

Digital Competence Framework

Your questions answered

September 2016

A curriculum for Wales – a curriculum for life

Digital Competence Framework – your questions answered

Audience

The entire education workforce, government and national partners, including local authorities and regional consortia, workforce unions, diocesan authorities, governing bodies and Estyn.

Overview

This document is to accompany the Digital Competence Framework (DCF) and help schools in Wales to implement it.

Action required

None – for information only.

Further information

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Additional copies

This document can be accessed from the Welsh Government's website at gov.wales/curriculumforwales

Related documents

Qualified for life (Welsh Government, 2014); Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales (Professor Graham Donaldson CB, 2015); Teaching Tomorrow's Teachers (Professor John Furlong, 2015); A curriculum for Wales – a curriculum for life (Welsh Government, 2015)

Contents

Key things you need to know Development of the Digital Competence Framework (DCF) Application of the DCF Support and resources Assessment and qualifications	2		
	4 7 9 11		
		Inspection	13

Key things you need to know

1. What does 'digital competence' mean?

Digital competence is the set of skills, knowledge and attitudes to enable the confident, creative and critical use of technologies and systems. It is the skill set that enables a person to be a confident digital citizen, to interact and collaborate digitally, to produce work digitally and to be confident in handling data and computational thinking (problem solving).

2. How soon will classroom 'classroom task ideas' be available?

Some 'classroom task ideas' are already included; others will be added during September and built upon steadily thereafter. They will be refreshed as an ongoing process, to ensure the tasks remain relevant.

3. What should schools/settings do from September?

They should familiarise themselves with the DCF, begin to incorporate it into practice and start to develop a vision for its future integration within curriculum reform.

4. When will schools/settings be required to adopt it?

As stated above, from September 2016 schools and settings should familiarise themselves with the DCF and plan for its adoption, including reviewing skills needs, and begin to implement it as understanding and confidence grows.

5. Does the DCF replace ICT or computer science?

No. They remain as previously. The DCF is different to the Programme of Study for ICT, Key Stages 2 to 3.

6. What is Estyn's approach to the DCF?

The DCF is not the same as ICT. However, where schools have tried to be creative and imaginative in taking forward initiatives for the benefit of learners, including drawing on the DCF to develop their practice in ICT, inspectors will approach innovation and flexibility of approach in a positive way.

There is guidance on the inspection of ICT on Estyn's website: www.estyn.gov.wales/document/supplementary-guidance-skills

7. What support will be available to help schools/settings adopt the DCF?

Regional consortia are planning activities to support adoption of the DCF in schools in the Autumn. In addition, a national Professional Learning Offer will be developed in collaboration with the Pioneer Network for 2017.

8. Will a scheme of work become available to implement the DCF?

No. The DCF is the third cross-curricular theme; as such it will not involve linear delivery of skills. Your regional consortium has guidance on this.

9. When will a skills audit tool be available?

An online tool for individuals and schools/settings to self-assess their confidence in being able to deliver the DCF will be available via Learning Wales in September. The aim is to have a skills audit tool developed by the Pioneer Network available later in the Autumn term.

10. Will schools/settings need to buy new equipment to deliver the DCF?

Not necessarily. Schools/settings should work with their local authorities to ensure they have a suitable and sustainable ICT replacement programme in place.

Development of the Digital Competence Framework (DCF)

11. What is digital competence?

- Digital competence is the set of knowledge, skills and attitudes to enable the confident, creative and critical use of technologies and systems in an increasingly digital world.
- Digital competence is a cross-curricular theme and will be the responsibility of all teachers and practitioners to include within their lessons.
- Digital competence is distinct from ICT but they are highly interrelated (particularly in primary education).
- It's likely that there will be some overlap between the DCF and Computer Science, however Digital Pioneers have developed the DCF working on the basis that Coding will primarily feature in Computer Science.

12. Why do we need a DCF?

 The need for a comprehensive Digital Competence Framework was a key recommendation of Professor Graham Donaldson's report, Successful Futures, reflecting a proposal from an independent ICT Review Panel in 2013. The Panel's report to the Welsh Government noted that digital competence is as important in the twenty-first century as literacy and numeracy.

