ICDL DIGITAL LITERACY
FORUM 2019

NAPOLI 22 OTTOBRE 2019
ICDL- Global Programme

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CONGRESSO AICA 2019
E ICDL DIGITAL LITERACY FORUM
Naples, October 22, 2019
Changing nature of work
Digital technology in all workplaces

1997

2019

Cloud | Mobile | Social
90% of jobs will require some level of digital skills

European Commission
In 2017, 10% of the EU labour force had no digital skills, mostly because they did not use the internet. 35% did not have at least basic digital skills, which are now required in most jobs.
Survey methodology

Digital Skills Indicator – derived from Eurostat survey on ICT usage by Individuals

Methodological note - 2015

Recognising the crucial role of digital competence in today's society, the European Commission's 2010 Digital Agenda for Europe devoted a whole pillar to digital literacy, skills and inclusion. Furthermore, recognising the need for indicators to measure the extent of digital competence in Europe, one of the actions of the Digital Agenda was to 'propose by 2013 EU-wide indicators of digital competence and media literacy' (Action 62).

Following a report of May 2014, DG CONNECT and the Eurostat Information Society Working Group agreed to create and publish a "Digital Skills Indicator" based on the Digital Competence Framework (developed by JRC and DG EAC, and available for self-assessment on the Europass website), and to be populated with data collected through the ICT survey on ICT usage by Households and Individuals.

The framework identifies five competence domains: Information, communication, content creation, safety and problem solving. The ICT survey collects information about activities realised during the previous 3 months by internet and computer users covering four of the five domains (the safety domain is not covered as an adequate indicators this domain is not yet available within the survey). It is assumed that persons having realised certain activities have the corresponding skills.

The nature of the ICT survey doesn't allow investigating proficiency levels for each activity performed. However, for each of the four domains, a set of activities have been selected (between 4 and 7), to reflect the competences outlined within each domain of the Digital Competence Framework, with the purpose of discriminating between people having, or missing, the basic skills. When there is evidence about the variety of tasks accomplished or about their complexity, a flag "above basic" is also attributed. Once these three levels of skills ("none", "basic" and "above basic") are computed for each of the four dimensions, an overall composite indicator is computed following a similar logical approach.

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ICDL Foundation — icdl.org
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Perception and reality

Pie charts showing the comparison between self-assessed skills and actual skills in different countries:

- Austria: General Digital Skills with 94% for self-assessed and 39% for actual skills.
- Switzerland: Using the Internet and Email with 85% for self-assessed and 34% for actual skills.
- Singapore: General Digital Skills with 68.5% for self-assessed and 55% for actual skills.
- India: Word Processing Skills with 84.6% for self-assessed and 48.5% for actual skills.
New Digital Divide

Economic divide among people and among organisations

Digital Lifestyle Skills

Digital Workplace Skills
Pace of digital adoption
European experience

Adoption of digital technologies, EU (% enterprises)

Desi Report 2019 – Integration of Digital Technology (source: Eurostat)
Changing nature of work

Top emerging and declining jobs

**Top 10 Emerging**
1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

**Top 10 Declining**
1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

Changing nature of work

Ratio of human-to-machine working hours, 2018 v 2022 (projected)

Figure 5: Ratio of human-machine working hours, 2018 vs. 2022 (projected)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Reasoning and decision-making</td>
<td>19%</td>
<td>28%</td>
<td>28%</td>
<td>47%</td>
<td>+52%</td>
</tr>
<tr>
<td>Coordinating, developing, managing and advising</td>
<td>19%</td>
<td>29%</td>
<td>31%</td>
<td>50%</td>
<td>+50%</td>
</tr>
<tr>
<td>Communicating and interacting</td>
<td>23%</td>
<td>31%</td>
<td>31%</td>
<td>44%</td>
<td>+42%</td>
</tr>
<tr>
<td>Administering</td>
<td>28%</td>
<td>44%</td>
<td>44%</td>
<td>59%</td>
<td>+59%</td>
</tr>
<tr>
<td>Performing physical and manual work activities</td>
<td>31%</td>
<td>44%</td>
<td>44%</td>
<td>59%</td>
<td>+59%</td>
</tr>
<tr>
<td>Identifying and evaluating job-relevant information</td>
<td>29%</td>
<td>46%</td>
<td>46%</td>
<td>59%</td>
<td>+59%</td>
</tr>
<tr>
<td>Performing complex and technical activities</td>
<td>34%</td>
<td>46%</td>
<td>46%</td>
<td>59%</td>
<td>+59%</td>
</tr>
<tr>
<td>Looking for and receiving job-related information</td>
<td>36%</td>
<td>55%</td>
<td>55%</td>
<td>62%</td>
<td>+35%</td>
</tr>
<tr>
<td>Information and data processing</td>
<td>47%</td>
<td>62%</td>
<td>62%</td>
<td>62%</td>
<td>+32%</td>
</tr>
</tbody>
</table>

Source: Future of Jobs Survey 2018, World Economic Forum

European Computer Driving Licence Syllabus Version 3.0

1. Introduction
   1.1 The European Computer Driving Licence
   1.2 Objectives of the ECDL
   1.3 Benefits of the ECDL
   1.4 ECDL Target Population
   1.5 Level of Difficulty
   1.6 The ECDL Standard
   1.7 ECDL Syllabus Version 3.0 Implementation
   1.8 Evolution in Syllabus Version 3.0
   1.9 The ECDL Modules

2. Description Of The Modules
   2.1 Module 1 - Basic Concepts of Information Technology (IT)
   2.2 Module 2 - Using the Computer and Managing Files
   2.3 Module 3 - Word Processing
   2.4 Module 4 - Spreadsheets
   2.5 Module 5 - Database
   2.6 Module 6 - Presentation
   2.7 Module 7 - Information and Communication
Celebrating 20 Years  →  ICDL Global Strategy
Product
Programme structure

School

Primary

Secondary

Higher

Workplace

Vocational
Community
Corporate

ICDL
DIGITAL STUDENT
Digital skills to design and develop, share and protect

ICDL
WORKFORCE
Digital skills for employability and productivity

ICDL
PROFESSIONAL
Digital skills for occupational effectiveness

ICDL
DIGITAL CITIZEN
Digital skills to connect and transact, explore and inform.
"Our approach is the European Union’s way: to establish stronger networks and strengthen partnerships for sustainable connectivity, across all sectors and based on a respect for common rules. This is the European way to tackle challenges and take opportunities, to the benefit of people in Europe and in Asia as well."

Federica Mogherini
European Union High Representative for Foreign Affairs and Security Policy
Vice-President of the European Commission
Identity
Global | Regional | National

• Global identity
  - One name – **ICDL** - a shared global standard, a global network

• Regional identity
  - Build regional relevance, belonging, contribution

  **ICDL Europe : ICDL Africa : ICDL Asia : ICDL Americas**

  **ICDL Foundation**

• National identity
  - Local relationships, government recognition, ATC community
ICDL  The Digital Skills Standard

Global Social Enterprise

ICDL FOUNDATION
ICDL EUROPE
ICDL AMERICAS
ICDL AFRICA
ICDL ASIA

100 countries
16 million candidates
50 million certification tests
20,000 test centres

ICDL Foundation — icdl.org
ACCA Southeast Asia
Contextualised modules for students and

ACCA Singapore
ACCA Malaysia
ACCA Vietnam
Singapore government

New digital skills for professionals | contextualised modules for legal industry
SIEMENS PLM Asia
3D Design module for students

National Centre for Educational Technology

Solid Edge 2019

Train-the-trainer Nanjing Vocational Colleges
Thank you – jakub.christoph@icdleurope.org
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