

QQI AWARDS STANDARDS.

Digital Core Competence





Foreword

The Qualifications and Quality Assurance Act 2012 requires QQI to 'determine the standards of knowledge, skill or competence to be acquired, and where appropriate, demonstrated, by a learner before an award may be made by the Authority'. QQI award standards are based on the level indicators and award type descriptors of the National Framework of Qualifications (NFQ) and are governed by QQI Policy for the Determination of Award Standards.

Based on systematic engagement with subject matter expertise and public consultation, award standards for certain broad fields of learning were developed for QQI awards at level 1-4 on the NFQ. These standards represent an elaboration of the generic descriptors of the NFQ. They should facilitate experts in particular fields of learning to create the link between their programmes' intended learning outcomes and the NFQ. Each award standard is cumulative, the statements of knowledge, skill and competence at NFQ levels 2, 3 and 4, build on the attainment of standards at lower levels, which are not necessarily reproduced at the higher level(s). The implementation and use of these standards is subject to QQI Policy and Criteria for the Validation of Programmes and QQI Policy for the Making of Awards. Whenever an award standard changes, programmes must be updated and validated against the new standards.

These standards are not programme specifications. It is through these, however, that the relationship between a programme, its component parts and the NFQ should be evident. The standards are a reference point and a point of comparison against which individual programmes may be justified.

They are intended to provide general guidance for articulating the learning outcomes associated with a particular field of learning. In designing programmes, providers must take cognisance of the standards for specific fields of learning where they generally relate to the programme being developed. It is, however, recognised that there is a significant growth in multi-disciplinary/inter-disciplinary programmes; there are emerging fields of learning; and in addition, within each field there is the vast spectrum of programmes possible based on a wide range of purpose. In this context, it is not possible to have a standard, or multiple standards, that cater for the complete range of programmes possible. It is therefore expected that the standards for specific fields of learning will be used as reference points for the design of programmes. In designing programmes, providers can draw from more than one standard.

In drafting the standards every effort has been made to ensure that they will provide for flexibility and variety in the design of programmes and therefore encourage innovation within an overall agreed framework. It



is not expected that all programmes will include every learning outcome identified in a standard. It is, however, expected that many programmes will include learning outcomes that are not included in the relevant standard.

When designing a programme, each learning outcome in the standard should be considered. Where departure from these is necessary, it should be justified in the context of the specific orientation of the programme and other facts pertaining to it. Each programme provider should be able to demonstrate how the design and content of its own programmes has been informed by the standard.

The level descriptors of the Framework, the award type descriptors and consequently the standards for the specific fields of learning are divided into three different types of learning outcomes - knowledge, skill and competence. These strands are further subdivided into eight substrands. Each strand/sub-strand is important. The relative weighting of each strand in a programme will vary from programme to programme. The weighting will be determined by many factors, including for example, the practical nature of a programme, or otherwise.

Each strand/sub-strand should be addressed appropriately in every programme. Where a programme is multidisciplinary or inter-disciplinary in nature, the use of more than one standard may be necessary. In such cases, the scope, depth and balance of knowledge, skill and competence should be attended to.

The titles of awards made by QQI on foot of these award standards shall be consistent with QQI Policy on the Making of Awards with an exception in the case of major awards where the named award stem shall have the following form: 'Level X Certificate in Lifelong Learning in' [specialisation].

These standards are determined by QQI under section 49(1) of the Qualifications (Education and Training) Act 2012.



AWARD STANDARDS - DIGITAL (CORE COMPETENCE) AT NFQ LEVELS 1 TO 4

Purpose

The purpose of this broad standard is to enable design of a variety of programmes enabling the learner to develop the relevant digital knowledge, skill and competence. 'Digital competence involves the confident, critical, and responsible use of, and engagement with digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking. '*

Please note that the above standard is aligned to the Key Competences for Lifelong Learning. This particular competence relates specifically to the "Digital Core Competence" European Commission, Directorate-General for Education, Youth, Sport and Culture, Key competences for lifelong learning, Publications Office, 2019, https://data.europa.eu/doi/10.2766/291008



References

DigComp Framework (europa.eu)

Essential knowledge, skills and attitudes related to this competence*

Knowledge

Individuals should understand how digital technologies can support communication, creativity and innovation, and be aware of their opportunities, limitations, effects and risks. They should understand the general principles, mechanisms and logic underlying evolving digital technologies and know the basic function and use of different devices, software, and networks. Individuals should take a critical approach to the validity, reliability and impact of information and data made available by digital means and be aware of the legal and ethical principles involved in engaging with digital technologies.

Skills

Individuals should be able to use digital technologies to support their active citizenship and social inclusion, collaboration with others, and creativity towards personal, social or commercial goals. Skills include the ability to use, access, filter, evaluate, create, program and share digital content. Individuals should be able to manage and protect information, content, data, and digital identities, as well as recognise and effectively engage with software, devices, artificial intelligence or robots.

