

Delivering the Digital Agenda for Europe

How the Digital Agenda for Europe will only fully deliver if we re-think the role of digital skills education in the new European economy.

The ways in which Europeans acquire appropriate digital skills to engage effectively in the economy and society needs to be re-thought once more.

It has become clear that a static and siloed approach to imparting digital skills through a limited number of channels will not sustain long-term growth, employment and competitiveness ambitions of Europe. Digital skills underpin both the Europe 2020 strategy for growth and its component plan, the Digital Agenda for Europe. We need to dispel the commonly repeated myth that those born after a certain date can be considered as ‘digital natives’ with no requirement to develop their digital skills. We must recognise that the issue of those without the skills to use technology fully will not simply go away; rather it requires digital skills to be embedded at the heart of the political agenda at both the national and European levels.

A broad evidence base that demonstrates the business case for digital skills needs to drive policy decisions at every level. As a matter of urgency, the role of digital skills needs to be better assimilated across all policies while also being maintained as a stand-alone policy priority. This is the only effective way of responding to Europe’s diverse and changing needs, whilst giving the Digital Agenda for Europe its best possible chance of success.

Aim of Report

The aim of this report is to build an objective picture of the real challenges of implementing the Digital Agenda for Europe (DAE), specifically pillar 6: Enhancing digital literacy, skills and inclusion. This report highlights the shared experiences and salient challenges that exist across Europe in achieving the digital literacy, skills and inclusion goals of the Digital Agenda for Europe and, using the collective voices of Member States, provides recommendations for advancement at the national and European levels.

We hope that this report will foster discussion, creativity and action at both the Member State and the EU level. Through convening Member State and EU-level meetings of government representatives, stakeholders and EU officials on an annual basis, ECDL Foundation is seeking to play its role in ensuring that the Europe 2020 strategy and specifically the DAE, work as practical tools which support, and are supported by, the right approaches to digital skills education.

We see ***Delivering the Digital Agenda for Europe*** as a timely contribution to a critical debate. If you have feedback and/or wish to become involved in this ongoing process please [contact us](#).



The Process so far...

The content of this report has been informed by a series of Europe-wide events on digital skills, convened by experts, industry and governments and a European Round Table that assembled the leading representatives from the national events at a European Round Table on Digital Literacy, Skills & e-Inclusion – Delivering the Digital Agenda. This European event examined the challenges and successes of the grassroots implementation of e-skills policy and was held on 7 December 2011 in the European Parliament, with the patronage of Ms. Neelie Kroes, Vice-President of the European Commission, and Commissioner responsible for the Digital Agenda for Europe.

ECDL Foundation is acting as the catalyst to bring policy makers, public servants and industry together to share experience across Member States and create a synergy that supports, in a practical way, the goals of pillar 6 of the DAE as well as to promote the right policy actions in Brussels to deliver the support that all Europeans need.

This report forms part of an ongoing ECDL Foundation campaign to deliver the DAE, which can only succeed with the active engagement and feedback of those most responsible for implementing the DAE at Member State level.

For further details see: <http://www.ecdl.org/daeroundtable>

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1 Executive Summary

In the autumn of 2011, ECDL Foundation engaged its European network of partners to connect with a range of stakeholders in the digital skills space and catalyse national round table discussions in 12 European countries. These discussions objectively evaluated the role that the Digital Agenda for Europe (DAE)¹ was playing within each country, addressed common challenges and the reality of achieving the national level targets for digital skills development outlined in the DAE. The participants included government representatives, employers' bodies, educational institutions, and IT industry representatives. Building on this activity at the Member State level, ECDL Foundation organised a European Round Table, with the patronage of Ms. Neelie Kroes, Vice-President of the European Commission and Commissioner responsible for the Digital Agenda for Europe which was held in the European Parliament and hosted by Mr. Seán Kelly MEP. The summit provided a forum to share national experiences and channel direct feedback to EU officials.

It emerged from the Round Table that while digital skills were known to be important, in many Member States this recognition was not matched by political intent, that is, by policy measures and funding channels. While the transversal element of digital skills was highlighted as being vital, the lack of a coordinated approach to digital skills development at national level was seen as an impediment to achieving the relevant components of the DAE. All participants agreed on the vital role of European Social Funding (ESF) in supporting the European e-skills agenda², however many expressed concern over the allocation of ESF funds at national level for digital skills, and their ability to influence governments to establish digital skills as a funding priority.

