DIGITAL STRATEGY FOR SCHOOLS 2015-2020

ACTION PLAN 2018

Foreword by the Minister

There is no doubt but that digital technology is revolutionising the way our young people access information and will no doubt underpin to a large degree the careers they are likely to have in the future. Ensuring that our education system responds to these changes is key to achieving our overall ambition to make Ireland's education system the best in Europe by 2026.

Today we are launching the Digital Strategy Action Plan 2018, the second published annual action plan centering on the implementation of the *Digital Strategy for Schools 2015-2020, Enhancing Teaching, Learning & Assessment.*

The Digital Strategy for Schools 2015-2020 sets out the vision for the embedding of digital technologies in schools to realise the potential of digital technologies to enhance teaching, learning and assessment so that Ireland's young people become engaged thinkers, active learners, knowledge constructors and global citizens able to participate fully in society and the economy. Making this ambition a reality requires the targeted and innovative use of technology to enrich teaching, learning and assessment.

Substantial progress has already been made in implementing the overall Digital Strategy for Schools. The 2018 Digital Strategy Action Plan builds on progress made in 2017. It reiterates the goals and objectives set out in the Digital Strategy for Schools 2015-2020 and contains over 80 actions/sub-actions to be achieved by the end of 2018. It will be followed by annual action plans in 2019, 2020.

Publication of today's plan is a key action under the government's Action Plan for Education, which aims to make the Irish education and training service the best in Europe within a decade. Fully embracing the potential of digital technologies in teaching and learning is a key part of becoming the best education system in Europe.

Richard Bruton TD,
Minister for Education and Skills

Digital Strategy for Schools 2015-2020
Progress Dashboard

Digital Learning Framework Published - Trial underway in 50 schools.

Digital Learning Planning Guidelines Published online for all schools

Full roll out September 2018.
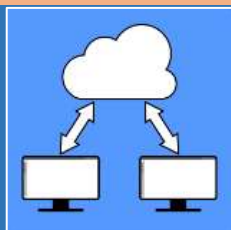
scoilnet **Over 18,000 high quality curriculum tagged digital resources available at Scoilnet.ie**
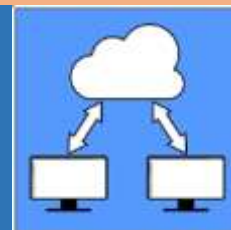
Schools Excellence Fund—Digital

32 Cluster projects, comprising 190 schools, supported by €1m investment

ICT Infrastructure Grants -€60m issued to 3,381 schools

ICT Infrastructure Grants - €50m to issue for 2018/19 School Year

PDST TECHNOLOGY IN EDUCATION
Promoting and supporting the integration of ICT in education

28,942 CPD interactions 2017
Suite of good practice videos/exemplars available on
www.pdsttechnologyineducation.ie

webwise.ie

Internet safety resources for teachers, parents and children: 2017:
695,401 Visits
921,632 Page views

Computer Science introduced as Leaving Certificate subject from September 2018

Schools Broadband Programme –
100Mbp/s to all Post-Primary school 1,100 primary schools connected to high-speed broadband

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

2018 Digital Strategy Action Plan

1.0 Introduction:

Ireland has set itself the ambitious target of having the best education and training service in Europe within a decade. To achieve this our system must be a front-runner in embracing digital technologies to enhance teaching, learning and assessment. The *Digital Strategy for Schools 2015-2020, Enhancing Teaching, Learning and Assessment* sets out the vision for the embedding of digital technologies in Irish Schools to;

"Realise the potential of digital technologies to enhance teaching, learning and assessment so that Ireland's young people become engaged thinkers, active learners, knowledge constructors and global citizens to participate fully in society and the economy"

The implementation of the Digital Strategy supports Goal 1 (Objective 1.5) of the Department's overall *Action Plan for Education 2016-2019* which provides for the increased use of digital technologies in teaching, learning and assessment so that learners are equipped with the necessary skills to meet the challenges of a rapidly changing society and working place. The Digital Strategy for Schools is aligned with the Department's overall Statement of Strategy including the introduction of new curricula and approaches to teaching and learning. It has clear links with other Department strategies including the Literacy and Numeracy Strategy, the National Skills Strategy, the Framework for Junior Cycle, the ICT Skills Action Plan and the STEM Education Policy Statement. It is also aligned with the National Digital Strategy of the Department of Communications, Climate Action and Environment.