Attitudes

Engagement with digital technologies and content requires a reflective and critical, yet curious, open-minded and forward-looking attitude to their evolution. It also requires an ethical, safe and responsible approach to the use of these tools.

*EU Council Recommendation on Key Competences for Lifelong Learning, Official Journal of the European Union, 2018

C_2018189EN.01000101.xml (europa.eu)

Note: The indicators at each level build on the skills from the previous one.

The outcomes at each NFQ level include those of all the lower levels in the same sub-strand unless stated otherwise.



NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4			
Digital core competence	The learner should be able to show:	The learner should be able to show:	The learner should be able to show:	The learner should be able to show:			
Knowledge breadth	Elementary knowledge	Knowledge that is narrow in range	Knowledge moderately broad in range	Broad range of knowledge			
	Basic knowledge of: simple information needs how to search for data, information and content in digital settings.	 Knowledge of: basic information needs how to search for data, information and content in digital settings. 	 Knowledge of: information needs how to search for data, information and content in digital settings how to access and navigate between different digital settings. 	 Knowledge of: how to express information needs how to search for data, information and content in digital settings how to access and navigate between different technologies. 			



NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4		
Knowledge kind	Demonstrable by recognition or recall	Concrete in reference and basic in comprehension	Mainly concrete in reference and with some comprehension of relationship between knowledge elements	Mainly concrete in reference and with some elements of abstraction or theory		
	Awareness of a digital setting. Basic knowledge of simple digital technologies and ways to search them.	Basic knowledge of: a digital environment selected simple digital technologies and ways to search them how reliable common sources of data, information and their digital content are online wellbeing. Awareness of a digital identity* and digital footprint. *All digital information that represents an individual. Awareness of data protection legislation (for example, GDPR).	 Knowledge of: how to handle content and information searches and navigation in digital settings how reliable is the content and information on common digital platforms how to use appropriate digital communications technologies in well-defined and common situations how to take part in society, in a range of familiar situations, using well-defined and standard digital services 	 Knowledge of: how to search for data and content in digital settings how to access and handle data and content personal ways to search how to analyse, compare, assess and interpret of sources of data and digital content ways to organise data and content how to take part in society, in a range of familiar and unfamiliar situations, using well-defined and common digital services 		



	 how to use well-defined and common digital tools and technologies for information sharing and collaborative working how to protect their reputation online in well-defined and common situations a digital identity and digital footprint digital communications and learning platforms. 	 how to handle appropriate digital technologies to share data and digital content common ways to protect their reputation online a variety of specific digital identities.
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NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Know-how and skill range	Demonstrate basic practical skills and carry out directed activity using basic tools	Demonstrate limited range of basic practical skills, including the use of relevant tools	Demonstrate a limited range or practical and cognitive	Demonstrate a moderate range of practical and cognitive skills and tools
	Able to: • find data, information and content through a simple search in digital settings • identify appropriate and simple ways to communicate in a given situation • select simple digital technologies to interact with others • recognise simple and appropriate digital technologies to share data and digital content • recognise simple ways to protect their reputation online.	 Able to: find data, information and content through a basic search in digital settings identify basic personal ways to search organise, store and retrieve data, information and content in a simple way in digital settings select basic digital technologies to interact with others identify appropriate and simple ways to communicate in a given situation recognise simple and appropriate digital technologies to share data, information and digital content 	Able to: describe how people work together when using digital technology with others in digital settings carry out well-defined and common searches to find data, information and content in digital settings explain how to access data, information, social media platforms, apps, websites and other digital media and how to navigate between them explain well-defined and common ways of carrying out personal searches organise, store and retrieve data and content a common way in digital settings	 Able to: organise data, information and content searches in digital settings explain how to access data, information and content, and be able to navigate between technologies organise data, information and content so it can be easily stored and retrieved select and work with a variety of digital technologies create digital content use appropriate digital technologies to share data, information and digital content select a variety of appropriate digital ways to communicate in a given situation discuss how people work together when using digital settings