To address this, the Round Table called for better cooperation and coordination at national and European level and stressed the need for more empirical evidence of the linkage between skills and productivity on a micro and macro level in both the national and European context. It was felt that establishing digital skills as a political priority needs to move beyond political sound bites to focus on clear actions and the following five priorities were established as the **main challenges to be addressed**:

- **Growth: Making the Business Case for Digital Skills**
- **Economic Inclusion: Avoiding the Digital Native Trap**
- **Social Inclusion: Active Ageing in a Digital Society**
- **Establishing Digital Skills as a Cross-Cutting Issue**
- **Developing the Digital Skills of Educators.**

In addition key actions for future and immediate action were agreed around **building the business case, championing the issue and driving the digital imperative across all policy.**

The European Round Table concluded that in the long term, more structure and clarity is required around digital skills definition, which is particularly important when comparing skills levels across borders. The **establishment of a single independent authority** to provide both consistency and coordination was broadly supported. This would in turn support well crafted and targeted long-term strategies and policies that are developed in a structured and coordinated way. This report is part of a continuing campaign by ECDL Foundation to work with stakeholders to drive the delivery the DAE.

¹ Commission Communication '[A Digital Agenda for Europe](#)', COM(2010) 245 of 19.5.2010

² 2010 Commission Communication "[e-Skills for the 21st century: fostering competitiveness, growth and jobs](#)", COM (2007) 496 of 07.09.2007 and "[Towards a job-rich recovery](#)", COM (2012) 173 of 18.04.2012

2 Introduction

This report is based on the combined experience and expertise of 12 European countries with stakeholders from the public and private sectors that came together for frank discussion and assessment of the relevance of the objectives and targets of the DAE. This sharing of common experiences and challenges enabled national actors to identify the necessary practical actions that both national and European policy makers and politicians need to undertake to ensure that the goals and aspirations of the DAE and the wider EU 2020 strategy will be met.

This ***Delivering the Digital Agenda for Europe*** report outlines critical steps towards ensuring that we work collectively to address the underlying challenges in digital skills acquisition and support the wider drive for growth and employability across Europe. It has been designed to offer a clear set of priorities to be debated and transformed into action and within the context ECDL Foundation's campaign to deliver the DAE. Through convening this series of events, ECDL Foundation has created a context in which stakeholders can monitor and assess progress on an regular basis to ensure that progress is made.



“Such digital inclusion cannot be delivered through one-off commands from Brussels; it takes constant dialogue between local champions and policy makers...that will take continuity and endurance. But it is essential for a socially and economically sustainable Europe.

Now we have the opportunity to move away from isolated projects. We need to put digital empowerment right in the middle of the political agenda – we need systemic transformation from the bottom up and from the highest political level down.” **Ms. Neelie Kroes, Vice-President of the European Commission, during her keynote address to the European Round Table.**



“The challenge now is how to turn a policy paper into action. We are helping governments to share their experiences amongst themselves and with the European Commission executives. This is the purpose of this first European Round Table and our campaign to deliver the Digital Agenda for Europe.”

Mr. Damien O'Sullivan, CEO of ECDL Foundation, speaking at the European Round Table.



“Social inclusion of individuals is important, particularly in relation to job growth. Most new jobs will require digital skills in the future and if we don't address the digital skills of all Europeans, we will actually contribute to rendering the digital divide even more prominent.”

Mr. Seán Kelly, MEP, during his welcome address at the European Round Table.



3 Digital Skills in Europe 2012 -2013: Key Themes and Challenges

This section elaborates some of the key themes that are set to frame the European digital skills debate in 2012 and in 2013. By combining the outputs of national events with the European Round Table and a series expert inputs, the linkage between five key thematic areas and the importance of digital skills becomes very clear.

Discussion on these thematic areas as outlined below may not come as a surprise to some readers, however there is still great concern at national level in particular that these areas, while well known, are not receiving appropriate attention for a variety of reasons. The Member State view on these areas and the challenges in overcoming issues within each thematic area are addressed below. It is important they receive the appropriate level of attention.

Participants agreed that in order to effect change and achieve progress on the ground, progress would need to be made in five key areas which span national and EU-level responsibility.

