NATIONAL SKILLS STRATEGY

SUBMISSION BY THE IRISH COMPUTER SOCIETY

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THEME 01 - DEVELOPING RELEVANT SKILLS

Relevant Skills:

What do you consider to be the relevant skills for development in the period to 2025?

- Digital Skills, particularly for collaboration and team-working
- Critical thinking and problem solving – computational thinking skills
- Innovative thinking and creativity
- Green Energy ICT

Do we have the right mix of initiatives to deliver the future needs of enterprise, the economy and society?

Digital literacy should be the foundation of all initiatives if we are to deliver on the future needs of enterprise, the economy and society. A new digital divide is emerging, that between digital lifestyle skills and digital workplace skills. We incorrectly assume that digital natives automatically have the skills required in the workplace.

According to the European Commission, 90% of all jobs will require at least basic digital skills by 2020. In contrast 40% of the European population has insufficient digital skills and 22% has none at all.

A 2014 survey conducted by the British Computer Society, the chartered institute for IT in Britain, found that almost half of employers questioned, did not think that their workforces had the skills to face the digital challenges of the future. Ireland is likely to reflect this picture.

Although there are computers in schools there is no clear national policy on the teaching of computer science, computational thinking and digital literacy. In England for example, there is a consistent approach to teaching computer science as a discipline from the primary school level. Digital literacy skills are developed as a part of the computing curriculum so as to provide the basis for all other subjects.

How can employers and education and training providers work more effectively to identify and address skills needs and ensure the “work readiness” of learners?

Employers and education and training providers could promote the concept of professionalism among learners. There is now a focus at EU level on the importance of professionalism, most recently in the ICT sector. A professional is said to be professionally competent if he/she exhibits all of the following characteristics:

Knowledge: of a common body of knowledge, supplemented by more specific knowledge and skills related to the area(s) of specialism

Quality: commitment measured by adherence to quality standards (internal and/or external)

Ethics: commitment displayed by demonstration of ethical professional practice against an agreed code of Ethics or code of conduct

Accountability: the Professional takes personal responsibility for the quality and effectiveness of his/her work

Experience: practical experience of the exercised competence
Delivering value: the Professional is financially remunerated for the value they have contributed through related activities

The Irish Computer Society’s Graduate Professional Programme gives IT graduates an opportunity to gain skills demanded by the industry, expand their professional network and begin a structured approach to their continuous professional development. [http://www.ics.ie/graduate-development-programme](http://www.ics.ie/graduate-development-programme)

**Life Long Learning:**

*How can we motivate more people to participate in life-long learning? What are the attitudinal and structural barriers to learning that need to be overcome?*

**Structural barriers**

The provision of training and education programmes in the higher and further education sectors is predominantly classroom-based, on campus, full or part time. A wider variety of online learning/supported distance learning/blended learning/part-time programmes and courses would make it easier for learners to fit learning and upskilling around their job and/or life demands. Third level institutions are beginning to establish distance learning ‘hubs’ and broaden the range of programmes on offer through flexible study options with the FET sector some way behind.

Access to adequate broadband in rural areas continues to be a barrier to digital inclusion.

Affordability of training and education is also a deterrent to those considering further study at all levels of the NFQ e.g. a 2-year online postgraduate diploma could cost €10,000.

There are no Government-backed training schemes to encourage the employed to upskill.

**Attitudinal barriers**

The concept of Continual Professional Development (CPD) is not embedded across the workforce. CPD or building skills is not a reactionary process in response to a promotion or new role; it should be ongoing and thought out. Citizens should be encouraged to take ownership of their career development and made aware of the benefits of CPD which include:

- An improvement in employability and career advancement prospects
- Building skills opens up opportunities to work with better employers and on better projects
- Improvement in professional credibility, confidence and most importantly, job satisfaction

For every citizen, employed or not, the concept of life-long learning needs to be promoted for personal development, mental health and intellectual capacity – just as they are encouraged to keep physically exercising throughout their lives.

**What actions can be taken by education & training providers to support and encourage increased participation in lifelong learning?**

Education and Training providers can embrace the concept of CPD. There is a recognised need for upskilling of staff within the FET sector. Integration of technology into learning and teaching will make lifelong learning more accessible to all.

**What actions can be taken by the State to support and encourage increased participation in lifelong learning?**
Financial incentives such as tax incentives for employers who support staff to upskill and for employees who seek further study.

Further flexibility around benefits for the unemployed, part-time employed or those on job seekers allowance.

National minimum levels of broadband connectivity must be committed to and delivered upon as a priority.

**How can we give recognition to prior learning including skills acquired in work, home or community settings?**

Prior learning in a variety of settings, both formal and informal could be captured by taking an approach similar to a CPD model. Learners record their prior learning activities which may be verified by the employer, training provider and/or organisation. Unverified activities could also be captured. The Irish Computer Society have recently launched its online system to support IT professionals in the tracking of their professional development. This online tool will allow for all CPD activities to be recorded, tracked, viewed and displayed on social media. ([www.ics.ie/ics/cpd](http://www.ics.ie/ics/cpd))

**What barriers need to be addressed in order to stimulate investment in training by Irish enterprises?**

Training budgets are one of the first things to be cut in a recession. In our now growing economy it is time to re-focus on the fundamental principle that investing in staff development results in an even greater return on your investment. Investing in training improves staff performance by fostering the continuous building of skills and abilities, improves staff morale, retention and company image, and exposes staff to industry best practices. A robust professional development structure can be an attractive feature of talented new hires. When linked to performance appraisals, CPD can help employees focus their achievements.