	 choose simple ways to communicate and adapt these for different audiences describe basic ways to protect their own reputation online. 	 carry out interactions with digital technologies in well-defined and common situations select well-defined, common and appropriate digital ways to communicate for a given situation select well-defined, common and appropriate digital technologies to share data, information and digital content explain how people work together when using digital technology with others in digital settings explain well-defined and standard ways to protect a person's reputation online. 	 analyse, compare and assess sources of data, information and digital content display a variety of specific digital identities discuss specific ways to protect their reputation online.
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NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Know-how and skill selectivity	Perform processes that are repetitive and predictable	Perform a sequence of common tasks given clear direction	Select from a limited range of varied procedures and apply known solutions to a limited range of predictable problems	Select from a range of procedures and apply known solutions to a variety of predictable problems
	Able to: Ilst basic instructions for a computing system to solve a simple problem or carry out a simple task identify simple ways to protect devices and digital content recognise simple risks and threats in digital settings select simple digital technologies to interact with others identify simple technical problems when using digital devices and using digital settings select simple ways to protect themselves from possible dangers in digital settings.	Able to: • find data and content through a simple search in digital settings • choose simple ways to communicate and adapt these for different audiences • assess how valid and reliable common sources of data, information and their digital content are • distinguish between basic risks and threats in digital settings • identify simple technical problems when using devices and using digital settings • identify simple solutions to solve these problems	Able to: Iist well-defined and common instructions for a computing system to solve common problems or carry out common tasks be able to point to well-defined and common ways to protect devices and digital content identify well-defined and common risks and threats in digital settings and protect themselves from dangers in digital settings carry out well-defined and common searches to find data, information and content in digital settings explain how to access data information and content and how to navigate between them	 Able to: work with artificial intelligence list instructions for a computing system to solve a given problem or carry out a specific task organise ways to protect their devices and digital content identify risks and threats in digital settings identify technical problems when using devices in digital settings and select ways of solving these problems understand and solve digital problems using recognised structures working on your own, or with others select ways to protect themselves and others from dangers in digital settings.



•	follow (either working solo
	or as part of a team) simple
	thought processes in digital
	settings to understand
	concepts and solve simple
	conceptual problems
•	under supervision, choose,
	simple digital tools and
	technologies when working

- with others on a projectidentify a digital identity.
- describe simple ways to protect their reputation and stay safe online or in digital settings.

- select digital data, information and content so you can organise, store and retrieve them using a regular routine.
- select, in well-defined and common situations, digital technologies and tools to share data, information and digital content, and carry out routine digital interactions in a given situation
- understand and solve digital problems (either working solo or as part of a team) using simple ways of thinking and recognised structures in digital settings
- explain well-defined and common ways to protect their reputation online and stay safe online and in digital settings.



NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4		
Competence context	Act in closely defined and highly structured contexts	Act in a limited range of predictable and structured contexts	Act within a limited range of contexts	Act in familiar and unfamiliar contexts		
	With support and under supervision, act in a safe way in digital setting.	Under supervision, choose simple digital tools and technologies to work with others.	Act in a safe and ethical way in digital setting. While operating in a supervised environment, use a limited range of digital technology and digital skills.	Act in a safe and responsible way in familiar and unfamiliar situations. While acting in a supervised environment, use a moderate range of digital technology and digital skills.		



NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4			
Competence role	Act in a limited range of roles	Act in a range of roles under direction	Act under direction with limited autonomy; function within familiar, homogenous groups	Act with considerable amount of responsibility and autonomy			
	Begin to show awareness of independent role for self.	Show awareness of independent role for self, including awareness of knowledge, skill and competence in digital setting. Explore the potential to develop further digital skills for a given role. Recognise simple appropriate digital technologies to empower self and to take part in society as a citizen.	Work effectively as a member of a team. Plan and organise work to achieve the outcomes of given tasks. With regular support, use observations, digital skills, creativity, and experience to act on own initiative. Recognise the potential to develop digital skills that contribute to a given role. Identify basic appropriate digital technologies to empower self and to take part in society as a citizen.	Use appropriate digital technologies to empower themselves and to take part in society as a citizen, including working in a critical way with digital technologies.			



NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Competence Learning to learn	Learn to sequence learning tasks; learn to access and use a range of learning resources	Learn to learn in a disciplined manner in a well-structured and supervised environment	Learn to learn within a managed environment	Learn to take responsibility for own learning within a supervised environment
	Learn how to use simple digital technologies to work and communicate with others. Show interest in looking for opportunities for self-development and to keep up to date with digital evolution.	Learn how to work with others through digital technology to improve digital competence. Look for opportunities for self-development and keep up to date with digital evolution.	Learn how to use digital technology to support own learning and work with others. Follow opportunities for self-development and keep up to date with digital evolution.	Develop ability to use digital technology to manage their learning to work with others effectively. Follow up on opportunities for self-development and keep up to date with the digital evolution.



NFQ	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4			
Competence Insight	Begin to demonstrate awareness of independent role for self	Demonstrate awareness of independent role for self	Assume limited responsibility for consistency of self-understanding and behaviour	Assume partial responsibility for consistency of self-understanding and behaviour			
	Be able to see digital technology as an enabler.	Show an awareness of staying safe online and using digital technology responsibly.	Recognise and value own personal contribution. Be aware of own attitudes, preferred ways of working and behaviour in different situations and what effect these have in a digital setting. Be responsible, safe, and ethical when using digital technology.	Reflect on: • own learning experience to understand themselves and enable their growth when using digital technologies • use digital technology in a sustainable way.			