An Implementation Advisory Group (IAG) was established in 2017 to guide the implementation of the Strategy and to drive forward reforms in how technology is used and taught in the classroom. Under the guidance of this Group, a Digital Strategy Action Plan will be published for each year of the Strategy. The first Digital Strategy Action Plan was published in June 2017. Progress on the implementation of the 2017 Digital Strategy Action Plan is set out below at no.2.0.

The 2018 Digital Strategy Action Plan builds on progress made in 2017. It reiterates the goals and objectives set out in the *Digital Strategy for Schools 2015-2020* and contains over 80 actions and sub-actions to be achieved before the end of 2018 (see no 3.0 below):

1.1 Indicators of Success:

In 2017 the following 10 indicators of what medium to long term success will look like were set out. These indicators will continue to be used to identify key milestones on this important journey. The actions implemented in 2017 and targeted for delivery in 2018 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 learning model and reflect the role of digital technologies in facilitating this model

3. All 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 embed 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 2017 Digital Strategy Action Plan:

The 2017 Digital Strategy Action Plan was developed around the four themes of the Digital Strategy 2015-2020 and this is the format carried into the 2018 Action Plan. The four themes are as follows:

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

Summary progress on the implementation of the 2017 Digital Strategy Action Plan is set out in the following Table:

No of sub actions	Achieved	C/F into 2018
120	113	7

In Total, some 120 actions/sub actions were identified for delivery in 2017. Of these 113 were delivered representing a 94% completion rate. Some of these actions are will be further built

on in 2018. The remaining 7 sub actions (relating to technical support and broadband connectivity for primary schools) are carried forward in to the 2018 Digital Strategy Action Plan. There is also a number of ongoing actions that will continue to feature in current and new action plans throughout the period of the implementation of the Digital Strategy for Schools. These 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 provision of improved broadband connectivity for schools.

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

A number of project groups with clear terms of reference were established in 2017 to develop and oversee key projects such as the development of a Digital Learning Framework, the updating of the *e-Learning in Your School Planning Resource* and the provision of improved broadband connectivity for primary schools.

The key achievements for 2017 are set out below and are organized around the four themes of the Digital Strategy for Schools 2015-2020.

2.2 Thematic Overview - Key Achievements in 2017 and continued actions for 2018

Theme 1- Teaching, Learning and Assessment using ICT:
Some of the key achievements in 2017 under this Theme, and which will be further built on in 2018, provides for the inclusion of clear statements and objectives on the use of digital technologies in all curricula specifications under development. The key skills in the Framework for Junior Cycle (JC) highlight the use of digital technologies across all subjects. This is a feature of those JC subjects which were finalised in 2017 (Music, Home Economics, Geography and History) and will also be a feature of all future subject specifications.

In 2017, work commenced on the development of a new mathematics curriculum for primary schools which will include computational, flexible and creative thinking skills. Leaving Certificate Computer Science is being introduced on a phased basis and will be available to a number of schools (40) from September 2018 and to all schools from September 2020 onwards. An intensive period of teacher professional development is currently underway to facilitate the introduction of the subject from next September. In 2017, research was conducted by the National Council for Curriculum and Assessment (NCCA) to explore

approaches to coding in an Irish context and this will be further expanded in 2018 and will inform the redevelopment of the primary curriculum.

