

## **The Role of Digital Proficiency as a 21<sup>st</sup> Century Competence**

### **Overview**

Increasingly, the 'digital' aspects of our lives are becoming embedded in all our activities and behaviours. They have an ever-increasing bearing on how we work, communicate with one another, interact with government, purchase goods and services, and consume and create media. As technology becomes progressively integrated into our daily lives, those without these skills will experience greater difficulty in participating in this range of essential activities.

These 'digital' factors interact with and relate to a large number of cross-cutting, widely applicable competences, for example - how we construct knowledge by analysing information; how we become social actors and express our opinions; how we develop and progress as individuals. Developing digital proficiency is just one piece of this broader jigsaw of competence development - but it is an increasingly important one.

### **The Changes in How we View Competence Development**

In the past, considerable emphasis was placed on the organisation of skills and competences – and, by extension, education – to suit the highly-ordered model of the industrial era, in which skills development often targeted one specific job function, or role.

The more connected nature of the 21<sup>st</sup> century has, to a large extent, resulted from the improved levels of communication and global understanding afforded by the ongoing proliferation of technology and access to information, such as mobile telephony and the Internet. This more connected era, in which a much greater amount of information is available, and in which a greater demand for flexibility and diversity has therefore arisen, has led to a reappraisal of how we acquire skills and knowledge. It has challenged the more traditional concept of skills and competences being 'vertical', in the sense that they are to be applied to one set of activities, such as a specific job function, and has generated a more holistic view of both why we learn, and how we learn. The demands of more knowledge-intensive societies and economies have created an environment in which the potential for people to develop their competences in wider knowledge areas has increased.

Within the work environment, employees are now required to perform a wider range of functions that would not have been traditionally associated with their role, for example far greater involvement in the entire process of document or report creation than would have been expected in the past. Technology has further accelerated this trend: the quite recent focus on efficiency in organisations has challenged the traditional model of certain cohorts of workers, such as secretarial or administrative staff, being 'responsible' for the use of technology in an organisation. Nowadays, nearly all workers are expected to be able to operate the technology related to their role.

### **An Increased Emphasis on Lifelong Learning**

Another recent development is the acknowledgement that organisations need to adapt to change, particularly in relation to the increased globalisation of markets, and the need for greater flexibility demanded by greater levels of competition. In addition to these trends, there has been a growing acknowledgement by organisations that their workers are now more focused on ideas such as work-life balance, job satisfaction, and lifelong learning. Not only do these elements positively impact on the overall satisfaction of the individual, the organisation

benefits due to improved employee retention, and the development of a wider range of expertise.

On the macro level, the economic and labour-related realities, such as the rapid rate of change in individual and international economies, and the continuous evolutions in the technological landscape now demand continuous education and training (CET), and lifelong learning. Individuals are not only expected to keep their specific job-related skills up-to-date, but must now also possess the generic competences that will enable them to adapt to change<sup>1</sup>. Additionally, the increased creativity and innovation offered by a more diversely-skilled workforce have a positive impact on the productivity and agility of an organisation in the modern knowledge-intensive economy. In keeping with the concept of lifelong learning, CET has a major contribution to make in driving inclusive growth: not only in providing the pool of skills that the economy needs locally, but also in fostering entrepreneurship, innovation, and social cohesion<sup>2</sup>.

### **The Role of Digital Competence in the Development of Other Competences**

The ability to competently use Information and Communication Technology (ICT), or digital competence, has, in many parts of the world, been identified as an essential 21<sup>st</sup> century competence in its own right<sup>3</sup>. It, however, possesses the added importance of facilitating and enabling individuals to significantly develop other key competences through knowledge acquisition and lifelong learning. Digital competence underpins many essential life skills and assets in the information society. Mastering essential ICT skills, such as those developed by the ECDL / ICDL programme, is an important step for the acquisition of many competences, not solely ICT-related ones.

Many lifelong learning and personal development activities now rely on e-learning resources. Individuals, therefore, require a degree of digital proficiency to be able to unlock the potential benefits offered these resources. These resources possess the added benefit of being greatly accessible to a huge number of people worldwide, as they are often free, and they can be accessed in one's own time and location, without the need for a formalised 'classroom' environment.

### **How ECDL / ICDL is Reflecting Change in Competence Development**

The ECDL / ICDL programme<sup>4</sup>, which develops digital proficiency, provides the tools to master a range of computer applications and devices. While many skills relating to computer usage are persistent, such as the effective use of word processing applications, or spreadsheets, some are not. ECDL Foundation is, therefore, continually reshaping and restructuring its programmes to ensure that they best fulfil the needs of organisations and individuals in the development of appropriate competences.

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<sup>1</sup> [European Commission - Key Competences for Lifelong Learning: European Reference Framework \(2008\)](#)

<sup>2</sup> See "More Than Just Jobs: Workforce Development in a Skills-Based Economy" – OECD, Feb 2009

<sup>3</sup> For example, see: Singapore's Ministry of Education's communication – '21<sup>st</sup> Century Competencies and Desired Student Outcomes' (2010), and [European Commission - Key Competences for Lifelong Learning: European Reference Framework \(2008\)](#)

<sup>4</sup> To view the full range of skills and knowledge areas developed through the ECDL / ICDL programme, visit [www.ecdl.org](http://www.ecdl.org)

## **Conclusion**

- The use of technology is becoming increasingly embedded in a growing number of daily activities.
- The continued focus on lifelong learning has led to the identification of a variety of key 21<sup>st</sup> century competences that an individual should develop to ensure full participation in the knowledge economy.
- Digital Competence is a key competence in its own right, but it also enables the development of other 21<sup>st</sup> century competences that are not ICT-related
- Lifelong learning is not merely of benefit to the individual: its flexible nature is crucial to the creative and innovative needs of modern economies.
- The skills ICT skills certified through the ECDL / ICDL programme are key to the acquisition of other key competences, and for lifelong learning.