

ECDL: Supporting Students' Digital Skills

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ABSTRACT

ECDL is the world's leading computer skills certification. More than 15 million people have engaged with the ECDL programme, in over 100 countries. Our programme is made up of a wide range of modules, each of which constitutes a standard in a specific area of competence relating to the use of common technologies. Individuals can show their mastery of these competences by becoming certified via high-quality invigilated tests. Our modules have been mapped against a range of national and international frameworks, including Europe's DigComp, so that their relevance and focus can be demonstrated to candidates and policy makers. ECDL modules are particularly useful for young people who may be seen to be digital natives but may lack the skills that they need. Our modules do this by developing both commonly required digital literacy skills, such as working with document and numbers and thinking critically, and more specialised skills, such as working with images or databases. Our programmes are implemented in a range of third-level institutions around the world to support students in their educational experience and future working life.

OVERVIEW



ECDL (known as ICDL outside Europe) is offered through an active network of operators and partners globally. ECDL Foundation, a not-for-profit, builds this network and develops and maintains the ECDL programme.

Key figures:

- More than **20 years** of experience in certification
- More than **15 million candidates**
- More than **100 countries**
- More than **40 languages**
- More than **2.5 million tests annually**

Key programme characteristics:

- The ECDL programme is made up of a **wide range of modules** supporting those in schools, in university, or in work. Combinations of modules can be offered to, or selected by candidates, depending on their educational and professional requirements
- Each module is **designed with expert input**, drawn from the computer societies of Europe and beyond, in order to set a standard for the knowledge and skills related to the use of common or crucial technologies. The learning outcomes for our modules are in the public domain.
- Students demonstrate their mastery of an area by sitting **invigilated certification tests** that are run according to globally consistent testing procedures, allowing internationally-recognised portable certifications to be issued.

Our module offering:

- Expanding and evolving over 20 years.
- Persistent skills, such as working with text and numbers, supplemented by other skills e.g. information literacy, computing.
- Increasing alignment to reference points, such as national and international education/skills/competence frameworks: For example, the European Union's Digital Competence Framework (DigComp), which is increasingly being adopted as meta-framework for students' and citizens' digital competence.

ECDL AND DIGCOMP COMPETENCES

DigComp Area	ECDL Modules
Information and Data Literacy	Computer Essentials, Information Literacy
Communication and Collaboration	Online Essentials, Online Collaboration, ICT in Education
Digital Content Creation	Word Processing, Spreadsheets, Presentation, Using Databases, Advanced Word Processing, Advanced Spreadsheets, Web Editing, Image Editing, Project Planning, 3D CAD, Advanced Presentation, Advanced Database
Safety	IT Security
Problem Solving	Computing, ICT Literacy

Frameworks also help to highlight areas of policy priority.

- For example, ECDL Computing is a response to the need for students to develop skills and knowledge relating to computational thinking and coding.
- Problem solving is relevant to virtually all disciplines especially in higher education; understanding the principles of computing is essential to many disciplines as well.

THE DIGITAL NATIVE: PERCEPTION V REALITY

ECDL remains relevant because the need to actively develop digital skills remains relevant. Among young people, immersion in social media and digital technologies may be interpreted as equating to digital literacy. However, this does not mean that they can use technology effectively to support their education or future employability.