A **Digital Learning Framework** (DL Framework) for teachers and school leaders was developed in 2017 and is currently being trialled in a cohort of 50 schools (30 primary and 20 post primary). An evaluation of the Framework is running parallel to the trial. The Framework, which is evidence based drawing from local and international research, will guide schools in embedding digital technologies in teaching and learning and leadership and management. It 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. 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.

The response from schools, with over 300 registering their interest to partake in the trial, demonstrates the recognition at school level for the potential for digital technologies to greatly improve learner experience and outcomes. The outcome of the trial and the parallel evaluation will help inform the further development and refinement of the Digital Learning Framework which will be disseminated to all schools for September 2018. The overall response to date from schools participating in the trial has been positive. The following statements are an example of the feedback from schools partaking in the trial of the Digital Learning Framework:

"…The Digital Learning Framework allows us to structure how these technologies are being used across the school. The planning process encouraged us as a staff to be honest in how we reflected on the purpose of digital technologies and how we could use them in an effective and engaging way to support the good teaching that is already present in the school. The planning documents were straightforward and simplified the process of setting in motion action plans that were realistic. The whole process alongside the ICT grant for this year and the coming years has enabled us to introduce new innovative technologies to the school for exciting and engaging lessons and learning for our pupils"
    Digital Technology Coordinating Teacher ….

"…. We found the DLF very useful for focusing in on small, attainable targets in Digital Learning for the year. As a staff we had lots of different ideas for how to develop in this area and the DLF allowed us to prioritise our area of focus while also allowing for a more long-term view to be developed. Of particular benefit to our staff were the sessions with our DLF advisor who provided several CPD sessions in a variety of areas related to digital learning as requested by different members of staff"
    Digital Technology Coordinating Teacher …

And from a school in Galway:

".. Having been fortunate enough to have been chosen as a pilot school to participate in the Digital Learning Framework, I'm delighted to provide feedback after such a wonderful, supportive

programme. The Trial in my opinion was one of the most positive, progressive, productive programmes I have ever seen rolled out in my teaching career. From the very first moment our adviser sat down with us our Digital Learning team were energised, motivated and enthusiastic about implementing the programme. Our advisor broke down each of the planning steps in such a logical and comprehensive manner. Not alone were the DT team supported but each member of staff was included in the training and in the sharing of our DT vision. It all ran so efficiently and effectively.

The support received from our advisor has given us such confidence going forward in building on the progress attained this year.

Overall the DLF trial was of huge benefit to us here in Scoil Iósaif Naofa. The staff and pupils are very appreciative for having been involved in such a positive, enjoyable learning trial".

The Digital Learning Framework is a key component of the **Digital Learning Planning Guidelines** which were developed in 2017. This resource provides comprehensive guidance on how the Digital Learning Framework can support schools in developing a digital learning plan. The guidelines can also be used to support whole school, subject department and individual teacher planning for embedding digital technologies in teaching and learning and in the day-to-day life of schools.

Supports for schools to plan for the progression in the adaptation of the Digital Learning Framework and the accompanying guidelines from September next is a key action for 2018. A longitudinal study on the impact of the Digital Learning Framework will commence in 2018 and will run for a minimum of three years.

ePortfolios are currently being used in a variety of subject/programme settings by post primary schools to facilitate the use of effective formative assessment practices. The use of ePortfolios by students and teachers will be further promoted and extended in 2018 informed by the findings of the PDST's ePortfolio evaluation project *"Formative Assessment using ePortfolio in the Transition Year"* (2015-2017) involving 24 post primary schools. Teachers participating in this project reported extended use of ongoing formative assessment and increased levels of confidence in leading the teaching, learning and technical aspects of an ePortfolio systems in their schools. Moreover students were motivated to improve their learning as the formative assessment methods using electronic means, allowed them to showcase their work in a dynamic way and receive feedback from their peers and teachers.

