DIGITAL STRATEGY FOR SCHOOLS 2015-2020

ACTION PLAN 2019

Foreword by the Minister



Digital technology is unavoidable in our society today. Developments and new innovations in technology are happening at all levels across the spectrum of education, the business world and in the home and this continues to transform how we interact with each other, how we learn and how we do business. In education, the effective use of digital technologies plays a central role in transforming how we teach, how students learn and how assessment happens in a high-quality 21st century education system

The vision of the Digital Strategy for Schools 2015-2020 is to realise the potential of digital technologies to transform the learning experience of our young people, helping them to become engaged thinkers, active and discerning learners and global citizens with skills to participate fully in society and the economy. All students should be able to reap the benefits of the online interconnected world as an important source of information to create knowledge and problem solve and not just see the internet as merely a source of information to be 'consumed'. Students can gain so much from learning to collaborate and create with their peers and indeed through engagement with other students around the world through online technology. The development of collaborative, analytical, creativity, problem solving skills are critical for our young people in an increasingly digital landscape to support them in their future careers and strengthen their lifelong prospects.

I am committed therefore to continuing with the implementation of the Digital Strategy for Schools and am pleased to publish today the 2019 Digital Strategy Action Plan. The 2019 Action Plan builds on progress made since 2015 in the implementation of the Digital Strategy. All of key priorities identified in the Digital Strategy have either been implemented or are underway. One of those key priorities is the implementation of the Digital Learning Framework which is in its second year of dissemination with teachers continuing to be supported by an intensive CPD programme. This Framework is an important resource in schools and for teachers to help develop critical skills and enhance pedagogical approaches to support student learning.

The Digital Learning Framework complements and supports a range of curricular reforms now underway in both primary and post primary schools including the key skills at Junior Cycle and the recently introduced Computer Science Leaving Certificate Subject. It will encourage more active teaching methodologies across the curriculum and more student engagement and will be used to identify teacher professional development in the area of digital technologies in teaching and learning. In implementing the Digital Learning Framework, schools and teachers are given a structure which will allow them to identify where they are on the journey towards embedding digital technologies in teaching, learning and assessment, and enable them to progress

in that journey. It will continue to be a key resource for schools in the promotion of the use of technologies in Education.

The greater use of digital technologies in education can also of course create challenges for online safety and my Department will continue to ensure that there are extensive training and curricular supports available to assist schools in the development of policies and practices on the safe use of the internet and to promote students' mental, emotional, social and physical wellbeing.

Publication of today's Action Plan supports further implementation of the broader Government Action Plan for Education 2019 "Empowering through Learning" which aims to make the Irish education and training service the best within Europe. I continue to be enthusiastic about what we can achieve and the use of digital technologies will facilitate development of key skills to open many doors for our society into the future.

Joe Mc Hugh TD
Minister for Education and Skills

Digital Strategy for Schools 2015-2020 Progress Dashboard



Digital Learning Framework

Trial complete.
National rollout
underway
supported by CPD
Framework





Digital Learning
Planning Guidelines
Published online for
all schools



scoilnet

Over 19,000 high quality curriculum tagged digital resources available at Scoilnet.ie



Schools Excellence
Fund—Digital

42 Cluster projects underway, some 230

schools, supported by €1m investment Showcase Event May 2019



ICT Infrastructure Grants
-€105m issued to 3,381
schools

Computer Science

– LC subject

phased

introduction



PDST TECHNOLOGY IN EDUCATION

Promoting and supporting the integration of ICT in education

36,891 CPD interactions 2018
Suite of good practice videos/exemplars available on www.pdsttechnologyineducation.ie



Internet safety resources for teachers, parents and children: 2018:

905,606 Visits 1,395,726 Page views

Digital Strategy for Schools 2015-2020, Enhancing Teaching, Learning and Assessment (Implementation)

2019 Digital Strategy Action Plan

1.0 Introduction:

Ireland is now one of the fastest growing economies in Europe with over 2 million people at work and unemployment at 6.1%. The internet and digital technologies are transforming every part of our lives. There is an abundance of information, advanced technology, greater convenience in daily lives and keener international competition. This change in society increases the demand for computer and technology related skills. Ireland needs to be a front runner in meeting those demands. It must ensure that its young people possess the necessary skills to navigate living in the 21st Century. The Digital Strategy for Schools focuses on the schools' sector and sets out a clear vision that is focussed on realising the potential of digital technologies to transform the learning experiences of students by helping them become engaged thinkers, active learners, knowledge constructors and global citizens who participate fully in society and the economy.

The Strategy sets out a programme of work for the 2015-2020 period and is organised around four themes:

- Teaching, Learning and Assessment Using ICT
- Teacher Professional Learning
- Leadership, Research and Policy
- ICT Infrastructure

Implementation of the Strategy is currently underway and substantial progress has been made to date. The 2018 Digital Strategy Action Plan (third year of implementation) is available on the Department's website. It includes a detailed progress report on the implementation of the Strategy during the period 2016 and 2017. Progress on the implementation of the 2018 Digital Strategy Action Plan is set out at section 2.0 below.

The Implementation Advisory Group (IAG), established in 2017, continues to drive the implementation of the Strategy. Under its guidance, the 2018 Action Plan was successfully implemented and the 2019 Action Plan has been developed. The 2019 Action Plan builds on progress made since 2016. It reiterates the goals and objectives set out in the Digital Strategy and contains some 55 actions and sub actions to be achieved by the end of 2019 (Section 3.0 and Table 1 below)

1.1 Indicators of Success:

The following Indicators of Success will continue to be used to identify key milestones on this important journey. The actions implemented in 2016, 2017 and 2018 and those targeted for delivery in 2019 will assist in achieving these success indicators.

- 1. All functions of teaching and learning in schools are fully digitally supported and enabled, with full engagement across the entire school community
- 2. All subject specifications support a constructivist approach to teaching and learning and reflect the role of digital technologies in facilitating this approach
- 3. Students have a digital portfolio with self-created content across the entire curriculum and a recognised capacity in discerning the ethical use of digital technologies

- 4. All schools can demonstrate effective or highly effective practice as described in the Digital Learning Framework, underpinned by a whole-school approach to e-planning
- 5. All teachers have upskilled and embedded digital technologies in their teaching practice
- 6. Our Providers of Initial Teacher Education have become recognised leaders in innovative learning for quality outcomes
- 7. An increasing number of schools participating in clusters each year leading innovation in the use of digital technologies that can be disseminated to all schools
- 8. Good protocols are in place to assist schools in managing their digital resources with robust relationship with industry, business and higher education institutions
- 9. All schools have high speed broadband connectivity
- 10. Schools use a variety of ICT equipment and delivery models for supporting their learning activities with demonstrable cost effectiveness and shared learning

2.0 Review of the progress in the implementation of the 2018 Digital Strategy Action Plan:

This is the second annual published review on the progress made in the implementation of the Digital Strategy for Schools 2015-2020. The 2018 Action Plan set out 80 actions to be achieved by the Department and its lead partners during 2018. Of those 75 were delivered representing a 92% completion rate. Some of those actions will be further built on in 2019. Substantial progress has been made in implementing the remaining five actions and they will be carried forward into the 2019 Digital Strategy Action Plan for further development/completion. Those actions include the following:

- Action 3.1 The continued roll out of the Physical Education App to support the implementation of the Senior Cycle Physical Education Framework in participating phase 1 schools
- Actions 16.2/16.3 Improve broadband services for primary schools. This is an ongoing process delivered through the current Broadband Access Programme and through close liaison with the Department of Communications, Climate Change and Environment (DCCAE) in the context of the National Broadband/State Intervention Plan
- Action 17.2 Plan to audit ICT Infrastructure Grant scheme compliance and expenditure to date. This
 process will be expanded further in 2019 and has close links to the "conditionality" element of the
 ICT Infrastructure Grant Circular which issued to all schools in Quarter 1 of 2019
- Action 18.1 To review options for the provision of ICT technical support in schools. A working group
 has been established for this purpose and their work is underway

Other ongoing actions include the following:

- the continued development of blended learning programmes and exemplars of effective and highly effective practice using digital technologies in teaching and learning;
- ensuring that clear statements and objectives on the use of digital technologies continue to be included in new curricular and policy initiatives relating to teaching, learning and assessment;
- ensuring that the effective use of digital technologies is embedded in the continuum of teacher education programmes
- The use of Digital Portfolios for assessment purposes

The Department's teacher professional development support services, including the Professional Development Service for Teachers (PDST) and its Technology in Education (TIE) and Team of Advisors, continue to play a lead role in promoting and supporting the embedding of digital technologies in teaching and learning in schools.

A number of project groups, established in 2017 to develop and oversee key projects such as the development of a *Digital Learning Framework* and the updating of the *e-Learning in Your School Planning Resource*, continued with their work throughout 2018

The key achievements for 2018 are set out below and are organized around the four themes of the Digital Strategy for Schools 2015-2020.

2.1 Thematic Overview - Key Achievements in 2018 and continued actions for 2019

Theme 1 - Teaching, Learning and Assessment using ICT:

An important objective of the Digital Strategy, particularly addressed under Theme 1, is to drive the effective application of digital technologies in teaching and learning through curriculum modernisation. To ensure delivery of this objective, clear statements and objectives on the use of digital technologies were included in all curriculum development in 2018 including Leaving Cert Art; Economics:, Applied Mathematics and the Primary Mathematics Curriculum. Such statements and objectives were also included in the Junior Cycle phase 5 subjects that were under development in 2018 including the four Technology subjects, Religious Education, Classics and Jewish Studies. This policy will continue into the future. Other key actions delivered under this Theme are as follows:

Computer Science:

The phased introduction of Computer Science as a Leaving Certificate subject commenced in September 2018. Forty schools are participating in Phase 1. They have offered computer science to their fifth year students from September 2018 and can offer it to their 5th year cohort in September 2019. Those students will be examined in Leaving Certificate Computer Science (LCCS) in the 2020 and 2021 Leaving Certificate examinations. All schools can offer LCCS as an optional leaving certificate subject from 2020, with examinations happening from 2022 onwards. As part of the computer science specification, students will learn the practices and principles of computer science, including programming skills, design and development processes and the role of computers in society.

Coding:

In 2017, research was conducted by the National Council for Curriculum and Assessment (NCCA) to explore approaches to coding in an Irish context. This was further expanded in 2018 and will inform the redevelopment of the primary curriculum which is currently underway

In this regard, and as part of Phase 1 of the *Coding in Primary Schools Initiative*, the NCCA worked with 15 schools around the country to find out what they were doing with coding and how they were using it in the

primary curriculum. The NCCA committed to publishing examples of schools' approach and these can be found at https://www.ncca.ie/en/primary/primary-developments/coding-in-primary-schools

Phase 2 of the Initiative, working with 25 schools which have little or no previous experience on coding, is also complete and the NCCA is in the process of analysing feedback and completing the final report on this work which is due for publication in Q2 2019. The purpose of Phase 2 of the schools-based initiative was to work with a network of schools to explore different approaches to integrating coding/computational thinking within the primary curriculum. These approaches were developed from findings from the work with schools who participated in Phase 1 of the initiative and findings from the international curriculum investigation. This work will help NCCA to clarify how, to what extent, for what purpose, and where, computational thinking and coding could be integrated into a redeveloped primary curriculum. The NCCA has also published a short research paper on computational thinking and a comparison of coding curricula in six jurisdictions. Those reports are contained at https://www.ncca.ie/media/3937/ncca-coding-in-primary-schools-initiative-research-paper-on-computational-thinking-final.pdf and https://www.ncca.ie/media/3545/primary-coding investigation-of-curriculum-policy-on-coding-in-six-jurisdictions.pdf

Digital Learning Framework (DL Framework)

The DL Framework for teachers and school leaders, developed in 2017, was trialed in a cohort of 50 schools during the 2017/2018 school year. The Framework provides a roadmap to help schools manage the transformation of teaching and learning as a result of new digital technologies and it guides schools on how best to embed digital technologies in teaching practices and across all school activities.

This DL Framework promotes high-level student engagement in the teaching and learning process whereby students become engaged thinkers, active and discerning learners and where digital interactions are respectful and positive and conducive to wellbeing. The Framework promotes collaboration between teachers and supports collaborative planning within and across subjects and levels and in those areas such as literacy, numeracy and STEM requiring a cross-curricular focus. Importantly it will allow schools to evaluate their progress and measure where they stand against benchmarks of effective and highly effective practice in the use of digital technologies in teaching and learning.

Feedback from schools participating in the trial was very positive. An evaluation of the Framework, conducted by the Educational Research Institute (ERC) ran parallel to the trial. A review of the DL Framework was subsequently conducted to incorporate findings from the ERC Evaluation and the process to disseminate the DL Framework to all schools commenced in September 2018. The dissemination was led by the national support service for teachers, the PDST, and in particular it's Digital Technology/ Technology in Education Teams.

The dissemination of the DL Framework is supported by a range of blended Continuous Professional Development (CPD) provision including face-to-face seminars (for school leader and nominated teacher) accessed via regional Education Centres, webinars, online courses and direct school support. The Framework was also accompanied by the dissemination of **Digital Learning Planning Guidelines** - a comprehensive set of guidelines for schools on the implementation of the Digital Learning Framework including the development of a Digital Learning Plan, an important aspect of the ICT Grant distribution to schools.

A Website <u>www.dlplanning.ie</u> was also developed by the PDST providing access to an interactive version of the Digital Learning Framework with good practice videos linked to the various standards as well as a range of further resources to support schools.

To date, representatives of some 50% of primary and post primary schools have attended the national seminars. The current issues relating to teacher supply were reported as a difficulty for schools in securing

substitute teachers and in some cases presented a challenge for schools to release teachers to attend the CPD seminars. However the differentiated models of CPD, as outlined above, continues to be made available to schools. More face-to-face seminars are being delivered in 2019 and will continue into the forthcoming school year. It is important to understand that the embedding of the Digital Learning Framework in schools will take a period of time and ongoing CPD in this area will continue to be an be an important feature of the work of the PDST.

In the latter part of 2018 the Educational Research Centre (ERC) was engaged by the Department to conduct a three year longitudinal study of the implementation of the DL Framework. This study has now commenced.

Digital Portfolios

To support assessment reform the use of digital portfolios continues to be encouraged in schools. ePortfolios, are currently being used in a variety of subject/programme settings by both primary and post primary schools to support learning and to facilitate the use of effective formative assessment practices. At present, there are 60 post-primary schools engaged in the PDST **formative assessment using digital portfolios** initiative which is a 15-month programme of work involving collective face-to-face professional learning seminars and direct school support by PDST advisors.