Cost will always be a consideration. State funding for upskilling of those in employment could be put in place – a % payment or funded courses in those areas identified as having skills shortages or being strategically important for economic recovery. Any such system would have to be closely managed in order to achieve real and genuine results, perhaps through strict eligibility criteria around choice of course and training provider.

**Real world experiences for learners:**

*How can the range of work place experiences be expanded, particularly in SMEs, to increase opportunities for learners to gain practical experience as part of their education and training programme?*

A formalised system needs to be put in place that will facilitate SME’s in carrying out systematic monitoring of the learner’s activities. Programme descriptors should list the types of activities carried out in work placement that can gain the learner credits. These activities should be mapped against the programme’s learning objectives with a minimum coverage required for any work placement. The SME should be required to have a documented validation process in place and produce evidence of validation before learners can gain their credits for work placement.
Skills infrastructure:

*Is there a need for greater collaboration, particularly in the post-secondary sector to support learners to access learning opportunities and to meet the skills needs of employers?*

Yes, employers and the post-secondary sector need to work together. The post-secondary sector has a responsibility to foster the idea of professionalism, CPD and lifelong learning amongst their learners. Collaboration with the relevant professional societies can be beneficial in this regard. Bridging programmes such as ICS Graduate Development Programme can introduce an element of ‘real life’ skills that complement the theory. ([www.ics.ie/graduate-development-programme](http://www.ics.ie/graduate-development-programme))

Employers need to accept that a degree of organisational socialisation is always going to be required for any new hires and that this process can only be the employers’ responsibility.

*How can we encourage the provision of a range of programme offerings by education and training providers that are relevant to learners and enterprise needs?*

A more inclusive and widely embracing approach to recognition with the NFQ is required, specifically, an opening up of the NFQ to international sectoral certifying bodies and industry awarding bodies. There is proven labour market demand for such industry recognised certification provided by foreign and ‘vendor’ type awarding bodies. Alternative routes to recognition of a professionally relevant award within the Framework could also be considered.

*There are divergent views on the issue of over-education and the scale of skills mismatches in the economy. It is clear that enterprise requires skills at all levels of the NFQ. We would welcome views on this issue and the implications that it has for the skills system and in particular the balance of provision between further education and training and higher education.*

There’s a possible mismatch between awards on the NFQ and equivalent awards on other European Frameworks and a review of levels and funding pitched at those levels is warranted.

*How can education and training providers and employers work together more effectively to respond to the results of the Employer Survey to achieve greater satisfaction amongst employers in future with the skills of graduates?*

All relevant stakeholders should be facilitated in coming together to share knowledge in a structured way. The professional bodies could be useful as facilitators of this process.
THEME 02 – ACTIVATING SKILLS SUPPLY

How can we encourage older people to reskill & retrain and continue to participate in the labour market? What skills will they require?

Digital skills have to be the foundation of any reskilling/retraining initiative. According to the European Commission, 90% of all jobs will require at least basic digital skills by 2020. The Department of Communications Energy and National Resources ‘Benefit’ schemes have been very successful in getting people from marginalised sectors of society to engage with technology at a social level. However employers require prospective employees to have the digital workplace skills certified through globally recognised programmes like ECDL. (www.ecdl.ie)

How best can this reskilling and retraining be facilitated?

Industry recognised certification is key if this reskilling is to be successful in getting older people to participate in the labour market. The Government can liaise with the relevant awarding bodies to put in place a national network of providers that will support older people to gradually build up their skills through part-time, full-time and blended learning options. Incrementally building skills and confidence is also important for this group. One example is Equalskills (http://www.ics-skills.ie/equalskills/index.php), an internationally certified introductory level digital skills programme that sits between a ‘Benefit-level’ course and ECDL certification.
THEME 03 – EFFECTIVE USE OF SKILLS

How can all stakeholders work more effectively to increase awareness of skills requirements and career opportunities among both school leavers and those already in the labour market?

National Festivals, aimed at all stakeholders, can garner attention and communicate a message on a grand scale. Such festivals can involve schools, higher and further education institutes and employers in outreach activities and events. For example, Tech Week is Ireland’s nationwide festival of technology, aimed at students, parents and the public. Tech Week inspires students to engage actively with STEM subjects and equips them with the knowledge and experience necessary to make informed choices about their future subject and career choices. Tech Week also aims to educate all citizens, of every age group and background, about the challenges and rewards or our fast-changing technological society. ([www.techweek.ie](http://www.techweek.ie))

How can we ensure a better understanding of the skills that are available, for instance in creating a common understanding of language proficiency?

We need a consolidated framework that’s understood by all and linked to a European framework. One such example is the European e-Competence Framework (e-CF) which provides a reference of 40 competences as required and applied at the Information and Communication Technology (ICT) workplace, using a common language for competences, skills and proficiency levels that can be understood across Europe. ([http://www.ecompetences.eu/](http://www.ecompetences.eu/))

How can we promote a more effective use of skills at work? In particular, how can managers be supported to identify effective work and organisational practices that make the best use of skills available to them?

We need to formalise our understanding of the skills required by different roles. By using competency frameworks linked to professions/sectors as in the e-CF or generic frameworks. Managers can carry out further role and task analyses to supplement these frameworks if given the appropriate training and support.

How can this best be promoted among SME’s?

By dissemination and promotion of competency frameworks and appropriate training of managers to carry out role and task analysis within their organisations.

Supporting SMEs to engage in training:

How can SMEs be better supported and encouraged to engage with training?

Through the provision of appropriate funding, tax incentives and promotion of the benefits of staff development.