdisciplinary competences in Austria) are considered vital to maintain employability in a changing world of work but also indispensable to actively take part in social life. Therefore after the Council and the European Parliament adopted a European framework with key competences for lifelong learning Austria built these into all vocational qualifications. This framework defines eight key competences for citizens’ personal development, social integration, active citizenship and employability in a knowledge-based society. Education and training systems of the EU Member States should aim to promote the acquisition of key competences of the entire population. The Lifelong learning strategy (LLL strategy), which was adopted by the Austrian federal government in July 2011, directly refers to the key competences mentioned in the European framework. In all of the 10 objectives to be reached by 2020 as defined by the LLL strategy, the goal is to promote the acquisition, deepen and further develop the eight key competences so that learners can acquire them in line with their individual needs. The LLL strategy takes account of all learning areas: it addresses early childhood education, general education, vocational education and training (VET), tertiary programmes, adult education and company-based continuing vocational education and training (CVET).

The general objectives of school-based VET and apprenticeships, thus, is to enable learners/graduates to ‘acquire learning autonomously’, ‘make decisions autonomously’ and develop ‘social understanding’. The goal is for learners/graduates to become ‘healthy’ citizens who are ‘open to the political and ideological views of others’ and ‘able to participate in the economic and cultural life of Austria, Europe and the world’. Even though the SchOG does not explicitly mention transversal competences, it clearly shows parallels to those interdisciplinary competences defined by the European framework. From the outset, the law has explicitly outlined: (a) the aim to widen learners’ general education in the different types of VET (i.e. implicitly includes key competences); (b) the (type of) mandatory subject areas and options curricula have to include; curricula also outline general goals and underlying principles which explicitly or implicitly include key competences.

Key Competences in Vocational Education and Training Belgium

Following on from the EU directive, in Belgium, key competences were made central to compulsory education from age 6 to 18, including initial VET (ISCED levels 1-3). They are assessed at the end of elementary school and at the end of the second year of secondary education.

After two years of secondary school (ISCED 2) students may continue in general education or VET (school-based or apprenticeship) leading to a vocational qualification which incorporates transversal skills.
Key Transversal Competences and Vocational Education and Training in Bulgaria

National strategic documents and the renewed legal framework over the past five years show that key competences play an important role in education in Bulgaria, including vocational education and training (VET). With the adoption of the new law for school education in September 2015 the policy is geared towards more purposeful integration of key competences and transversal skills in the curricula for general and vocational education.

Strategy for the development of VET 2015-20, adopted in 2014 The strategy focuses on the acquisition of key competences in secondary VET for personal and professional development. It foresees changing the content of vocational training by updating curriculum based on the national qualification standards.

Key Transversal Competences and Vocational Education and Training in Croatia

Educational areas and interdisciplinary themes (based on occupational standards and credit-based VET qualifications) were introduced in VET by developing 30 modularised curricula in 2012-14. Twenty three curricula have been piloted in schools and four have been fully implemented since 2013/14. Key competences and transversal skills are integral part of these curricula both in general education and vocational modules of VET. The 2016 draft national VET curriculum defines purpose, principles, goals, values, contents and forms of teaching and learning and elements of curricula for attainment of VET qualifications.

Key Transversal Competences and Vocational Education and Training in the Czech Republic

In the Czech Republic, upper secondary initial vocational education and training (IVET) is mainly school-based and provided by secondary vocational schools (SOU) and secondary technical schools (SOS). Learners enter IVET after completing nine years in compulsory general education, usually at age of 15-16.

The lifelong learning strategy and its implementation plan 2009-15 (2009) emphasise the importance of key competences and transversal skills in initial and continuing education. They aim to provide material and technical assistance to schools and teachers to help them foster learners' functional literacy and other key competences including the ability to learn throughout life.

The policy priorities set out in the Education strategy 2020 (2014) include the aim for upper secondary VET students to acquire skills and knowledge (including basic skills) at a level allowing them to pursue a career and continue learning.

