

Skills Insights Note 2025-1

Cross Sectoral Synergies and Transversal Skills

- The Expert Group on Future Skills Needs (EGFSN) advises the Government on future skills requirements and associated labour market issues that impact on the national potential for enterprise and employment growth. The latest EGFSN publications can be found at: www.egfsn.ie.
- This Skills Insights Note has been issued by the Chair, Tony Donohoe, and was prepared by Ciara Cowap and Linda Kane of the EGFSN Secretariat.
- The authors would like to thank the Members of the EGFSN for their helpful comments and valuable feedback on provisional drafts, which greatly contributed to the improvement of this work.



Overview

The Expert Group on Future Skills Needs (EGFSN) was established in 1997 and is tasked with advising Government on future skills requirements and associated labour market issues that impact on the national potential for enterprise and employment growth.

From its inception, the EGFSN has been a key body for advising Government on the skills needs of the enterprise sector in Ireland and has provided detailed sectoral and occupational reports providing forecasts of specific skills needs, identifying gaps in skills provision in Ireland, and making recommendations to Government, industry, and to the skills supply system to address these gaps.

The EGFSN oversees an annual Work Programme which identifies priority areas where skills gaps may emerge. Traditional EGFSN research studies involve intensive stakeholder engagement, with projects often taking 18 months from proposal to publication.

At the December 2024 meeting of the Expert Group, the Chair and Membership endorsed a new series of Skills Insights Notes which will be prepared by the EGFSN Secretariat and will provide an opportunity to publish more frequent and topical pieces of work. These Notes will be prepared alongside the longer research studies the EGFSN typically undertakes.

As well as current topics, other themes that can be explored include updates on implementation plans and issues that the Expert Group has previously explored in a published report, by highlighting specific findings or key points.



- An analysis of the key findings and recommendations from the latest EGFSN reports identify a number of common themes and cross sectoral synergies.
- This note will explore in further detail the themes of collaboration; continuous skills development and life-long learning; the importance of apprenticeships and alternative training pathways; the need for a responsive and agile education system; and the importance of transversal and digital skills.
- Compiling recommendations and grouping them into common themes highlights areas where lessons can be generalised and applied to other sectors of the economy.

Introduction

This first Skills Insights Note will provide an overview of the key findings and recommendations of the five most recent EGFSN reports from 2021 to 2024. These include: Skills for Modern Methods of Construction, Skills for International Financial Services, Skills for Biopharma, AI Skills, and Skills for Zero Carbon.

A number of common themes and cross sectoral synergies emerged across these reports. These include the need for greater collaboration between industry, Government and academia; continuous skills development and life-long learning; the importance of apprenticeships and alternative training pathways; the need for a responsive and agile secondary and tertiary education system; and the importance of transversal and digital skills.

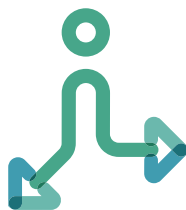
The frequency with which these themes are repeated across studies indicates that these learnings are likely to apply to other sectors of the labour market and could provide benefits to these sectors if they were broadly adopted.



**Collaboration
Between
Industry,
Government,
& Academia**



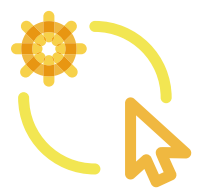
**Ongoing Skills
Development
And Life-Long
Learning**



**Apprenticeships
& Alternative
Training
Pathways**



**Responsive &
Agile Education
System**



**Transversal Skills
& Digital Skills**



Collaboration Between Industry, Government & Academia

A central feature of the aforementioned studies is the necessity for extensive collaboration between stakeholders across industry, Government, and the education and training system.

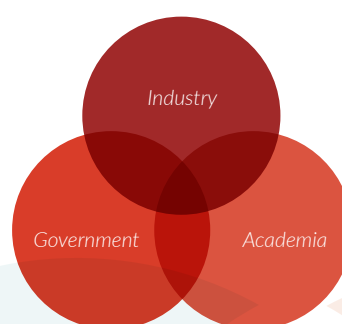
During EGFSN projects, a steering committee is created at the outset to ensure that all viewpoints are understood, and that realistic solutions are explored, with the responsibility for change and progress in a sector shared amongst all those involved. This high level of cooperation ensures that there is consensus about the priority areas to be addressed and a collaborative approach to issues facing an industry or sector.

Another valuable method to extend collaboration following the completion of an EGFSN report is the creation of Implementation Oversight Groups that meet regularly for two years following report publication to monitor progress on recommendation delivery. This cooperative approach is especially important when recommendations require partnerships for successful implementation. The EGFSN Secretariat provides administrative support to facilitate these meetings and monitor progress.