In addition some 270 schools presently participate in the PDST-GAA Future Leaders Programme for Transition Year Programme with each student having their own digital portfolio space. The number of schools involved will rise to 400 in 2019-2020. The "PDST/GAA Future Leaders Transition Year Programme" is a cross-curricular programme comprising a series of modules, each assessed using digital portfolios. The Programme is designed to develop student leadership skills and encourages ownership over one's learning by taking responsibility for personal learning and performance.

In February 2018 the Junior Cycle Support Team (JCT) and NCCA hosted a joint conference to disseminate the findings of two EU projects (Co-Lab and ATS 2020) and to showcase the work of schools involved in the projects in exploring how portfolios support student reflection and student collaboration. At the conference a broad range of 96 educational partners were in attendance with representatives of the following: NCCA, JCT, Teachers and students from the pilot schools involved in both projects, School Management Bodies, NIPT, PDST, CSL, NBSS, DES, Inspectorate, Teaching Council, Initial Teacher Education providers (3rd level) and a cross-section of school leaders. The video link below provides an overview of the conference: https://www.youtube.com/watch?v=GicF44tjkks&feature=youtu.be.

An online course supporting the use of digital portfolios in teaching, learning and assessment will be redesigned in 2019 to take account of the learnings from the EU projects. A supporting webinar is scheduled for delivery in 2019 and will be made available for all schools through the PDST website.

In 2018, in the area of Formative Assessment, the NCCA committed to publish samples of student junior cycle work which would show how digital technologies can be used for formative assessment purposes across a variety of junior cycle subjects and short courses.

The following are links to some such sample publications:

Modern Foreign Language (MF)L: Students introducing themselves: https://www.curriculumonline.ie/getmedia/af6df7bc-3b15-402f-8f09-4de8d5fe51f2/JC MFL French 1yr Ex2 Introductions.pdf

MFL: Students using a blog:

https://www.curriculumonline.ie/getmedia/619952cf-cf9a-4fd1-b300-34a0d8c3cfd5/JC MFL German 1yr Ex1 Pets.pdf

https://www.curriculumonline.ie/getmedia/00825cc6-74a3-4f9d-987d-f4af954741fe/JC MFL German 1yr Ex3 Pets.pdf

MFL: Italian introductions: https://www.curriculumonline.ie/getmedia/53d8f7d1-99cb-45c2-ae05-7b68ae14feca/JC MFL Italian 1yr Ex1 Message.pdf

There are also some other samples available to registered teachers in the area of Science, English and MFL.

Digital Content and Scoilnet

The Digital Strategy recognises that schools need to have access to a wide range of relevant, high-quality digital content, which serves to support learning at all stages of our education system and the use of open educational resources is important in this context. In this regard the continued promotion of Scoilnet as the Department's official Education Portal is an ongoing priority and work in this area continued throughout 2018. There are currently in excess of 19,000 curriculum tagged open education resources (i.e. free resources) available through the website. The aim of the Scoilnet service is to develop digital literacy and confidence in using technology in teaching, learning and assessment through the provision and use of those open resources. Teachers in Ireland can share their own curriculum-tagged resources through the website and create their own personal "learning paths" through the use of quality assured digital content and resources sourced from the portal.

Scoilnet statistical information for 2018

	2018	2017
Page views	2.03m	1.50m
Resources clicked	580,700	366,365
Resources added	2,166	2,119
Sessions (Period of time a	587,661	396,295
user is engaged with the		
website)		

Key statistics for 2018 show a significant increase across measurable data over that of 2017 (page views up over 35%, resources accessed up over 50% and sessions up 48%). The number of resources added remains constant at over 2,000 which includes resources freely shared by teachers.

Strategic partnerships

To assist further in the continued development of digital content, a protocol to guide the development of strategic partnership(s) with relevant cultural, educational and/or sporting bodies was also put in place in 2018 and will be used by the Department's Support Services to identify potential partners with a view to adapting relevant digital content into useful learning and teaching resources for schools. The following are examples of two such partnerships that commenced in 2018:

RTE Archives Partnership: This is a collaborative partnership involving RTÉ with the JCT and PDST to create

digital resources that are tagged to the History curriculum at Primary, Junior Cycle and Senior Cycle level. The outputs from the partnership are displayed through Scoilnet, the DES portal for teachers and schools, both in the form of collections and as stand-alone learning objects. The RTÉ Archives project is a pilot collaboration which may form the basis for further collaborations between RTÉ and the DES support services.

Great Hunger Exhibition: The PDST-Technology in Education Team collaborated with Quinnipiac University in the USA to create curriculum-tagged digital resources to support the acclaimed art collection that exhibited in Dublin, Skibbereen and Derry. The exhibition, curated and owned by the American university, featured over 40 pieces of art associated with the Great Famine and the PDST-Technology in Education Team (through Scoilnet) created digital information/learning activities for each piece to support teachers and schools visiting the exhibition or using the art to learn about the famine.

Theme 2. Teacher Professional Learning: Education is key to preparing our children and young people to participate fully in a technology driven world and teachers are central to this process. A full Theme in the Digital Strategy is targeted at teacher professional learning to ensure that teachers are equipped with the knowledge, skills and confidence to effectively embed digital technologies in their teaching practice.

Initial Teacher Education

The role of Initial Teacher Education (ITE) is fundamental to the development of digital competency in the teaching profession so that the overriding aim of the Strategy, that teaching, learning and assessment are enhanced through the use of digital technologies, is realised. The Teaching Council has responsibility for the accreditation of ITE Programmes and ICT is a mandatory element of the Teaching Council document "Initial Teacher Education: Criteria and Guidelines for Programme Providers.

However in order to ensure that ITE Providers are kept abreast of policy development in the area of digital technologies in teaching and learning, the Department, together with the Teaching Council, hosted a Digital Strategy Awareness Raising Event for ITE Providers highlighting in particular the Digital Learning Framework for Schools. This Event took place in October 2018 and included representation from all the ITE programme providers and the Higher Education Authority (HEA). The primary purpose of the Event was to highlight the importance for ITE Providers to ensure that all programmes of education, for pre-service teachers, facilitates the development of their skills, knowledge and confidence to embed digital technologies in their teaching practice. A secondary aim of this event was to facilitate collaboration between the various Providers on the implementation of this requirement. Some fifteen Providers attended the event and collaborated and shared their current policies and practices and discussed what additional actions could be taken in this area to ensure the necessary skills development. A consultative group has been established to further drive the implementation of this action.

On a more general and broader level, the **National Forum for the Enhancement of Teaching and Learning** provides general support to staff and HEI's in enhancement of teaching and learning including digital. Various National Forum projects and reviews that have been forthcoming in recent years address specifically the digital aspect of teaching and learning in higher education. The Forum ran a number of events throughout 2018 to promote and support digital teaching and learning in the HEIs.

In May 2018, the Forum published a guide to *Developing Enabling Policies for Digital Teaching and Learning* in higher education which provides a stepped approach to developing an enabling policy for digital teaching and learning. A Review of the Existing Higher Education Policy Landscape for Digital Teaching and Learning in Ireland was published in June 2018.

In addition, the compact agreements between the HEIs and Higher Education Authority (HEA) to give effect to the 2018-2020 Systems Performance Framework (SPF) were being finalised at end 2018. Objective 5 of the SPF relates to consistent improvement in the quality of the learning environment which includes policies on digital teaching and learning. A high level target to deliver on this Objective is that all HEI's will have "...in place policies for digital teaching and learning by 2019".