13. How was the DCF developed?

- In June 2015 the then Minister for Education and Skills announced that
 the development of a DCF would be fast-tracked, so as to be available
 from September 2016. Digital Pioneer Schools from across Wales were
 announced in July 2015 and the DCF has been developed by
 teachers/practitioners from those schools, supported by external
 experts and facilitated by Welsh Government officials.
- Rigorous, independent quality assurance and international research have been used to formulate the DCF and build the framework on a foundation of best practice and educational research.
- In finalising the DCF that has now been made available, the practitioners from Digital Pioneer Schools took into account views from stakeholders. This included their cluster schools and a range of stakeholders who responded to two questionnaires, as part of wider engagement exercises, on previous drafts of the DCF, as well as feedback from a Quality Assurance Group chaired by Professor Tom Crick and groups such as the National Digital Learning Council.

14. How is the DCF structured?

- The DCF has been structured using year-on-year progression statements. This is similar to the structure of the National Literacy and Numeracy Framework (LNF).
- As with the LNF, the DCF is designed to recognise that not all children
 progress in the same way. The statements provide clarity about learner
 progress for planning purposes but should be used within the context
 that learners will progress further or faster in some aspects than in
 others and that learning will often span several years.
- As the new curriculum is developed and the concept of progression reference points is clarified this format will be reviewed.

15. How does the DCF fit in with the Foundation Phase?

 The DCF in its current form has been developed to complement the current curriculum, including Foundation Phase, ensuring that learners develop the basic skills that will be built on as they progress through their education.

16. The DCF will be made available in September 2016 – will this be the final version?

- The DCF available from September 2016 may be subject to refinements, taking account of feedback from schools, other settings, teachers/practitioners and wider stakeholders. It will continue to evolve, not least to reflect changing technologies.
- However, from September 2016 all schools/settings should begin familiarising themselves with the DCF, agreeing their strategic vision for cross-curricular digital competence and considering how to translate this into practice.
- The classroom task ideas that are included as part of the DCF will
 continue to be developed and a second tranche of classroom task
 ideas will be added in January 2017. Classroom task ideas will also
 need to evolve and grow to reflect new technologies and the increasing
 experience and expertise within the digital learning field.

17. Is there an intention to revise the DCF and if so what will the mechanism for this be?

- Now that the DCF has been made available, feedback from teachers/practitioners and schools/settings who are familiarising themselves with it will be collated through the regional consortia. There is also a feedback function built into the online version of the DCF.
- This feedback will be reviewed, initially on a termly basis, by Digital Pioneers supported by regional consortia, independent experts, Estyn and Welsh Government and any appropriate changes will be fed into future iterations of the DCF.

18. Some of the strands of the DCF appear to be quite technical; how will these be delivered across the curriculum?

- The DCF has been designed in line with the principles of *Successful Futures*, which envisages digital competence being integrated as a cross-curriculum responsibility along with literacy and numeracy across the breadth of the new curriculum.
- The DCF includes some examples of classroom task ideas for how the skills can be developed through natural opportunities within the current curriculum. A further tranche of classroom task ideas will be added from January 2017, and Hwb community areas will allow for the sharing of practitioner-created ideas and resources.
- Classroom task ideas will also need to evolve and grow to reflect new technologies and the increasing experience and expertise within the digital learning field.
- It is not intended for all skills to be artificially imposed into all areas of the curriculum.

19. Is the DCF suitable for children with additional learning needs (ALN)?

- The DCF is designed to be for all children of Wales. For learners with additional learning needs, this will incorporate Routes for Learning skills which are the earliest skills that form the foundation for other, higher skills to be developed.
- Routes for Learning seek to view the learner holistically and provide several pathways of possible development, broken down into very small steps (as in A/B/C steps) and individualised for each learner.
- Some of the early stages of digital competence involve the development of more general skills which are necessary developmental steps to using technology appropriately.

20. What role will the Digital Pioneers have after September 2016?

- Digital Pioneers will continue to have a vital function considering feedback, making appropriate revisions to the DCF and developing classroom task ideas.
- Digital Pioneers will also work with the rest of the Pioneer Network supporting the work to embed the DCF in the new curriculum as it develops and developing support for the wider application of the DCF.
- Digital Pioneers will be key players, alongside other Pioneers, the regional consortia, Welsh Government and others, in supporting and encouraging the use of the DCF in schools/settings across Wales.

Application of the DCF

21. As a teacher/practitioner what am I expected to do with the DCF from September 2016, September 2017 and September 2018?