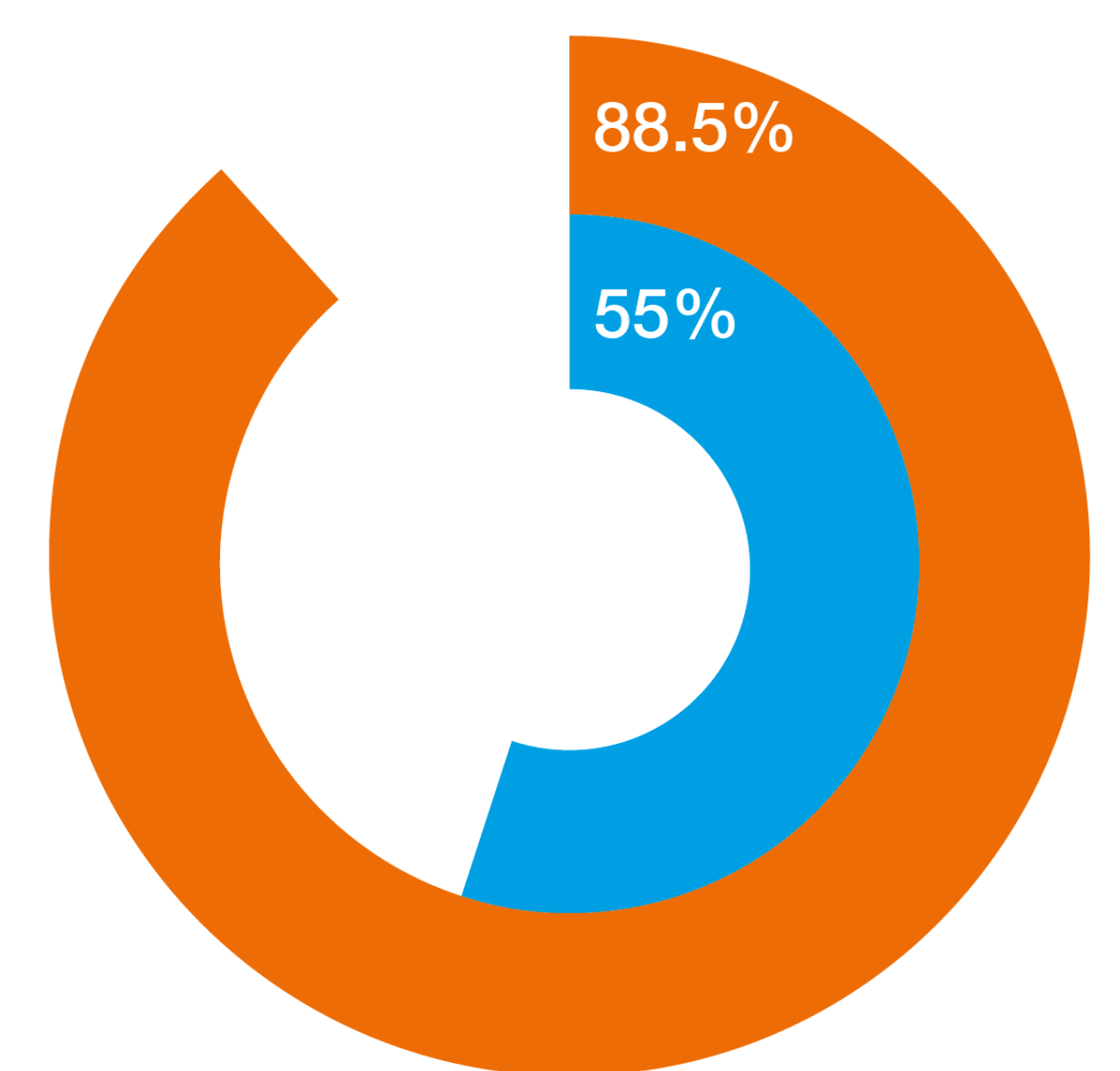
Measuring the challenge:

- A five-country study of self-evaluated digital skills among young people in university
- Skills evaluated related to common tools – using devices, online activity, documents, spreadsheets, and presentations.
- Self-evaluation was compared with actual performance on tasks

The outcome:

- self-assessment is a poor predictor of actual performance, and people tend to over-estimate their digital skills.
- digital skills gaps exist in all the surveyed countries in Europe and outside Europe.
- digital skills gaps are persistent among young people as well as their older counterparts
- people who have previously acquired digital skills certification perform better than those without such a certification.

For example, in Singapore, 88.5% of respondents identified themselves as being adequate to excellent regarding the set of digital skills under consideration. Their average score in terms of actual performance was only 55%.



Singapore
General Digital Skills
Actual Skills
Self Assessed Skills

Source: ICDL Asia

Also, looking across the five countries, the weakest skills were in areas that might directly impact on productivity in education or the workplace, such as working with numbers or creating presentations. Young people appear to be better at consuming content than producing it.

ECDL IN HIGHER EDUCATION

ECDL is embedded in the skills development activities for numerous third-level educational institutions globally. Our modules complement existing courses, providing relevant employability skills for students.

European examples:

- A number of universities in Italy give academic credits for completing ECDL certification, and some require ECDL as a pre-requisite for certain majors. Bocconi University in Milan requires candidates on most of their degree programmes to attain ECDL certification.
- Certifying your digital skills can help you get into university in the UK. ECDL Advanced certification is worth 24 UCAS Points, which can count towards entry requirements for many university courses across the country.
- In vocational education, ECDL is endorsed by BIBB, the German Federal Institute for Vocational Education and Training, and a centre of excellence for vocational research.

Case Study:

- Coventry University's Add+Vantage vocational education and training (VET) scheme provides the skills, including ICT skills, that are essential alongside the academic knowledge that students have gained. ECDL is a core component of this.

REFERENCES

- ECDL Programme syllabus information, <http://ecdll.org/about-ecdll>
- The Digital Competence Framework 2.0, <https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework>
- Perception & Reality: Measuring Digital Skills Gaps in Europe, India, and Singapore, http://ecdll.org/media/perception_reality_report_-_ecdll_foundation_-_2018_1.pdf
- Coventry University ADD+VANTAGE: <http://ecdll.org/education/case-studies?i=2569>

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