The National Induction Programme, which supports the induction of newly qualified teachers into the teaching profession in Ireland, also continues to provide guidance on the effective use of digital technologies in teaching, learning and assessment.

Continuous Professional Development (CPD)

To ensure that serving teachers are equipped with the necessary skills, the effective use of digital technologies in teaching, learning and assessment continues to be an integral part of **all** Department funded CPD programmes and supports. In this regard, and to ensure consistency of approach, a set of ICT indicators is used at both the design and quality assurance stages of CPD development across all the support services.

The Professional Development Service for Teachers (PDST) is the country's largest single support service offering professional learning opportunities to teachers and school leaders in a range of pedagogical, curricular and educational areas. Its dedicated Technology in Education Team, together with its ICT Team of Advisors, continue to design, develop and deliver a comprehensive range of blended learning CPD programmes, including face-to-face and online courses, workshops, webinars, good practice videos and direct school support.

The following table shows teacher CPD in the area of digital technologies for 2018:

Embedding ICT in Teaching, Learning and Assessment				
Focus of CPD	Term	No. of teacher *CPD interactions		
Local and national courses (offered through the Education Centre network)	Jan - Dec 2018	3266		
Digital Learning Framework and Digital Strategy Awareness Raising Seminars	Jan - Dec 2018	2032		
Term Time Online Courses	Jan - Dec 2018	2352		
Online Summer Courses (5 Days)	Summer 2018	14565		
School Support	Jan - Dec 2018	3416		
Face to face summer course (5 Days)	Summer 2018	11260		

^{*}CPD units provided are the number of interactions a teacher support service has with teachers. Interactions range from a two hour session in a local education centre to a suite of sessions on a particular issue or in the case of college based events a full post graduate course. The actual number of teachers is not recorded in these figures.

In some areas the CPD interactions appear to have declined in comparison to 2017. This is because priority was afforded to the dissemination of the DL Framework and the delivery of national seminars for this purpose.

The 2019 Digital Strategy Action Plan will provide for the continuing development and provision of differentiated models of CPD to support the embedding of digital technologies in teaching, learning and assessment. Quality assured exemplars of effective and highly effective practices and case studies, aligned with the Digital Learning Framework, will be further developed. The Digital Learning Framework will also

help schools and individual teachers to identify, plan and address, their CPD needs in the area of digital technologies and enable them to take ownership of their own development and improvement in this area. The Support Services can further target its CPD provision to meet those specified needs.

Theme 3. Leadership, Research and Policy:

Some key 2018 actions for delivery under this Theme include promoting a culture of innovation in schools; school- industry partnerships; and the promotion of the safe and ethical use of the internet:

Schools Excellence Fund- Digital and STEM

The three year School Excellence Fund (Digital and STEM) Programme was specifically developed to promote a culture of innovation in schools and was launched in the latter part of 2018. The primary aim of the Programme is to demonstrate, through the active participation of schools and students themselves, how the innovative use of digital technologies can enhance teaching and learning and how it can promote collaboration between students/schools leading to greater student engagement and enhanced learner experience and outcomes.

Some 42 clusters, comprising circa 230 schools were selected in 2018 to implement projects developed by themselves and supported by €1m funding, together with significant CPD support from the PDST. The range of activities currently underway in these projects include, robotics, coding, the use of digital portfolios, STEM projects and involve primary and post-primary schools working together in collaboration. Some third level colleges and industry are also involved in some of the projects. The following are a sample of the projects that are being funded:

- A cluster of six post-primary schools in Dublin, Cork, and Westmeath will work together on a project that will use drones to record topology of the local areas surrounding the schools. This footage will then be used to inform core elements of the Junior and Senior Cycle Geography curricula.
- A mixed cluster of nine primary and post-primary schools are partnering with Trinity College and UCD
 to work on the maths curricula in the transition from primary to post-primary. The cluster will
 investigate activities using IZAK9 cubes, Geogebra and other technologies to engage students in
 collaborative learning, problem solving, hypothesis development and testing. Digital portfolios will
 be used to track progress and outcomes.
- Five primary schools, including four DEIS schools, will collaborate on a project which will use technology to facilitate pupils working together and sharing knowledge and information, enhancing their communication skills. There are different projects for defined class groups, beginning at introductory level for infant classes, up to a website project for 6th class, with newspaper/book project, photo gallery project, among others, in between.
- A cluster of six Gaelscoileanna, in Dublin and Kildare will work on a project which aims to improve Computational Thinking Skills through the use of Robotic materials, with a particular emphasis on expanding the range of resources available in Irish.
- A cluster of midlands post-primary schools', project will use industry leading training in MoJo (mobile journalism) video content creation to enhance teaching, learning and digital literacy among educators and students in the cluster schools.
- A DEIS post-primary school will work with four primary schools (three DEIS and one special school) on a coding project
- Four Kerry primary schools will promote STEM and develop STEM spaces in the participating schools, with significant industry support from Liebherr, a major local manufacturing company. The project

will use a wide range of projects to support this, including programming drones, with a pilot's license to be awarded by Kerry Airport to any pupil who can fly a specified route.

- A cluster comprising five primary schools and one DEIS post-primary school from Kilkenny, Tipperary and Laois will conduct an outreach programme to local primary schools to increase the uptake, particularly of girls, in the JC Short Course in Coding. The overall aim of the project is to increase the numbers pursuing the suite of STEM subjects.
- A cluster of one post-primary school and five primary schools in Offaly, intends to build on the legacy of Birr town as a former site of a Weather station, and the tradition of engineering innovation and space exploration through Birr Castle and the Lofar project (TCD). The project aims to create a two-way active learning environment through the establishment of a STE(A)M hub for all schools in the midlands. Outcomes include learner-built weather stations in each school, plant communicators, and GPS tracking systems.

An external Evaluation of the Programme is running parallel to its implementation and the outcome of the Evaluation will inform how the learning from the Programme can be transferred across the wider system.

Engagement with Industry

Engagement with representative bodies of Industry to develop a framework to assist schools to work with industry to form relevant educational linkages is another key action under Theme 3. To avoid duplication and to have a single engagement platform, this Action has been subsumed in to the STEM Education Policy Statement and Implementation Plan. A Department of Education and Skills, Department of Business, Enterprise and Innovation, and Industry sub-group has been established to guide implementation of this Action. Science Foundation Ireland also has an active role. A Framework is currently being developed to provide the basis for schools, both primary and post primary, to form quality, inclusive and relevant educational linkages with business and Industry improving the STEM and digital learning experience for all students.

Internet Safety

In the area of Internet Safety, there are extensive training and curricular supports and resources available to assist schools in the development of policies and practices on the safe use of the internet and on the prevention of bullying and harassment using the internet. The resources and supports provided continue to evolve and respond to emerging needs.