This project has been extended to a further cohort of post primary schools (at least 28) for students following the Leaving Certificate Applied (LCA) and Leaving Certificate Vocational Programme (LCVP). An ePortfolio initiative at primary level is also being developed. The learnings from the *Co-Lab* and *ATS 2020* projects will also be embedded in relevant CPD programmes (the *Co-Lab* and *ATS 2020* are European projects that worked with teachers, students and ITE students to develop models of using ePortfolio to promote and embed key skills such as collaboration, critical thinking and reflection).

The *"PDST/GAA Future Leaders Transition Year (TY) Programme",* comprising a strategic partnership between the GAA and the PDST, will further harness the use of ePortfolios as a tool to enhance teachers' formative assessment practices. The *"PDST/GAA Future Leaders Transition Year Programme"* is a cross-curricular programme comprising of a series of modules, each assessed using ePortfolios. The Programme is designed to develop student

leadership skills and encourages ownership over one's learning by taking responsibility for personal learning and performance.

The continued promotion of **Scoilnet** as the Department's official Education Portal is an ongoing priority and work in this area will continue throughout 2018. The aim of the Scoilnet service is to develop digital literacy and confidence in using technology in teaching, learning and assessment through the provision of curriculum-tagged open education resources (i.e. free 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 2017

	2017	2016
Page views	1.5m	1.9m
Resources clicked	366,365	398,593
Resources added	2,119	3,734
Sessions (a period of time user is engaged with the website)	396,295	484,512

The overall 12 month comparison for 2017 and 2016 shows a drop in the four key statistics. However, the first four months of 2016 saw exceptional traffic due to Scoilnet's engagement with the commemoration of the 1916 centenary. 2017 was a more 'typical" year but usage comparisons for the last six months of 2017 compared with 2016 show an 18% increase for resources clicked and a 28% increase for page views.

Theme 2. Teacher Professional Learning:
The Department understands the strategic need to support teachers in developing their professional practice, knowledge and skills so that they can embed digital technologies more effectively in their practice. A key objective of the Digital Strategy is to embed digital technology across the continuum of teacher education ie Initial Teacher Education (ITE) Induction and continuous professional development.

The Teaching Council has responsibility for the accreditation of Initial Teacher Education Programmes. The Department has met with the Teaching Council regarding the importance of the need for newly qualified teachers to have the skills, knowledge and confidence necessary to use digital technologies for teaching and learning. There is a number of mandatory elements set out in the Teaching Council document "*Initial Teacher Training: Criteria and Guidelines for Programme Providers", Revised Edition 2017"* and ICT is included.

In 2018, the Department will also host an awareness raising event for Initial Teacher Education (ITE) Colleges on the use of digital technologies for teaching, learning and assessment.

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

To ensure that practising teachers are equipped with the knowledge, skills and confidence in this area the effective use of digital technologies in teaching, learning and assessment is an integral part of **all** Department funded continuing professional development (CPD) programmes and supports. In 2017 a set of ICT indicators was developed to be used at both the design and quality assurance stages of CPD development.

One of the key roles of the Professional Development Service for Teachers (Technology in Education) is the provision of CPD on how digital technologies can be embedded in teaching, learning and assessment. The Team continue to design, develop and deliver a comprehensive programme of courses, workshops, on-line resources and courses, good practice videos and a range of other supports and resources for primary and post primary school teachers. The supports can be accessed at www.pdsttechnologyineducation.ie

The following table shows teacher CPD in the area of digital technologies for 2017.

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 2017	4726
Term Time Online courses	Jan – Dec 2017	5,023
Online Summer Courses	Summer 2017	2868
School support	Jan- Dec 2017	4000
Face to face summer course (5 Days)	Summer 2017	14, 625

*CPD units provided are the number of interactions a teacher support service has with teachers. Interactions range from a 2 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.

The 2018 Digital Strategy Action Plan provides 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. In 2017, existing exemplars, which align with the statement of effective/highly effective practice contained in the Digital Learning Framework, have been identified and are highlighted at www.pdsttechnologyineducation.ie

Theme 3. Leadership, Research and Policy:

In 2017 the priority actions under this theme included the establishment of structures to provide oversight of and guidance on the implementation of the Digital Strategy (ie IAG), the

development of proposals to encourage innovation in schools and initiatives to promote internet safety.