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Key Transversal Competences and Vocational Education and Training in Denmark

The Danish VET is organised in a dual system, where school-based learning in blocks of typically 5-10 weeks, including theoretical and vocational subjects, and practical learning at the workplace interact.

The focus on key competences and how they are developed is on the school based learning. The school-based part is designed to deliver a range of broad competences aiming to support and provide perspectives to the practical learning in companies.

Key Transversal Competences and Vocational Education and Training in Estonia

50% key competences are taught in special modules common for all students and 50% are integrated into basic modules of vocational studies that vary by qualification.

Key Transversal Competences and Vocational Education and Training in Finland

Relevant and up-to-date vocational competences (transversal skills) are considered vital for Finland’s economic competitiveness and prosperity. The labour market demands diverse vocational skills, strong competences, and the continued renewal of these skills. The mission of vocational education and training (VET) is to foster the skills required in working life, promote (self-)employment and support lifelong learning.

Initial VET provides students with the necessary vocational skills for entry-level jobs. At upper secondary level, VET also supports learners growing as society members and provides the knowledge and skills for further studies. Upper secondary VET qualifications prepare for work. Graduates' acquire a range of (basic) vocational skills and tools for entrepreneurship; all supporting their personal and professional development, and preparing for further studies.

Adjusting to changes in working life requires the employee to possess good lifelong learning skills. A key objective of upper secondary VET is to support completing of young people studies and to provide them with the tools for being good citizens and for lifelong learning.

Key Transversal Competences and Vocational Education and Training in France

Key competences are defined as a combination of knowledge, skills and attitudes that are appropriate to a particular context. They are those that are needed by any individual for personal fulfilment and development, active citizenship, social integration and employment. Regions (responsible for managing apprenticeships) also facilitate the acquisition of key competences in VET through measures for acquiring the ‘common base of knowledge and competences

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Key Transversal Competences and Vocational Education and Training in Germany

In recent years, the concept of competence has become a central idea in education and training. The quality of education and training processes is no longer defined exclusively by standards focussed on inputs, such as teaching staff qualifications or facilities offered. Instead, the focus has increasingly been on the actual learning outcomes achieved by pupils, apprentices and students. Companies consider the relevance of learning to work tasks and the competence of trainers important for the development of competences.

The term ‘competence’ is generally used to describe the accumulated knowledge, capabilities and skills of individuals which enable them to master specific tasks. Competences are developed through learning and development processes. They are acquired by learning in work and everyday life environment.

Self-competence (replaces human competence) describes the willingness and capability to clarify, think through and assess the development opportunities, demands and limitations in family, professional and public life, to develop one’s own talents and to form and continually develop plans for one’s own life. It includes traits such as independence, ability to accept criticism, self-confidence, reliability, sense of responsibility and duty. This also includes, in particular, the development of reasoned value judgements and self-determined commitment to values.

Key Transversal Competences and Vocational Education and Training in Hungary

In 2015, the government adopted a new policy concept paper that refers to key competences in three instances. However, these references to intentions and expectations are neither specific nor do they relate to actual policy measures and decisions.

First, key competences are mentioned in the objective of assessment of key competences at the end of vocational school programme to boost employment. However, the 2015 legislative amendments took no account of this objective.

Key Transversal Competences and Vocational Education and Training in Iceland

Originally it had been decided to test the acquisition of key competences like any other subject. However, many teachers pointed out that those assessments would be highly subjective (for example, to assess whether a student has acquired a lifestyle that is sustainable) and therefore the assessment idea was dropped. These subjects have been embedded in other tuition rather than being taught as individual subjects.

Key Transversal Competences and Vocational Education and Training in Italy

in 2015, within the jobs act framework, Decree No 81/2015 innovating the apprenticeship system, identified new categories of key competences (for a specific type of apprenticeship).

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Key Transversal Competences and Vocational Education and Training in Latvia

Education development strategy 2014-20 promotes the acquisition of key competences by developing competences-based general education content and including five above mentioned modules in VET programmes. The strategy also comprises measures for the development of VET teachers’ competences including skills to help students acquiring key competences.