The Digital Strategy provides for the promotion of the responsible and safe use of the internet. The actions under this Theme are also feeding into the *Government Action Plan for Online Safety 2018-2019* which is currently being implemented under the guidance of a Sponsors Group chaired by the Department of Education and Skills. Recognising that online safety is not the responsibility of any one Department, the Government Action Plan involves a wide range of activities across six key Government Departments as follows:

- Departments of Communications, Climate Action and Environment (DCCAE) leads on structured engagements by Departments with online platforms; and review of the Audio Media Visual Services Directive. It recently announced plans for an Online Safety Act/Online Safety Commissioner.
- Department of Education and Skills (DES) leads on schools policy development; Webwise; support for National Parents Council (primary) helpline
- Department of Justice and Equality (DJE) leads on oversight of hotline.ie; legislative changes to criminal law; liaison with an Garda Síochána on implementation/enforcement issues; and disbursement of EU funding
- Department of Children and Youth Affairs (DCYA) leads on consultative engagement with children and young people, including through Comhairles, and Children First guidance

- Department of Health (D/Health) leads on the development of online mental health tools that augment existing services and implementation of Healthy Ireland
- Department of Business, Enterprise and Innovation (DBEI) leads on oversight of the E-commerce Directive (2000/31/EC) and coordination of the EU Digital Single Market strategy.

The 2018 progress report on the implementation of the Government Action Plan for Online Safety was published in early February 2019 and is available on www.gov.ie/besafeonline.

Webwise.ie is an internet safety initiative, co-funded by the EU and the Department of Education and Skills. It is managed by the PDST and works in close co-operation with all relevant stakeholders at European, Regional and local level. It promotes the autonomous, effective and safer use of the internet by young people through a sustained information and awareness strategy targeting school leaders, teachers, parents and children themselves with consistent and relevant messages. It continues to be updated to reflect new and emerging technologies that impact on internet safety. The information and resources can be accessed directly from Webwise at https://www.webwise.ie or through the single access point www.besafeonline.ie Key Resources available through Webwise include:

- ➤ Webwise Youth Hub launched in September 2018 to provide practical information and advice for young people on key issues, popular apps and platforms and details of ongoing youth work and campaigns.
- ➤ Webwise Parents Online Hub this resource was developed by Webwise to give parents support and advice on a range of topics including cyberbullying, sexting, social media, screen time, online pornography and continued to be updated in 2018 as new technology emerged. The hub features expert advice from professionals and offers useful conversation starters and tips on managing internet safety in the home. To support the online hub, Webwise also launched Parents' Guide to a Better Internet. This booklet enable parents to talk with confidence to their children about the benefits and risks online such as cyberbullying, screen time, sexting, social media and online pornography.
- ➤ Webwise Teachers Online Hub provides free education resources and advice for teachers. In 2018 a range of new material was developed to include material to help teachers plan internet safety campaigns and lessons through the academic year and also to access information and advice on how teachers can protect themselves online.

In September 2018, Webwise published a free internet safety resource which can be used by primary and post primary schools to host their own internet safety talks for parents. The talks can be accessed at https://www.webwise.ie/internet-safety-talks-for-parents. The information included in the presentations covers key topics for parents including social media, screen time, cyber-bullying, image-sharing and features expert advice and support. The talks are supported by a script and best-practice guidelines and are supported by the National Parents Council (primary).

The Webwise Team actively participate in European-level events and in the organisation of regional and local events for Safer Internet Day. Its most recent resource, developed in 2018 to coincide with Safer Internet day 2019, "HTLM Heroes: An introduction to the internet" has been awarded the most educative project at the European Media Literacy Awards. The new SPHE Resource is aimed at primary school pupils and contains 8 lessons and is supported by 3 animations which centre around two USB characters, Archie and Ruby, who perform catchy internet safety raps. The resource will also forge links between home and school by introducing take home activities and parental engagement.

Both the Department and PDST continues to promote Webwise as a key educational resource for schools and teachers and it is worth noting that visits to the Website has increased by 30% since 2017. The 2018 statistical information is recording close to one million users.

Webwise: some statistical information for 2018 and 2017

	2018	2017	% difference
TOTAL WEB VISITS	905,606	695,401	+30%
TOTAL USERS	904,249	618,529	+46%
TOTAL PAGE VIEWS	1,395,726	921,632	+51%

Smart phones:

To continue to forge the link between home and school and to encourage further collaboration with parents, the Department issued a circular in May 2018 requiring schools to consult with parents, students and teachers on if and how smart phones and other digital devices should be used in schools. The requirement to collaborate will be underpinned in law once the Parents and Students Charter is enacted. This bottom-up approach will ensure all parents, teachers and school communities are involved in development of the smart phone policy in their respective school. It will also mean that parents will be able to adopt a complimentary approach at home to what they know is in place in their child's school, if they wish to do so. Webwise also provided information and best-practice examples to assist schools in implementing policies in this area. In 2018, the DES provided the National Parents Council (primary) with funding of €30,420 for the provision of training sessions on anti-bullying including cyberbullying.

Awareness raising on internet/online safety will continue throughout 2019 and the Webwise team will continue to provide teachers, schools, parents/guardians and young people with information, advice and tools to promote safer, more responsible use of the internet. The Department will continue to collaborate with other Departments and stakeholders to ensure that our children can conduct their on-line lives in a safe and secure manner.

Theme 4. ICT Infrastructure:

The priorities under this Theme relate to broadband connectivity, infrastructural grants, technical support and maintenance, purchasing and procurement.

Schools Broadband

Under the **Schools Broadband Programme**, funded and managed by the Department of Educations and Skills, with backbone services provided by HEAnet and a 24 hour helpdesk support by the PDST (Technology in Education) Team, all recognised primary and post-primary schools are provided with broadband connectivity. During the period 2016 − 2018 the Department provided some €41m towards the provision of Broadband services to schools representing an annual investment of some €14m. This funding is separate to the €210m ICT Infrastructural Grant for schools which underpins the implementation of the Digital Strategy for Schools.

For the post-primary element of the Broadband Programme, 100 Mbp/s + symmetrical services are provided to all post-primary schools in the country, and some 58 special schools.

The Primary Programme is based on available industry provision, and the best quality connectivity to all schools in line with the technical solutions available in the market and financial constraints, is provided. Some 1,400 primary schools are currently on download speeds of 30Mbps or greater (the baseline download speed required under the current National Broadband Plan) – with many on speeds greatly in excess of that. This is a significant improvement over recent years, given that less than 100 primary schools were on those speeds in 2012. Further schools are likely to be upgraded to those speeds in 2019 and beyond, through EIR's 300K Rural Deployment commitment.

It is important to note that where broadband infrastructure is upgraded across the country, and where this upgrade will facilitate faster speeds to a school, every effort is made to ensure that the school can avail of this upgrade as soon as possible, either with their existing provider, or through a change to another provider having regard to contract and regulatory parameters applying.

The need to improve broadband connectivity to primary schools is recognised in the Digital Strategy for Schools 2015-2020 and an interdepartmental working group has been established to determine how best to provide enhanced broadband connectivity to primary schools in collaboration with the Department of Communications, Climate Action and Environment (DCCAE) in the context of the National Broadband Plan and the Intervention Strategy and proposed industry provision. The Government recently announced its plans for the provision of broadband services to the areas identified in its Intervention Plan which includes upwards of 700 primary schools.

ICT Infrastructure:

The implementation of the Digital Strategy for School is underpinned by a €210 capital investment Programme for the upgrade of ICT Infrastructure. This infrastructural grant is allocated through a standard lump-sum and additional per-capita sums based on the size of the school. Funding must in the main be used for the purchase of ICT equipment, including teaching/student computing devices, projectors, cloud-based tools and applications/resources, and learning platforms. The outlay of the funding should align with the school's Digital Learning Plan with due regard to the Digital Learning Framework.

In early 2017 the first tranche of this funding, €30m, issued to schools and a further €30m issued in the first quarter of 2018. An additional €45m of this funding issued to schools in the first Quarter of 2019 in respect of the current school year.