Both the Skills for International Financial Services report and the Skills for Biopharma report recommend broad collaboration to develop a Skills Framework for their respective sectors. This would ensure consistency of education, qualifications, and skills standards within sectors, and would identify the technical skills and professional competencies required to work in different functions and at different levels.

The Skills for Biopharma report suggests facilitating knowledge sharing through recurring conferences or public forums where stakeholders can exchange information and ideas with industry participants and potential new entrants. These events provide information on the latest innovations and advancements, career pathways, and education and training opportunities.

Fostering collaboration between stakeholders across industry, Government, and the education and training system allows for a flexible and agile response to identified skills shortages.



“Shared solutions require shared responsibility”

EGFSN reports emphasise the vital role of collaboration between industry, Government, and education in shaping future skills.



Ongoing skills development & life-long learning

In modern economies, with fast-paced labour markets, skills and knowledge can become quickly outdated and more broadly across the EU there is an increasing focus on productivity and competitiveness. In this context, continuous skills development and life-long learning take on an even greater role as they enable individuals to continuously adapt to changes in technology, the job market, and industry trends. All individuals should see life-long learning as an opportunity for them to stay relevant, improve their employability, and enhance their career prospects.

All of the EGFSN reports considered in this Note acknowledge the importance of ongoing skills development and recommend various methods to ensure workers can avail of upskilling opportunities.

The Skills for Modern Methods of Construction, AI Skills, and Skills for Zero Carbon reports all recommend the upskilling of existing professionals (including engineering, architecture, environmental, legal, and teaching professionals) through continuous professional development (CPD) opportunities. Many professional affiliation bodies understand the importance of ongoing learning and have minimum CPD hours requirements for members to fulfil each year. These bodies are also well placed to understand the emerging skills needs in their sectors and can use their professional networks to inform a broad audience.

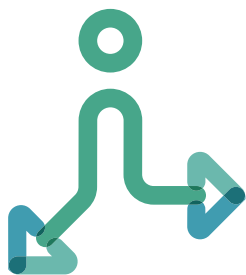
The emerging area of micro-credentials also has the potential to help address upskilling requirements and is referenced in all the latest EGFSN reports. Micro-credentials are shorter, more flexible and targeted courses that allow individuals to gain specialist skills or knowledge in a specific area.

Micro-credentials can be stackable, meaning they can be accumulated over time to lead to a larger qualification or certification.

The Skills for Modern Methods of Construction report recommends the roll out of regional roadshow training, to deliver hands-on upskilling opportunities onsite in a practical setting for workers in the construction sector to acquire new skills that will allow them to embrace innovative technologies and materials. Specialist centres such as the National Construction Campus at Mount Lucas, which is provided by the Laois & Offaly Education Training Board, are also required to provide a demonstration park for new skills and competencies. This campus also serves as a retrofitting and Nearly Zero Energy Buildings centre of excellence, offering upskilling courses for retrofitting, as recommended in the Skills for Zero Carbon report.

100%

of EGFSN reports recommend ongoing professional development, upskilling, or micro-credentials.



Apprenticeships & Alternative Training Pathways

Apprenticeships are statutory based programmes of structured ‘earn while you learn’ education, which formally combine learning in the workplace with learning in an education or training centre. Apprenticeships help bridge the gap between academic knowledge and real-world application. The completion of an apprenticeship prepares the participant for a specific occupation and leads to a qualification recognised under the National Framework of Qualifications at levels 5-10.

While theoretical education provides a solid foundation, it is through apprenticeships that individuals acquire the practical skills and expertise necessary to excel in industry. In a tight labour market, this type of on-the-job learning can provide the necessary workers while simultaneously providing an opportunity for career development.

Craft Apprenticeship curricula are periodically updated in consultation with industry to include future technologies relevant to specific industries. Since 2016, these apprenticeships have been supplemented by consortia-led apprenticeships. The latter are developed by industry-led consortia that include representatives of employers, sectoral bodies, employees, education and training institutions and public bodies. Programmes are offered between NFQ levels 5 -10 and vary in duration from 2 to 4 years. They also combine both on- and-off the job learning as well as a combination of online and blended learning.

All of the EGFSN reports assessed here included recommendations in relation to apprenticeships as a means to highlight new pathways into various sectors and create opportunities outside of higher education for individuals to train in numerous fields.

The Skills for Modern Methods of Construction report recommends new and shorter dedicated apprenticeships for MMC, to boost the profile of this area of the industry. The Skills for Zero Carbon report includes several recommendations to augment existing craft apprenticeships and encourage participation in other traineeships for both young people and adults wishing to move into green occupations.