In the area of **innovation** the launch of the School Excellence Fund to promote digital technologies was one of the key achievements for the IAG. School Excellence Fund-Digital, announced in the latter part of 2017, will support clusters of schools in working together in really exciting ways on projects related to teaching and learning using digital. All schools were invited to submit an application for consideration for inclusion in the Fund and, while schools were advised to form a cluster prior to making an application, individual applications were also facilitated with a cluster where appropriate.

Summary of Applications received

Clusters

Primary School Clusters	Post-Primary School Clusters	Mixed Clusters	Total
39	30	54	123

Total no. of schools: 588

Individual:

Primary Schools	Post-Primary Schools	Total
51	40	91

The level of interest shown demonstrates the commitment that there is among our educators and school leaders to embrace digital technologies in teaching and learning.

In all 32 clusters have been selected for progression involving over 200 schools. The implementation of the programme will be progressed in 2018, to run for a period of 3 years, and will include the development of an accompanying evaluation framework. Work on selected projects is expected to commence shortly. Each cluster will receive up to €20,000 funding over the course of the programme. Examples of projects include the following:

- The use of drones to record footage 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.
- The use of 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.
- The use of Robotic materials to improve computational thinking skills, with a particular emphasis on expanding the range of resources available in Irish
- A cluster of midlands post-primary schools will use industry leading training in MoJo (mobile journalism) video content creation to enhance teaching, learning and digital literacy among educators and students
- Coding project

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.

An important initiative to highlight is Webwise.ie which was set up by the PDST (Technology in Education) Team and which continues to be updated to reflect new technologies and the changing use of social media. Webwise 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.

Website visits (January-December 2017)

TOTAL WEB VISITS	695,401
TOTAL USERS	618,529
TOTAL PAGE VIEWS	921,632

As part of the Safer Internet Day 2018, the Minister launched a resource called "**Be in Ctrl"** which was developed by the Webwise Team in partnership with An Garda Siochana, which addresses the issue of online sexual coercion and extortion which supports the Social Personal Health Education (SPHE) curriculum. The resource includes information for school leaders, lesson plans and is supported by the Garda School Programme. Teachers adapt the resource depending on their class requirements. This resource is linked to "**Lockers"** a resource also developed by the Webwise Team and which is designed to engage 2nd and 3rd year students on the topic of non-consensual image sharing. Some 90,000 young people took part in the Safer Internet Day 2018 representing an increase of 28% over the previous year.

Webwise support forging the link between home and school through the development of an online parenting hub (launched in 2017). This provides parents with easy access to practical advice and information to help address their concerns about the various issues facing their children in the online environment. The new hub features expert advice from professionals and offers useful conversation starters and tips on managing internet safety in the home. To support the new 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.

Resources ordered 2017:

Resource Name	Number of Orders
MySelfie - Primary	3963
Webwise- primary	669
Up2Us antibullying Kit (PP)	3519
Lockers (PP)	3692

- Total Parent guides distributed in 2017: Approx 20,000
- Webwise events – 10
- Total Number of Youth Ambassadors trained to lead SID campaigns: 80

Awareness raising on internet/on-line safety will continue throughout 2018 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 2017 priority actions under this theme addressed broadband connectivity, infrastructural grants, technical support and maintenance, purchasing and procurement.

Through the Schools Broadband Access Programme the Department provides for the supply of **broadband connectivity** for all recognised primary and post primary schools, and some 98% of schools are included in this scheme. Broadband capacity can vary due to geographical location and local infrastructure. In 2017 almost €15m was spent on the provision of broadband connectivity to schools.