Future grant allocations will include an element of conditionality of funding to be based on evidence from schools of the embedding of digital technologies in teaching and learning. The process to implement this is ongoing at the moment.

A Framework of Providers was put in place in 2017 to facilitate schools with the procurement and purchase of ICT equipment.

On its website, https://www.pdsttechnologyineducation.ie/en/Technology/itsecurity/, the PDST (Technology in Education) Team has made available to schools an updated range of technical advice, material and guidance on a range of issues such as Cloud based Tools/Applications; Webhosting/Bloggs; Computing Devices/Tablets/BOYD; Network/Wireless Networking; IT security and Technical Support.

The Department is aware however that Technical Support is of a particular challenge for schools and accordingly an expert group has been established for this purpose and options for enhanced technical support will be a priority consideration for 2019.

3.0 2019 Digital Strategy Action Plan:

Table 1 below sets out a very detailed suite of actions for delivery in 2019 that will further implement the Digital Strategy for Schools 2015-2020 and will build on progress since 2016. It is expected that an end of year review on progress for the implementation of this Action Plan will be published in the first quarter of 2020. Some key actions to be delivered in 2019 include the following:

To embed digital learning objectives within education policy and curriculum, clear statements on the
use of digital technologies will continue to be included in all of the subject specifications developed
in 2019.

- The National Council for Curriculum and Assessment (NCCA) will continue its consideration of how coding might be best integrated into the primary school curriculum and will continue to work with a network of schools in exploring different approaches in this regard.
- A coding initiative with Education Centres will be implements in 2019 targeting 42 primary schools and supported by 21 digital technology tutors
- The use of digital portfolios by students and teachers will be further promoted particularly targeting primary schools
- The dissemination of the Digital Learning Framework, which commenced in September 2018, will
 continue in 2019. This will include 200 national seminars and regional community of practices, online
 CPD including 4 webinars and direct school support
- A longitudinal study on the impact of the Digital Learning Framework will continue in 2019. This will be conducted by the ERC.
- The effective use of digital technologies will continue to be an integral part of the design and development of all Department funded Continuous Professional Development (CPD) Programmes and supports for 2019
- Quality assured exemplars of effective and highly effective practice and case studies will be further developed in 2019 (these will align with the Digital Learning Framework).
- Enhance the access to CPD for teachers through extending CPD delivery models to include online and blended learning programmes. Some 7 webinars, 34 online courses, 25 good practice videos, face to face courses including 105 regional clusters and direct school support are planned for delivery in 2019.
- Extensive CPD support for 32 Digital and 10 STEM clusters participating in the Schools Excellence Fund Digital Initiative will be provided in 2019. An event, to showcase some of the project work and to share learning and experiences, will be organised by the Department for participating schools during 2019.
- Open Educational Resources will continue to be made available to schools and the Scoilnet Team will increase collaboration with potential new contributors including UCD maths, UCC Geography, UCD medicine and Science & Technology in Action.
- The IAG, through consultation with the Teaching Council, will facilitate the establishment of an ITE consultative group to agree steps to help ensure that the key messages of the Digital Strategy/DL Framework can be contained in ITE programmes.
- The Department will continue to engage with Industry and education stakeholders to finalise a
 Framework which will provide the basis for schools, both primary and post primary, to form quality,
 inclusive and relevant educational linkages with business and Industry improving the STEM and digital
 learning experience for all students.
- The safe and responsible use of the internet will be further promoted in 2019 through awareness-raising actions and programmes. The Department will continue to chair the Sponsors Group that has been established to guide the implementation of the Government Online Safety Action Plan.
- Continue to improve broadband services in schools
- Consider technical support solutions for schools
- Provide ICT infrastructure grants to schools; review compliance and expenditure to date; review criteria for 2019/2020
- Consider future policy direction to build on the digital strategy for schools for the period 2021-2026.

Table 1: 2019 DIGITAL STRATEGY ACTION PLAN TABLE OF ACTIONS

NUMBER	ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
Theme 1	Teaching, Learning and Assessment using ICT: Teachers and students will use digital technology effectively, whereby learners are actively involved in a process of determining meaning and knowledge for themselves, leading to enhanced outcomes. This will be achieved through: • The introduction of Computer Science at Leaving Certificate level and the promotion of coding short course at Junior Cycle • Digital learning objectives embedded in the development of all new subject specification for primary and post primary curriculum/syllabus • The provision of continuing professional development (CPD) programmes for teachers and school leaders • The provision of a Digital Learning Framework for Teachers and Schools, in tandem with a comprehensive range of classroom practice exemplars, underpinned by constructivist pedagogical principles, to guide the embedding of digital technologies in teaching, learning and assessment.		
1	To embed digital learning objectives within future education policy and curriculum reform initiatives; Include clear statements and objectives on the use of ICT and the development of digital learning competencies, in future curriculum specifications and policy initiatives relating to learning and teaching.		
1.1	Clear statements on the use of digital technologies will be included in all of the subject specifications which are to be developed in 2019: • Leaving Certificate Classical Studies; • Leaving Certificate Applied (LCA) Module Descriptors; • Leaving Certificate Chinese, Polish, Lithuanian and Portuguese • Leaving Certificate Physics, Chemistry and Biology. • Primary Language Curriculum • Draft overview of a redeveloped Primary Curriculum	Q4	DES/NCCA

	1.2	coding into the wider primary school curriculum the following actions will take place in 2019: • Complete Phase 2 of the Coding in Primary Schools Initiative (Q1) • Publish a report on the findings from the initiative (Q2) • Publish examples of the schools' work with coding and computational thinking (Q3)	Q3	NCCA
2		To provide opportunities for students to pursue in depth ICT study in the senior cycle.		
	2.1	The second year for Phase 1 schools of Computer Science as a Leaving Certificate Subject begins in September 2019	Q3	NCCA; PDST; DES
3		To promote technology supported assessment		
	3.1	Completion and roll out of Physical Education App to support the implementation of the Senior Cycle Physical Education Framework in participating phase 1 schools - the app will allow students to track their development and progress	Q3	NCCA
	3.2	Publish samples of student junior cycle work which will show how digital technologies can be used for formative assessment purposes across a variety of junior cycle subjects and short courses	Ongoing	NCCA
4		To promote the use of digital portfolios for primary and post primary students		
	4.1	Redesign post-primary digital portfolio online course to reflect emerging trends and new research	Q3	PDST/PDST-TIE;
	4.2	Extend the Portfolio initiative 'formative assessment using digital portfolio" to a further cohort of post-primary schools (at least 35)	Q4	PDST/PDST-TIE
	4.3	Develop a Webinar for post primary level on how teachers can effectively engage in formative assessment through the use of digital portfolios	Q4	PDST/PDST-TIE
	4.4	Deliver an online course at primary level on the use of digital portfolios	Q4	PDST/PDST-TIE
	4.5	Implement a digital portfolio initiative at primary level exploring "formative assessment using digital portfolios " in a cohort of 24 schools	Q4	PDST/PDST-TIE