From September 2016

- The DCF is made available to schools and other settings (age 3 to 16+ years).
- Individual practitioners in schools/settings will be responsible for familiarising themselves with the DCF, agreeing with colleagues their strategic vision for cross-curricular digital competence and exploring translating this into practice.
- An important element of the continued development of the DCF will be extending and refreshing the classroom task ideas that link to skills in the Framework. You can share classroom task ideas/materials via the Hwb community areas.
- To assist in developing a cross-curricular strategy, the Pioneer Network, working with the Welsh Government will develop a digital competence audit tool that schools/settings can use to inform planning.
- To support schools and individual practitioners in using the DCF, the Pioneer Network will collaborate to develop a high level Professional Learning Offer by September 2017.
- As you familiarise yourself with the DCF your feedback on the Framework will help inform its future development and refinement. You can provide feedback via a facility within the on-line DCF, or via your regional consortium.

From September 2017

- As individual practitioners and schools/settings develop their familiarity with and use of the DCF, they should continue to provide feedback and classroom task ideas.
- The Pioneer Network continues to collaborate to develop the new curriculum and keep stakeholders engaged in the process and apprised of progress.
- The DCF and Professional Learning Offer will continue to be refined taking account of feedback from teachers/practitioners and other curriculum review programmes of work.

From September 2018

- Individual practitioners and schools/settings will have made good progress in using the DCF in their schools/settings.
- The ambition is for the new curriculum to be available to schools/settings from September 2018 and used to support learning and teaching from September 2021.

 The Pioneer Network, working with regional consortia, will refine and test the Professional Learning Offer which will enable schools/settings to use the DCF across the new curriculum by 2021.

22. I want to embed the DCF into all that I do right away, can I do that?

- While it is not designed specifically with the current curriculum in mind, substantial parts of the DCF do dovetail with the current curriculum
- Teachers/practitioners who feel able to deliver parts of or the entirety of the DCF from when it is available are encouraged to do so.

23. How will the DCF relate to the new curriculum?

 The decision to fast track the development of the DCF allows for it to be fully integrated across the new curriculum as it is designed and developed.

24. How will the DCF relate to the ICT frameworks that each regional consortium has in place?

- The existing regional ICT frameworks support the implementation and delivery of ICT as a subject (statutory up to the age of 14) to ensure skills are appropriately progressed.
- Initially there will be an overlap between the regional ICT frameworks and the DCF. Regional consortia may wish to amend/revise their existing frameworks in light of the DCF over time.

Support and resources

25. What support will schools/settings and teachers/practitioners get to use the DCF?

- The Pioneer Network is currently working to identify the materials that will be helpful in supporting schools and teachers/practitioners to use the DCF. This will include new and pre-existing material. Support will need to be tailored/differentiated depending on where the individual school/setting is on its digital journey.
- Pioneer Schools, working with experts and other schools will use information from skills audits, international research into best practice, local knowledge and experience and other evidence to develop a high level Professional Learning Offer by September 2017. All maintained schools in Wales have access to the Hwb digital learning platform which provides an extensive range of centrally-funded digital tools and resources to support the full application of the DCF.
- Training and support for implementing the new curriculum is being led by the Pioneer Network, working with the regional consortia. While some support is available from September 2016, it is intended that the Professional Learning Offer will be developed in response to teachers'/practitioners' emerging needs post-September 2016, taking account of feedback as they familiarise themselves with the DCF.

26. Will schools/settings be expected to invest in additional physical resources?

- The DCF has been purposefully designed not to refer to specific technology in the skill specifications, and therefore to be deliverable largely within schools'/settings' existing and planned capability.
- To prepare for using the DCF, the main focus of effort will be in relation to development of teachers'/practitioners' digital confidence and competence, and in ideas for integrating the DCF in their teaching, rather than in hardware or software.
- Schools/settings, working with their local authority/regional consortia, should carefully assess whether resources would add significant value to the delivery of the DCF, including reviewing against existing centrally-funded services such as Hwb, before any investment is made.

27. How will my consortium and/or my challenge adviser help me understand the requirements of the DCF?

- This document is part of initial guidance developed by Welsh Government working in partnership with the Digital Pioneers and consortia leads.
- Consortia will run events to raise awareness and understanding of the DCF. Along with challenge advisors, these will help schools/settings

and teachers/practitioners receive a consistent message about the DCF.