All post-primary schools and some special schools are included in the Department's 100Mb/s High Speed broadband programme. In relation to primary schools, significant improvement has been made in recent years, with the number of primary schools with access to broadband speeds of greater than 30mbs having increased from less than 100 in 2012 to over 1100 in 2017. An additional 400 schools are targeted for upgrade during 2018 with 40 of these upgraded in Quarter 1 of 2018. The Department will continue to review the availability of improved connectivity through infrastructural interventions and upgrade schools where the opportunity arises, within the contractual and budgetary obligations of the programme.

The need to improve broadband connectivity to primary schools is recognised in the Digital Strategy for Schools 2015-2020. In 2017, an interdepartmental working group was established to determine how best to provide enhanced broadband connectivity to primary schools in collaboration with the Department of Communications, Climate Action and Environment in the context of the National Broadband Plan and the Intervention Strategy, and proposed industry provision. The group is expected to report in 2018.

The Department will continue with the rollout of a €210million capital investment to schools (**Infrastructural Grant Scheme).** The first tranche of this funding, €30m, issued to schools during the 2016/2017 school year. Under the Scheme, schools are expected to draw up a Digital Learning Plan using a whole school approach and guided by the Digital Learning Framework. The Plan will outline the vision of the school for the embedding of digital technologies in teaching, learning and assessment and will assist schools in strategically allocating capital funding to deliver on this vision.

The second tranche of this capital investment funding, another €30m, in respect of the current school year, issued to schools in the first quarter of 2018. A review of the ICT Infrastructural Grant Scheme will be conducted in 2018 to ensure compliance by schools with

the terms of the scheme and to review expenditure to date. Future grant schemes will also include an element of conditionality of funding to be based on evidence of the embedding of digital technologies in teaching and learning.

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

An expert group will also be established to review options for the provision of technical support for schools and is expected to report in 2018.

3.0 2018 Digital Strategy Action Plan:

Table 1 below sets out a very detailed suite of actions for delivery in 2018 that will further implement the Digital Strategy for Schools 2015-2020 and will build on progress in 2017. 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 2019 together with a 2019 Digital Strategy Action Plan. Some key actions to be delivered in 2018 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 2018
- Computer Science will be introduced as a Leaving Certificate subject from September 2018 – phased introduction in 40 schools with full roll out in 2020
- 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 work with a network of schools in exploring different approaches in this regard
- The use of digital portfolios by students and teachers will be promoted
- The progressive adaptation of the Digital Learning Framework in all schools with supporting Digital Learning Planning Guidelines will be a key priority for 2018 – an implementation and dissemination plan is currently under development
- A longitudinal study on the impact of the Digital Learning Framework will be commissioned and commenced in 2018
- Awareness raising events for primary and post primary schools leaders on the key messages of the digital strategy including the Digital Learning Framework and the Digital Learning Planning Guidelines will take place from April 2018
- 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 2018
- Quality assured exemplars of effective and highly effective practice and case studies will be further developed in 2018 (these will align with the Digital Learning Framework). Teachers will be facilitated and encouraged to share their own curriculum-tagged resources
- Enhance the access to CPD for teachers through extending CPD delivery models to include online and blended learning programmes

- An awareness raising event for Initial Teacher Education and Higher Education Colleges will take place in 2018 and which will target the use of digital technologies in pre-service teaching education programmes
- The *Schools Excellence Fund initiative – Digital* will be further developed and implemented in 2018. This will be enabled through the clustering project announced by the Minister in the latter part of 2017.
- The Department will continue to engage with Industry and education stakeholders to agree measures to support robust and sustainable partnerships between schools and business/industry
- The safe and responsible use of the internet will be further promoted through awareness-raising actions and programmes. A circular will issue to schools on Smart Phone usage.
- Continue to improve broadband services in schools
- Provide ICT infrastructure grants to schools; review compliance and expenditure to date; review criteria for 2018/2019.
- Scope actions for a review of the Digital Strategy for Schools 2015-2020