Key Transversal Competences and Vocational Education and Training in Lithuania

The importance of key competences is underlined in major educational strategic documents in Lithuania. The national education strategy stipulates the following mission for education – to provide everyone with foundation for independent and active life, to help to improve skills and to become a full participant of democratic society who actively participates in social, economic and cultural life.

Key Transversal Competences and Vocational Education and Training in Luxembourg

Many actions/initiatives (including 74 curricular working groups) ensure that key competences are adequately integrated in the curricula at all levels. The working groups are represented by teachers and employers, and elaborate and adapt VET programmes to the needs of the labour market. Thus, key competences are defined in VET using a bottom-up approach.

Key Transversal Competences and Vocational Education and Training in Malta

The Maltese qualifications framework (MQF) includes key competences as an integral part of any national vocational qualification between level 1 and 5, both in school-based vocational education and training (VET) and apprenticeships.

Key Transversal Competences and Vocational Education and Training in the Netherlands

The search for the essentials of non-technical skills is symbolised by the changes in their designation, and may be also by their ‘negative’ definition; it seems to be easier to describe what they are not (‘non-technical’) then to clarify where they really stand for. This is also true for the definition provided for in the guidelines for this article: ‘The distinctive feature of key competences is that they are not directly relevant to a certain job but have the ability to be used flexibly in different situations, for further learning and the labour market. However, some of the key competences overlap with those directly linked to a specific sector/occupation’.

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Key Transversal Competences and Vocational Education and Training in Norway

Norwegian Directorate for Education and Training to develop and revise national subject curricula. For relating skills development to subject content in a given subject as a first step in formulating competence aims reflecting these skills as well as subject content. Each subject curriculum group will therefore make decisions on which grids, cells and levels are relevant for their subject as well as for different age groups of students, and formulate competence aims based on these decisions.

Key Transversal Competences and Vocational Education and Training in Poland

The lifelong learning strategy states that vocational education and training (VET) should equip young students with the skills most sought in the labour market, such as e-skills to combat high unemployment of young people.

The human capital development strategy 2020 (2013) promotes key competences and creativity in education, including VET. It also promotes lifelong learning and readiness to meet ecological, economic and social challenges that have an impact on the labour market needs.

Key Transversal Competences and Vocational Education and Training in Portugal

In Portugal, key competences (competências-chave) are known as basic competences (competências básicas or de base or essenciais) or simply competences.

Key Transversal Competences and Vocational Education and Training in Romania

According to the National Education Law, the national assessment is oriented towards transdisciplinary testing of some competences. The renewal of VET curricula (with the ESF support) has focused on integrating the EU-key competences and other transversal competences. Training firms, as a method to promote entrepreneurship and other transversal skills (team work, problem solving, etc.) are compulsory for service training programmes in upper secondary technological schools.

Key Transversal Competences and Vocational Education and Training in Slovakia

The term ‘competence’ has emerged in pedagogical discourse in a specific context stressing transversal features. The influential 15-20-year national programme of training and education, It can be concluded that no sufficient attention has been paid so far to key competences in VET.
Key Transversal Competences and Vocational Education and Training in Slovenia

Competence-based programmes are prepared to enable learners developing cognitive, functional and personal/social dimensions. The problem here, however, is the unbalanced representation of individual dimensions (mostly personal/social) of competences in the catalogues of knowledge for subjects and in teaching itself (in the teacher’s preparations and in the way lessons are taught). Slivar states that the problem is, above all, in the absence or weak presence of the social dimension, and that still dominant presence of the cognitive dimension, which is also easier to measure from the point of view of implementation.

Key Transversal Competences and Vocational Education and Training in Spain

Key competences (competencias basicas or competencias clave) of the CNCP are personal initiative, responsibility, self-assessment, creativity and innovation (5), communication in foreign languages and scientific competences. Thus, the development of VET programmes, leading to a diploma or professional certificate, takes account of key competences as general principles and objectives.