	4.6	Expand further a digital portfolio for all new future leaders schools (c120)	Q3	PDST/PDST-TIE
5		To ensure that schools can engage effectively in whole- school planning and school self-evaluation to support provision for the use of digital technologies in teaching, learning and assessment		
	5.1	Implement the second year of the Plan for the dissemination of the DLF to schools including the delivery of a further c200 nationwide seminars, 70 regional CoP, provision of a suite of webinars (4), online CPD and direct school support.	Q3	PDST/PDST-TIE
	5.2	Facilitate communities of practice (CoP) or school leaders/other nominated teachers (regional digital clusters) to consider and plan for best practices in the implementation of the DLF	Q4	PDST/PDST-TIE
	5.3	Commence the longitudinal study of the Digital Learning Framework and its implementation in schools	Q1	ERC/DES; PDST/PDST-TIE
6		Extend the scope and reach of students' learning beyond the walls of the classroom; bring remote learning into the classroom (link also to action 12.1 - clustering initiative)		
	6.1	Continue to support the development of the Gaeltacht e- hub initiative to facilitate interschool collaboration on the use of digital technologies to broaden subject choice for learners	Q4	DES
	6.2	Promote where appropriate the use of the e-twinning platform to showcase school projects and to foster collaboration between schools link to Action 12	Q4	PDST/PDST-TIE
	6.3	Engage with Global Cities Initiative (Bloomberg Foundation) to increase participation of schools in the programme for the 2019/2020 school year.	Q4	PDST/PDST-TIE
	6.4	School's Excellence Fund (Digital) Initiative— promotes the clustering of schools on a local, regional and national basis to collaborate on innovative projects demonstrating the use of digital technologies in teaching and learning see Action 12	Q4	DES; PDST/PDST.TIE
7		To provide access to Open Educational Resources		
	7.1	Continue to promote Scoilnet and associated sites/services as the national reference point for schools for high quality digital content	Q4	PDST/PDST-TIE; Support Services
	7.2	Increase collaboration with potential new contributors including UCD Maths, UCC Geography, UCD medicine and Science & Technology in Action	Q4	PDST/PDST-TIE;
	7.3	Extend the availability of audio content to teachers through the creation of podcasts to support languages	Q4	PDST/PDST-TIE;

	7.4	Support the delivery of the STEM Education Policy Statement and Implementation Plan as detailed in Pillar 3, objective 2 in the STEM Education Implementation Plan 2017-2019	Q3	PDST/PDST-TIE
8		To support schools in their engagement with parents/guardians with regard to the use of digital technologies to support teaching, learning and assessment and responsible use of the internet - linked to action 13.2		
	8.1	Develop further case studies that illustrate models of effective and highly effective practice that have good communication between schools and parents	Q4	PDST/PDST-TIE; Support Services
The	eme 2	Teacher Professional Learning: Teachers will be equipped with the knowledge, skills and confidence to use digital technologies effectively in teaching and learning in their classrooms: • Department-funded continuous professional development programmes for teachers (all of which are underpinned by constructivist pedagogical principles) will have the use of digital technologies embedded in their design, development and delivery. • Guidance, including examples of good practice, on the effective and ethical use of digital technologies in enhancing teaching, learning and assessment are used by teachers • Professional communities of practice (CoP), engaged in the innovative use of digital technologies, supported within schools and other teacher/principal networks • The Teaching Council's policies will promote the use of digital technologies across the continuum of teacher education.		
9		To embed digital technology across the continuum of teacher education - ensure that digital technologies is embedded in the planning, design and delivery of all teacher education courses and programmes.		
	9.1	Ensure that the effective use of digital technologies continues to be embedded in the design and development of all Department funded CPD programmes	Q4	PDST/PDST-TIE; DES
	9.2	Facilitate the establishment of a consultative group comprising representatives of ITE colleges and the IAG to develop a guidance framework for ITE Providers on how the key messages of the Digital Strategy/ DLF can be contained in ITE programmes	Q1	DES
	9.3	Continue to liaise with Teaching Council to determine how best the vision of the Digital Strategy and the use of digital technologies for teaching and learning can be embedded into the continuum of teacher education	Q1 ongoing	PDST/PDST-TIE; DES

10		To provide a flexible, differentiated model of Continuing Professional Development (CPD) to support embedding of digital technologies in teaching and learning and assessment		
	10.1	Enhance the access to CPD for teachers through extending CPD delivery formats to include online and blended learning (e.g. National Seminars; webinars; good practice videos; online courses, regional based face to face courses; sustained school support; clustering model of CPD)	Q3	PDST/PDST-TIE;
		 200 national seminars planned for 2019 7 Webinars planned for 2019 25 good practice videos planned for 2019 34 online courses planned for 2019 9 Primary Summer Courses (20 hours) planned for 2019 4 post-primary term-time Courses planned for 2019 105 regional clusters (70 primary and 35 post-primary) planned for 2019 direct school support 		
11		To continue to provide information to teachers on innovative ways to use digital technology more actively in their own teaching.		
	11.1	Make available an additional 25 "effective/highly effective practice videos" for teaching and learning and leadership and management aligned with the statement of practices contained in the DLF	Q3	PDST/PDST-TIE; Support Services
	11.2	Provide advice and guidance to teachers on new technologies relevant to teaching, learning and assessment	Q3	PDST/PDST-TIE; Support Services
	11.3	Provide guidance and advice to schools on how digital technologies can be appropriately embedded in teaching, learning and assessment for learners with special educational needs	Q4	NCSE; Support Services
	11.4	Computational thinking and creativity across the continuum. In partnership with Mary Immaculate College, Limerick deliver the First Lego League Junior curriculum to 11 DEIS primary schools and host a showcase event in Q2	Q2	PDST/PDST TIE
	11.5	Facilitate teachers to share resources through Scoilnet and other appropriate means (link to action 5.3)	Q4	PDST/PDST-TIE; Support Services
	11.6	Implement a coding initiative with Education Centres to extend coding to new schools (42 schools will be targeted in 2019 and supported by 21 digital technology tutors	Q4	PDST/PDST-TIE
	11.7	Promote innovation in Irish schools through a variety of projects/initiatives including – FÍS film project (extend to	Q4	PDST/PDST-TIE

		PP), School Digital Champion, F1 in schools, Robotics, Coolest Projects, BT Young Scientist projects etc.		
		coolest Projects, BY Touring Scientist projects etc.		
	11.8	Continue to support the School Digital Champion	Q4	DCCAE, DES,
		Programme and promote it among post-primary schools,		PDST/ PDST-TIE
The	me 3	Leadership, Research and Policy:		
		Informed by research and guided by national priorities,		
		schools will engage with innovation and collaboration on		
		the effective use of digital technologies in teaching,		
		learning and assessment:		
		Proposals developed to encourage collaboration and innevation on the offective use of digital technologies in		
		innovation on the effective use of digital technologies in the learning environment		
		Provision of ongoing updated guidance, planning		
		resources and related supports for the school		
		communities with regard to the effective, safe and ethical		
		use of digital technologies.		
12		Support the Schools Excellence Fund Digital Initiative		
				2207/220
	12.1	PDST advisors to support the 32 Digital and 10 STEM	Q4	PDST/PDST-TIE
		clusters participating in the Initiative through tailored CPD support and online facilitation		
	12.2	Facilitate a show case event to display school projects and	Q2	DES;
		encourage collaboration	α	PDST/PDST-TIE
		J		ŕ
	12.3	Commence an external evaluation of the scheme and	Q4	DES;
		produce an interim report on progress		PDST/ PDST-TIE
13		To promote responsible and ethical use of the internet and		
		related technologies.		
	13.1	Continue awareness-raising actions and programmes,	Q4	PDST/PDST-TIE;
		through Webwise and other appropriate channels, which	~	DES
		promote responsible and ethical use of the internet in close		
		cooperation with all relevant stakeholders at European,		
		regional and local level (including other Department's:		
		DCCAE/Justice & Equality/Children and Youth Affairs) –		
	13.2	ongoing process. Continue to provide parents/guardians, students and	Q4	PDST/PDST-TIE
	13.2	teachers with information, advice and tools to promote	Q -	T D31/1 D31-11L
		safer, more responsible and more effective use of the		
		internet – ongoing process.		
	13.3	Develop an Safer Internet Day awards programme to	Q2	PDST/PDST-TIE
		encourage schools participation in the international Safer		
		Internet Day		
14		To provide strong leaderships within the Department to		
		oversee and regularly review the Strategy		
	14.1	Publish a review of progress on the implementation of the	Q2	DES
	14.1	2018 Digital Strategy Action Plan and develop a 2019 Digital	QΖ	DLS
		Strategy Action Plan		