NUMBER	ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
Table 1: 2018 DIGITAL STRATEGY ACTION PLAN			
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 2018: • Leaving Certificate Art; • Leaving Certificate Economics • Leaving Certificate Applied Mathematics • Primary Mathematics Curriculum Also the Junior Cycle phase 5 subjects under development in 2018; • Four Technology subjects (Materials Technology/Wood, Technical Graphics, Metalwork, and Technology); • Religious Education; • Classics; • Jewish Studies.	Q4	DES/NCCA

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
	1.2	As part of the consideration on how best to integrate coding into the wider primary school curriculum the following actions will take place in 2018: ● Publish examples of schools' working with coding - phase 1 of research on current approaches on the use of coding in primary schools (Q1); ● Publish short research paper on computational thinking (Q2); ● Publish a comparison of coding curricula in six jurisdictions (Q2); ● Work with a network of schools in exploring different approaches to integrating coding in the primary school curriculum (Q1-Q4)	Q4	NCCA
2		To provide opportunities for students to pursue in depth ICT study in the senior cycle.		
	2.1	The 1st phase of Computer Science as a Leaving Certificate Subject will be introduced in September 2018 - its implementation is overseen by the Computer Science Steering Group - actioned at 14.3 and 43.2 of the Department's 2018 Action Plan for Education.	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 across the 2 years of senior cycle	Q4	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	Q4	NCCA
4		To promote the use of digital portfolios for primary and post primary students		
	4.1	JCT and NCCA host 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 project in exploring how portfolios support student reflection and student collaboration	Q1	NCCA
	4.2	Publish the Report on the findings from the Co-Lab project; the reports will highlight how portfolios were used in primary and post primary schools. It will contain resources that can be used at school level to promote the use of portfolios by students and teachers	Q1	NCCA
	4.3	Publish the report on an E- Portfolio project for Transition Year	Q1	PDST

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
	4.4	Embed the learning from the transition year ePortfolio project, together with those of the Co-Lab and ATS 2020 project, into CPD programmes	Q4	PDST/TIE; Support Services
	4.5	Develop a suite of blended CPD provision (eg Webinars, good practice videos, MOOCs) on the use of digital portfolios by students and teachers	Q4	PDST-TIE; Support Services
	4.6	Develop a project through a pilot "embedding formative assessment in TY using ePortfolios" in a further cohort of schools (at least 28)	Q4	PDST-TIE
	4.7	Develop an ePortfolio initiative at primary level	Q4	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	Complete the trial and evaluation of the Digital learning (DL) Framework for Schools, update the Framework and Digital Learning Planning (DL) Guidelines where appropriate.	Q3	ERC; DES; PDST-TIE
	5.2	Develop and implement a plan for the promotion and dissemination of the DL Framework and the DL Planning Guidelines that is flexible and blended	Q3	PDST-TIE
	5.3	Plan the design, and commission, a longitudinal study (min 3 years) on the impact of the Digital Learning Framework in schools and commence its implementation	Q3	DES; PDST-TIE
	5.4	Modify existing templates used by the Inspectorate to include the need to evaluate the impact of the implementation of the digital strategy for schools on teaching and learning.	Q3	DES
	5.5	Delivery of 8 awareness raising events for primary and post primary school leaders on the key messages of the Digital Strategy including the DL Framework and DL Planning Guidelines to commence from April 2018 and continue into subsequent years	Q2	PDST-TIE

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
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	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	Participate in an international initiative (Global Scholars Programme) that will facilitate co-operation and collaboration between schools, using digital technologies, that will extend learning beyond the walls of the classrooms	Q4	PDST-TIE
7		To provide access to Open Educational Resources.		
	7.1	Complete a protocol to guide the development of strategic partnership with relevant cultural, educational and/or sporting bodies in order to adapt relevant digital content into useful learning and reaching resources for schools	Q2	PDST-TIE; Support Services
	7.2	Identify two new strategic partnerships to be established in 2018 having regard to Protocol and agreed priorities funding and resource requirements	Q4	PDST-TIE; Support Services
	7.3	Support the delivery of the STEM Education Policy Statement and Implementation Plan as detailed under Action 13 of the Department's Action Plan for Education	Q4	PDST-TIE; Support Services
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	identify models of effective/highly effective practice that show good communication between schools and parents/guardians and show case these examples	Q4	PDST-TIE; Support Services