28. Will there be a digital lead in my school/setting, and what will their role be?

- It is for schools/settings to take decisions on these matters. However, digital competence is a cross-curricular responsibility, so all practitioners have a responsibility to consider how delivering elements of the DCF could support learning and teaching within their subject areas in the future. As noted by Professor Donaldson in Successful Futures, identifying a lead practitioner could be an effective way of coordinating the integration of the DCF as a cross-curriculum responsibility.
- A lead practitioner could, for example, coordinate identifying and meeting staff development needs and preparing a plan for the implementation of the DCF.
- Carrying out a school infrastructure audit (internet speed and Wi-Fi
 capability) along with a hardware audit, in partnership with the
 consortia, in order to ensure that there is the capability to deliver the
 DCF for all learners is also good practice.

29. I am considering carrying out a skills audit of my staff to help identify the support they might need. Is there one already available that I can use?

 The Welsh Government, in partnership with Digital Pioneers, is developing a self-assessment confidence rating tool for individuals, schools/settings to assess where their development needs are, so they should not feel the need to develop an audit tool of their own. This tool is intended to be available during the autumn term.

Assessment and qualifications

30. How will the DCF be assessed?

- Successful Futures recommends that literacy, numeracy and digital
 competence should be a cross-curricular responsibility for all
 teachers/practitioners and people who work with children and young
 people. This cross-curriculum responsibility will be integrated within the
 new curriculum Areas of Learning and Experience (AoLEs).
- While it is not intended specifically to assess the DCF as a stand-alone component of the curriculum, future assessment arrangements for the new curriculum are being developed by the Curriculum Pioneers.
- As with the LNF, the DCF can be used as a formative assessment tool
 to support teachers to understand a learner's progress, areas of
 strength and next steps for development. There is no requirement for
 schools and individual teachers to use the DCF to make summative
 judgements of learner progress.

31. How does the DCF link with the Welsh Baccalaureate?

- There are clear links between digital competence and the digital literacy listed as an 'Essential and Employability Skill' in the Welsh Baccalaureate.
- Skills developed within the DCF are complementary to those required within the Welsh Baccalaureate.
- Digital skills are assessed within the Welsh Baccalaureate's 'Individual Project' and the 'Enterprise and Employability Challenge'.

32. Will the ICT and Computing GCSEs change as a result of the DCF?

- As the independent regulator of qualifications in Wales, it is for Qualifications Wales (QW) to determine future revisions to qualifications.
- QW is taking a strategic, sector-by-sector approach to reviewing the provision of qualifications in Wales.
 - In doing so one of its main aims is to ensure that in key sectors of Wales' economy, there are qualification that are meeting the needs of learners and providing clear and effective pathways to further study and employment.
 - As part of this approach, QW will be conducting a review of qualifications in the IT sector, with the initial evidence gathering and analysis phase launching later this year and findings reported in summer 2017.
- So as not to pre-empt the outcomes of the review of qualifications provision in the IT sector, QW has decided to leave the current ICT GCSE and A level in place for the time being. The reform of GCSE and A level Computer Science qualifications is continuing as planned. The

new A level was introduced for first teaching in September 2015 and the new GCSE will be introduced for first teaching from September 2017 (support for which will be available from the WJEC and regional consortia).

Inspection

33. Will Estyn be inspecting with regard to the DCF, and if so how will this be reported?

- It is important to emphasise that digital competence is a cross-curricular responsibility and all teachers/practitioners should consider how delivering elements of the DCF could support learning and teaching within their subjects in the future.
- The DCF is different to the Programme of Study for Information and Communication Technology (ICT), Key Stages 2 to 3.
- Estyn already inspects standards and the quality of provision in ICT and this will continue. Currently, inspectors only report on standards where they are judged to be particularly strong or weak. From September 2016, Estyn will always report on standards in ICT in quality indicator 1.1. There is guidance on the inspection of ICT on Estyn's website: www.estyn.gov.wales/document/supplementary-guidance-skills.
- Where schools are creative and imaginative in taking forward initiatives for the benefit of learners, including drawing on the DCF to develop their practice, Estyn inspectors will approach innovation and flexibility of approach in a positive way.

For further information

Contact: curriculumforwales@wales.gsi.gov.uk

Further updates will be communicated through a range of channels including Dysg, Learning Wales, Hwb and regional consortia networks.