Key Transversal Competences and Vocational Education and Training in Sweden

VET in Sweden has been traditionally school-based. There are 12 broad VET programmes, all of which include a minimum of 15 weeks (approximately 15%) of mandatory work-based learning. The 2011 reform introduced apprenticeships – a new path to VET diploma. Apprenticeship programmes comprise the same features (content, access to higher education, development of key competences and transversal skills) as in school-based VET, except that learners have at least 50% of training at a workplace.

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Countries Outside of Europe

Key Transversal Competences and Vocational Education and Training in Australia

In Australia, discussions on transversal skills have been taking place for a number of years across all educational sectors. The language used to describe transversal skills, however, appears to have evolved over time through policy shifts and research developments. Overall, it appears that the topic of transversal skills is located in a complex environment of sometimes competing policy initiatives. Currently, transversal skills in TVET are referred to as ‘employability skills’.

Key Transversal Competences and Vocational Education and Training in China

In China, there is no framework for transversal skills in TVET but instead, the Ministry of Education (MoE) issued the Reform Educational Systems and Promote Education for All plan which emphasises that vocational education should not only teach students essential knowledge but also foster their transversal skills to cope with societal changes. In 2010, MoE issued the Secondary Vocational Education Reform and Innovation Action Plan which establishes standards and detailed regulations for vocational reform. The Plan emphasises that vocational education should enhance students’ comprehensive competencies and lifelong development, and match work and professional standards.

Key Transversal Competences and Vocational Education and Training in Indonesia

In Indonesia, transversal skills are referred to as ‘life skills’ and focus on TVET at primary and secondary levels. The government regulation on education standards states that life skills education (Pendidikan Kecakapan Hidup) should take place in lower, as well as upper secondary education, including vocational education. According to the regulation, life skills education should include the teaching of personal, social, academic and vocational competencies.

Key Transversal Competences and Vocational Education and Training in Japan

In Japan, transversal skills have become a key concept that emphasises skills required in today’s work place and appear to have taken the central place in Japan in the process of formulating national policies, notably the latest National Science and Technology Basic Plan.

The Plan establishes four pillars as core areas of action. First, it intends to realise “sustainable growth and societal development for the future” where Science, Technology and Innovation (STI) will be strategically promoted aiming at reconstruction and revival from natural disasters. Second, it responds to “priority issues for Japan”. These include a safe and high-quality life, industry competitiveness, the resolution of global problems, promoting fundamental R&D, and common bases for science and technology.

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Key Transversal Competences and Vocational Education and Training in Malaysia

In Malaysia, the Education Act covers all forms of education, including TVET. The sub-section 35(2) states that “technical education covers the provision of (a) skills training; (b) talent training related to a specific job; (c) training for the upgrading of existing skills; and (d) other technical or vocational training that is approved by the Ministry of Education”. It does not, however, refer explicitly to transversal skills. Skills that could fall under this category are, however, one important element that must be embedded in the curricula of all programmes offered by higher learning institutions. Tertiary education institutions adopt and adapt the learning outcome domains of the Malaysia Qualifications Framework (MQF).

Key Transversal Competences and Vocational Education and Training in Korea

Transversal skills in the Republic of Korea are understood as (1) Vocational Basic Competencies (VBC) and (2) Career Development Competencies (CDC). VBC is contained in the Korean National Competency Standards (KNCS) and is composed of ten skills, which are further sub-divided into high, medium and low skill levels.

Key Transversal Competences and Vocational Education and Training in Viet Nam

In Viet Nam there is no clear definition or framework for transversal skills. Instead, the Law on Education defines the objectives of TVET as training potential workers to be equipped with knowledge and skills at different levels, as well as moral values, professional ethics, discipline, awareness, attitudes that support industrialised work and physical health. TVET should, therefore, provide workers with employability/self-employability skills or the ability to continue studying to gain further qualifications and, thereby, meet the needs of national socio-economic development, defence and security.