3.1 Growth: Making the Business Case for Digital Skills

The need for economic growth is the primary driver pushing digital skills upwards in many national priorities. Despite this appearing to be a truism, according to many business and civil service representatives, there was serious concern from Member States that politicians give insufficient prioritisation to digital skills; and many politicians remain unconvinced as to the ‘business case’ for investing in digital skills.

This was emphasised in particular by some Member State representatives who were concerned that their political leaders were insufficiently aware of the huge opportunity they were missing by failing to invest in digital skills to maximise the benefit of their relatively low cost labour markets.

ICT workforce annual growth rate continues to rise despite the crisis, while ICT graduate numbers are falling. It is clear that ICT supports employability as the job market absorbs ICT graduates even during the crisis.

Mr. Michel Catinat, Head of Unit,
European Commission DG Enterprise & Industry

There was a unanimous call for better ‘evidence’ of what works at local, regional, national and European levels for accelerating the take up and measuring the impact of digital skills. One of the recognised challenges in gathering ‘evidence’ is that practice leads theory and so ‘evidence’ does not always have academic rigour, but may be more anecdotal in form. While it was noted that there are many case studies and reference points available, a lack of awareness of these sources remains an issue. Many case studies can be found in areas such as the [e-Practice Portal](#), while more rigorous statistical data is available from [Eurostat](#) and [OECD](#) reports. The challenge lies however in linking best practice to a bottom line and economic evidence.

What we need in terms of substance is evidence: how do efforts on the ground achieve good e-commerce practices? We need economic evidence, for public administrations for example.

Mr. Miguel González-Sancho, Deputy Head of Unit,
European Commission DG Information Society and
Media

Two areas were identified for particular attention in creating a better evidence base:

- Demonstrating the economic contribution of digital skills to e-commerce, to e-government, to the take up of broadband infrastructure, and to SME’s ability to

have transactions online as well as to facilitate entrepreneurship. The generation of hard data on digital savings and conversely on the cost of digital ignorance will support the economic argument which is the strongest one, and the one that needs to be developed and widely promoted.

- Evaluate European digital skills performance within Europe but also in comparison to other countries. Benchmark the investment in skills and skills levels against economic performance nationally and internationally.

3.2 Economic Inclusion: Avoiding the Digital Native Trap

In the tough economic and employment environment that currently prevails in Europe, it is not a simple case that digital skills represent a guarantee of employment. Indeed, many European countries have high levels of unemployment amongst the under 25 age group, a demographic that many policy makers and governments continue to collectively refer to as ‘digital natives’, and consider them to have the best non-specialist digital skills in society. There was widespread agreement and frustration expressed at the dangerous assumption that this cohort of

A quarter of Europeans have never used the internet, and in some countries this rises to 40% of the population. We know this is largely due to a lack of skills. We need training and re-training at all levels and we need to understand how to best equip the labour force to compete globally.

Mrs. Lucilla Sioli, Head of Unit,
European Commission DG Information
Society and Media

youth are appropriately skilled to engage in the workforce. This assumption could lead to a new layer of labour market exclusion where a lack of focus on appropriate skills means a young and otherwise educated workforce do not fit easily into the employment market because of a lack of joined up thinking between industry and educators including various types of training organisations.

3.3 Social Inclusion: Active Ageing in a Digital Society

A further issue that recurred in discussion is that of Europe’s ageing demographic and how digital skills are vital for all age groups to participate in the digital economy.

There appear to be stark differences between countries on the number of older people embracing digital skills, including the use of the internet. In Northern Europe for example we see significant increases in ‘silver surfers’ in all but the poorest economic groups. Yet the situation varies greatly across Europe and in many cases older people are not adequately afforded the skills, access and opportunity to use technology effectively. This is likely to become a growing issue as governments hope to create significant public sector savings by providing services online. It also presents major difficulties for the workforce as people retire later in life.

Local champions that drive collaboration and bring social intermediaries together with Member States can help address the inclusion issue on a large scale.

Mr. Ilias Iakovidis, Acting Head of Unit,
European Commission DG Information
Society and Media

Engagement across ministries is vital at national levels and should be combined with a business model that includes intermediaries with government and business actors. This model should combine infrastructure with skills and underline what is at stake if action is not taken.