Identify steps required for a future policy to build on the digital strategy for schools for the period 2021 -2026 To enhance ICT capacity and awareness in the education system in partnership with industry Promote industry participation in the SEF Digital initiative Develop a framework in relation to STEM partnerships between Business/Industry and Schools to include an agreed set of mutually beneficial guidelines in relation to engagement (linked to Action 9.1of the Departments 2019 Action Plan for Education)	Q4 Q1	DES DES DES DES./DBEI/SFI
Promote industry participation in the SEF Digital initiative Develop a framework in relation to STEM partnerships between Business/Industry and Schools to include an agreed set of mutually beneficial guidelines in relation to engagement (linked to Action 9.1of the Departments 2019 Action Plan for Education)	Q1	
Develop a framework in relation to STEM partnerships between Business/Industry and Schools to include an agreed set of mutually beneficial guidelines in relation to engagement (linked to Action 9.1of the Departments 2019 Action Plan for Education)	Q1	
between Business/Industry and Schools to include an agreed set of mutually beneficial guidelines in relation to engagement (linked to Action 9.1of the Departments 2019 Action Plan for Education)		DES./DBEI/SFI
All schools will have enhanced ICT infrastructure to enable them to maximise the potential of digital technologies in teaching, learning and assessment. This will be achieved by: • Improved connectivity for primary schools and continued provision of high speed broadband to post primary schools • The implementation of a grant scheme for the purchase of digital equipment by schools • The provision of guidance and advice relating to the procurement and purchase of equipment and services		
Support the use of digital technologies in schools through improved broadband services (in collaboration with the Department of Communications, Climate Action and Environment), grants for ICT equipment and advice and support materials		
Under the existing Schools Broadband Access Scheme, continue to improve broadband services to primary schools where available – target of upgrades to 300 additional schools in 2019	Q4	DES, PDST-TIE
In collaboration with DCCAE and IDG recommend options to provide enhanced broadband services to primary schools	Q4	DES, PDST-TIE
Maintain support on the current 100M/bits/sec Programme for Post-Primary Scheme working with DCCAE and HEAnet to ensure it remains fit for purpose	Q4	DES
Continue to support the Schools Broadband Programme through the service desk, content filtering, security and anti-virus control	Q4	PDST-TIE
To provide funding for school ICT infrastructure.		
Issue the ICT Grant Circular to schools for the 2018/2019 school year and continue with the roll out of the €210 ICT infrastructure grant (the third tranche of this funding to issue to schools in Q1 of 2019)	Q1	DES
	ICT Infrastructure: All schools will have enhanced ICT infrastructure to enable them to maximise the potential of digital technologies in teaching, learning and assessment. This will be achieved by: • Improved connectivity for primary schools and continued provision of high speed broadband to post primary schools • The implementation of a grant scheme for the purchase of digital equipment by schools • The provision of guidance and advice relating to the procurement and purchase of equipment and services Support the use of digital technologies in schools through improved broadband services (in collaboration with the Department of Communications, Climate Action and Environment), grants for ICT equipment and advice and support materials Under the existing Schools Broadband Access Scheme, continue to improve broadband services to primary schools where available − target of upgrades to 300 additional schools in 2019 In collaboration with DCCAE and IDG recommend options to provide enhanced broadband services to primary schools Maintain support on the current 100M/bits/sec Programme for Post-Primary Scheme working with DCCAE and HEAnet to ensure it remains fit for purpose Continue to support the Schools Broadband Programme through the service desk, content filtering, security and anti-virus control To provide funding for school ICT infrastructure.	Action Plan for Education) ICT Infrastructure: All schools will have enhanced ICT infrastructure to enable them to maximise the potential of digital technologies in teaching, learning and assessment. This will be achieved by: Improved connectivity for primary schools and continued provision of high speed broadband to post primary schools The implementation of a grant scheme for the purchase of digital equipment by schools The provision of guidance and advice relating to the procurement and purchase of equipment and services Support the use of digital technologies in schools through improved broadband services (in collaboration with the Department of Communications, Climate Action and Environment), grants for ICT equipment and advice and support materials Under the existing Schools Broadband Access Scheme, continue to improve broadband services to primary schools where available — target of upgrades to 300 additional schools in 2019 In collaboration with DCCAE and IDG recommend options to provide enhanced broadband services to primary schools Maintain support on the current 100M/bits/sec Programme for Post-Primary Scheme working with DCCAE and HEAnet to ensure it remains fit for purpose Continue to support the Schools Broadband Programme through the service desk, content filtering, security and anti-virus control To provide funding for school ICT infrastructure. Issue the ICT Grant Circular to schools for the 2018/2019 school year and continue with the roll out of the €210 ICT infrastructure grant (the third tranche of this funding to

	17.2	Process applications for funding under the "conditionality" element of the ICT Grant Circular		
	17.3	Conduct audit of a representative sample of schools to review compliance with the terms of the ICT Grant circular since 2017	Q3-Q4	DES, PDST-TIE
18		To review options for the provision of ICT technical support in schools		
	18.1	Produce Working Group Report with recommendations for the provision of ICT technical support in schools	Q2	DES
19		Ensure clear and concise advice is available to schools in relation to procurement		
	19.1	Identify OGP Frameworks with potential for direct drawdown mechanism that could be made available to schools similar to the Desktop/Laptops that was put in place in 2017 (e.g. iPad/MAC Framework, Chromebook, Android Devices FW).	Q4	DES; OGP; PDST-TIE
	19.2	Work with the relevant state bodies to ensure that schools are aware of such Frameworks and drawdown mechanisms	Q4	DES; SPU; ETBI;OGP; PDST-TIE

List of Acronyms and Abbreviations

CPD Continuous Professional Development

COP Community of Practice

DBEI Department of Business, Enterprise and Innovation

DCCAE Department of Communication, Climate Action & Environment

DES Department of Education & Skills

DLF Digital Learning Framework

DLPG Digital Learning Planning Guidelines

ERC Education Research Centre

HEA Higher Education Authority

HEI Higher Education Institute

IAG Implementation Advisory Group

ICT Information, Communication, Technology

ITE Initial Teacher Education

JCT Junior Cycle for Teachers

LCA Leaving Certificate Applied

NCCA National Council for Curriculum and Assessment

NCSE National Council for Special Education

OGP Office of Government Procurement

PDST Professional Development Service for Teachers

PDSTTIE Professional Development Service for Teachers-Technology in Education

SID Safer Internet Day

SFI Science Foundation Ireland

SPHE Social, Personal, Health Education

STEM Science, Technology, Engineering, Mathematics