The Skills for International Financial Services, Skills for Biopharma, and AI skills reports all propose the promotion and development of new pathways and apprenticeships into their respective sectors. The development of these new apprenticeships led by industry consortia are highly attuned to the emerging needs of the enterprise sector and are key to addressing skill gaps in highly specialised areas.

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reports call for expanded and modernised apprenticeships



Responsive & Agile Education System

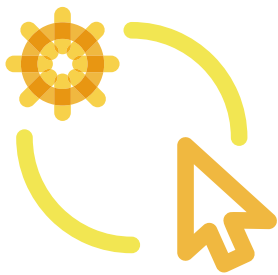
Across the EGFSN reports the need for a responsive and agile secondary and tertiary education system was frequently highlighted as essential given the need to quickly adapt to changing societal, technological, environmental and economic needs. This responsiveness enables the education system to adjust curricula, teaching methods, and learning pathways in real-time to meet emerging demands, such as new technologies, environmental challenges, or shifts in workforce requirements.

The Skills for Biopharma and AI Skills reports recommend reforms for secondary education, through curricula reviews with the view to strengthening STEM education in schools and consider the addition of AI course content.

The Skills for Zero Carbon report recommends the expansion of work experience opportunities for students and young people, including Transition Year students, so that they can be exposed to potential career opportunities in new sectors they may not have considered before. The Skills for Zero Carbon report also recommends increasing availability and capacity of relevant programmes to meet demand from zero carbon activities as the green transition accelerates and to ensure that third level courses align with industry needs.

The latest EGFSN reports also acknowledge the importance of building awareness of potential career opportunities and learning pathways in multiple sectors. Advertising campaigns can boost the appeal of new occupations and can play an important part in making potential learners aware of the options that are available to them in the further and higher education sector.





Transversal Skills & Digital Skills

Transversal skills are defined by CEDEFOP as “learned and proven abilities which are commonly seen as necessary or valuable for effective action in virtually any kind of work, learning or life activity.” They are sometimes referred to as “soft” skills and include competencies such as critical thinking, teamwork, time management, and communication skills. They are not exclusively related to any one occupation or economic sector.

All of the EGFSN reports reviewed acknowledged the importance of transversal skills and the need to ensure that these skills are included as part of the core curriculum across all further and higher education programmes to ensure that graduates are equipped to succeed in a modern workplace where problem solving and teamwork are key. Given the importance of transversal skills across all sectors of the economy, this topic will be revisited in a future Skills Insights Note.

Digital skills feature very prominently across all the reports considered. In almost every industry, from biopharma to finance, construction to education, digital tools and platforms are used to enhance productivity, improve communication, and streamline operations. These skills enable individuals to efficiently use software, data analysis tools, and online platforms, making them more effective and adaptable in their roles.

The EGFSN reports include recommendations across the digital skills space reflecting the views of a variety of stakeholders. The Skills for Modern Methods of Construction report contains four recommendations in relation to digital skills, including that courses are continuously updated to keep up with technological change and that AI skills be used to help streamline projects.

The AI Skills report has several broad recommendations for the development of digital skills. The report recommends an AI course for public servants, as well as the promotion of a free online course for all citizens. As well as this, a recommendation is made to increase the presence of AI in education, for teachers to improve their digital literacy, and to explore the use of AI to support teaching, learning and assessment.

“Learned and proven abilities necessary for effective action in virtually any kind of work, learning or life activity.”

– CEDEFOP



Conclusion

This inaugural Skills Insights Note explored the recommendations from the latest EGFSN reports, to find common themes and cross sectoral synergies across reports. Grouping the recommendations into common themes highlights the areas of greatest urgency or importance, that can be applied generally to many sectors.

Collaboration between industry, Government, and academia can help to coordinate planning for training and upskilling, as well as give students and workers knowledge about career opportunities and pathways. Multiple EGFSN reports acknowledge the importance of skills development and life-long learning for all individuals, especially as society progresses in the green and digital transitions. Education is beneficial in all sectors and to all individuals, and increasing capacity in further and higher education courses, improving skills from second level, and providing courses for emerging sectors can help to strengthen the labour force.

All the EGFSN reports considered in this review highlighted the need to promote apprenticeships and improve accessibility of apprenticeships to young people as alternate pathways into fulfilling careers. And finally, each of the latest EGFSN reports acknowledged the importance of transversal skills and digital skills. It is essential that these skills are included as part of the core curriculum across all further and higher education programmes to ensure workers are equipped for the modern workplace.

The recurring presence of these themes across multiple EGFSN studies suggests that the insights gained are likely relevant to other areas of the labour market and could offer valuable benefits if widely implemented across other sectors of the Irish economy.