3.4 Digital Skills as a Cross-Cutting Issue

The approach to digital skills as one-dimensional, siloed and delivered through limited channels needs to be re-thought. The perception of skills as ‘stand-alone’ was seen to

be outdated and failing to address the potential of living successfully in the information society. The discussion underlined the need for digital skills to be adapted and integrated horizontally at all levels to reflect the changing needs of society and the economy. The ubiquity of technology in society and industry in general, demonstrates the transversality of digital skills and demands a cross-cutting approach in both policy and practice.

On a policy level, the link between embedding skills as a cross-cutting issue and demonstrating the economic link to value, return on investment, employability and the broader evidence base were closely linked. The lack of such evidence was repeatedly recognised as a particular danger for digital skills development at Member State and European level.

3.4.1 Making Digital Skills a Political Priority

As a consequence of the limited evidence base described in section 3.1 politicians across Europe are failing to give digital skills the priority it deserves. This is not a new issue, but the current economic circumstances have magnified the attention it requires. Given the urgent need for economic growth and since ICT and the ICT sector are obvious routes to growth it is clear that the issue of digital skills development should be better recognised by politicians. It is clear that skills shortages, gaps and mismatches will continue to negatively affect growth, competitiveness, innovation and employment in Europe. However, there appears to be a persistent low appreciation at national level by politicians of the cross-sectoral importance of digital skills, as they favour more topical and tangible issues such as infrastructure development.

The following actions have been identified to help to raise the political priority of digital skills:

- Creating Digital Literacy Champions: internal facing (e.g. within the civil service) and external facing (e.g. focusing on media work and public awareness).
- Raising the awareness and comparability of European skills development and certification programmes at the national level through a more structured dissemination and uptake of EU competence and qualifications frameworks.
- Adopting an 'embedded' approach to digital skills in education, not only teaching standards of digital skills but also of the use of digital skills in education delivery and student evaluation.

3.4.2 Developing a Long-Term Digital Literacy Policy

The onus falls on Member States to develop a long-term digital literacy and e-skills policy and while this is clearly necessary, many Member States experience barriers to creating or further developing such a policy.

In the attempt to carve out a longer term digital literacy policy six areas of focus have been identified, these can apply to both national and European levels:

- Setting and agreeing goals with the corresponding resources and indicators for 5 and 10 year objectives by policy makers.
- Provision of incentives within policy to facilitate uptake and implementation, such as tax breaks and/or long-term digital subsidies.
- Creating a common set of definitions around varying digital proficiency levels.
- Provision of clearer guidelines on sourcing funding channels for skills development for Member States governments.
- Better coordination of top-down and bottom-up approaches.
- The establishment of good governance and reporting channels within and across governmental departments.

3.4.3 Creating a Joined Up Approach to Digital Literacy

One of the defining characteristics of digital literacy is that it is a cross-cutting issue. This transversal trait demonstrates the critical importance of digital skills; it also increases the difficulty in objectively monitoring and evaluating progress especially from a policy perspective; as the accountability lines can become blurred. The research undertaken as part of this process found very clearly that there is a pressing need to have significantly better joined up approaches to digital skills development at governmental and at a policy level on a pan-European basis.

Three key recommendations for supporting the delivery of a more joined up approach have been identified at the EU level:

- Establish a single authoritative independent authority or platform for digital skills and literacy.
- Propose common standard definitions and indicators around digital literacy, digital competence. This could be based on the European e-Competence Framework developed by the CEN Workshop on ICT Skills (European Standards Body)
- Ensure that industry, education, certification and training providers, and public authorities work together to ensure that skills supply meets demand. One aim of such collaboration would be to align understanding, definitions and offerings to a common framework.

National level actors have a role to play in ensuring that such recommendations are carried through and implemented through local, regional and national channels.

3.5 Developing the Skills of Educators

One recurring theme, which was echoed by many of the Member States was the requirement to have a more structured approach to ensuring that the skills of those involved in teaching is consistent and at an appropriate level. Broad consensus was reached that this has been a somewhat neglected area in Member States. Standards of ICT skills for educators need to be established and formal learning channels need to have appropriate quality oversight. If this does not occur, it was felt that it may result in much wasted and unfocused investment in ICT education, which yields poorer benefits for the economy and society as a whole.

- Skills development programmes should be used to ensure a structured and standardised approach to teaching digital skills.
- Teachers, in the formal education systems as well as in Vocational Education and Training need to develop the skills to integrate technology into learning.

4 Building a Sustainable and Inclusive Approach to Digital Skills Education

One of the key findings of this report is that we need to create a new culture of thinking around digital skills. While it is imperative that we keep our focus on quality and standards it is also vital that we drop our linear and siloed way of thinking about digital skills deployment and acquisition through limited channels.

In order to maximize the opportunities that exist under the DAE and to ensure a better chance of reaching the goals of e-skills being integrated into long-term policies that are anchored in reality, consensus was reached on the following recommendations.

4.1 Priority Actions

Here we outline three priority recommendations for immediate action.

4.1.1 Build the Business Case

Economic evidence of the benefit of skills and conversely the **cost of digital ignorance** is seen as the most important method of attracting the attention of politicians and government. The evidence base should be broad enough to encompass international comparators as well as to demonstrate the far-reaching impact of skills on governments and e-government, on businesses both large and small, on cross-border and international e-commerce, on broadband uptake, on education. It should show the impact for society in terms of lifelong active participation, and the economic cost of exclusion. Once the economic impact is well known the challenge of making digital skills a political priority may start to be overcome.

4.1.2 Champion the Issue

Digital champions should act as catalysts at the local, national and European levels. On a national level they should be appointed to work internally within government to bridge the boundaries of departments, budgets and public service administration. At the local, and national levels individuals with positive high profiles can promote the importance of digital skills both externally in the public eye and by working in collaboration with industry, education and civil society.

4.1.3 Drive the Digital Imperative across all Policy

Policy approaches to skills as a vertical element need to be rethought to introduce and fully implement the **transversal impact of digital skills** across domains, across government department and institutional divisions. This horizontal approach needs to co-exist in tandem with the pillar of digital skills as a standalone element, and be complemented by a joined up approach to how it can support all policy themes. In a practical sense, this will require full scale coordination units within governments that work within and across all departments. Policies need to address the long term but do so with short-term urgency.

5 From Policy to Action: What Next

ECDL Foundation has convened stakeholder action at the national and European levels to support and help deliver what we believe is Europe's best chance yet to harness the potential of technology and bring an inclusive and competitive Europe within our grasp. The DAE is the policy framework that has made this a possibility. Yet policy and practice cannot be separated and our efforts to support this transformation into practical actions do not stop at mere words. We remain committed to implementing this large scale, high profile and pragmatic campaign to drive the success of the DAE.

Over the course of 2012 and into 2013, ECDL Foundation will disseminate the outputs and conclusions of this paper to public and private organisations across the EU 27 and beyond. Specifically, it will use its extended network to seek to begin to implement the recommendations of this report, and to keep up the momentum towards achieving the goals of the DAE and in highlighting the role of digital skills in building a socially inclusive and economically competitive Europe.

ECDL Foundation will do this through the ongoing development of its activities at the Member State level. The national round tables held in 2011 established new channels for communication between stakeholders and paved the way for more in-depth discussions to take place this year, to bring together influencers to initiate and maintain action.

In 2013, the 2nd European Round Table will be held in conjunction with Member States and policy makers. This will look at the progress of digital skills in achieving the goals defined in the DAE in particular the development of national digital literacy policies and the progress on the implementation of the recommendations of this report across Member States. It will build on the midterm review of the Digital Agenda for Europe and progress made by working with National Digital Champions. We hope that a critical evaluation of the status of digital skills for 2013 will be derived and that we will continue to support strategic dialogue on key issues such as creating the evidence gathering infrastructure and providing better support for cross-sector collaboration.

We believe that the success of the DAE is critical for Europe and as such requires new thinking and unprecedented levels of cooperation between stakeholders. It is our hope that this ***Delivering the Digital Agenda for Europe*** report and related national and European level round table events will continue to drive the skills elements of the DAE in the right direction. We would greatly welcome your engagement in doing so.

About ECDL Foundation

ECDL Foundation is the certifying authority for the leading international computer skills certification programme - ECDL / ICDL. ECDL Foundation's mission is to enable proficient use of ICT that empowers individuals, organisations and society, through the development, promotion, and delivery of quality certification programmes throughout the world. With over 11 million candidates participating in a range of programmes, ECDL Foundation has set the global benchmark in end-user skills certification. For more information about ECDL Foundation, and about the ECDL / ICDL programme, please visit: www.ecdl.org