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

NUMBER	ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
Theme 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, engaged win 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 development of all Department funded CPD programmes	Q4	PDST-TIE; DES
9.2	Host awareness raising event for ITE colleges on the use of digital technologies for teaching and learning - this will include the newly developed Digital Learning Framework	Q4	PDST-TIE; DES
9.3	Liaise with the Higher Education Bodies (through HEA and Higher Education Research & policy) on progress made in implementing objective 5 of the HEI's Systems Performance Framework (2018-2020) as it relates to policies for digital teaching and learning	Q4	DES
9.4	Collaborate with the National Forum for the Advancement of Teaching and Learning in Higher Education to determine how best to embed the use of digital technologies across initial teacher education programmes	Q4	PDST-TIE, DES

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
	9.5	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	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 - link also to action 45.2 of the Action Plan for Education 2018		
	10.1	Continue to develop, promote and deliver differentiated CPD training models to embed digital technologies in teaching and learning	Q3	PDST-TIE; Support Services
	10.2	Enhance the access to CPD for teachers through extending CPD delivery formats to include online and blended learning programmes (eg webinars, good practice videos, MOOCs)	Q3	PDST-TIE; Support Services
	10.3	In line with action 45.2 of the 2018 Action Plan for Education contribute to and support the development of the Strategic Policy Framework for CPD with specific reference to the use of digital technologies for teaching, learning and assessment.	Q3	PDST-TIE; Support Services
11		To continue to provide information to teachers on innovative ways to use digital technology more actively in their own teaching.		
	11.1	Produce quality assured exemplars of effective and highly effective practice and case studies, aligned with the Digital Learning Framework, and which supports differentiation and personalisation, in the use of digital technologies in Irish classrooms.	Q3	PDST-TIE; Support Services
	11.2	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
	11.3	Promote and facilitate teachers to share examples of effective and highly effective practice through Scoilnet and the websites of the PDST and other support services.	Q4	PDST-TIE; Support Services
	11.4	Provide guidance to support the establishment of on-line professional communities of practice within/across schools or other teacher networks	Q3	PDST-TIE

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
	11.5	Promote the use of digital technologies by Teacher Professional Networks (TPN's) who are in receipt of funding from the Department.	Q2	DES
	11.6	Strengthen the links between the TPN's and Scoilnet in relation to the development and sharing of resources	Q3	PDST-TIE; DES
	11.7	Promote innovation in Irish schools through a variety of projects/initiatives including – FÍS film project, School Digital Champion, F1 in schools, Robotics, Coolest Projects, BT Young Scientist projects etc.	Q4	PDST-TIE
	11.8	Promote and support FÍS book club and FÍS Film Festival at primary level, in partnership with IADT	Q4	PDST-TIE
	11.9	Plan for the expansion the FIS film project to post-primary level.	Q4	PDST-TIE
	11.1	Continue to support the School Digital Champion Programme and promote it among post-primary schools	Q4	DCCAE, DES, PDST-TIE
Theme 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 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		Scope a proposal to incentivise and facilitate schools in innovation, clustering approaches (enabling schools to collaborate on curriculum and related matters using technology), to maximise the impact of ICT in teaching and learning.		
	12.1	Implement a scheme, as part of the Schools Excellence Fund Initiative, to support the innovative use of digital technologies in Teaching, Learning and Assessment, through school clusters. The scheme will include application, selection, support material, ongoing support, funding and evaluation, development of strategic partnerships with industry, HEI's and other relevant bodies (ongoing process)	Q4	DES; PDST-TIE
	12.2	Develop an Evaluation Framework for the new scheme and commence evaluation	Q3	DES; PDST-TIE

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
13		To promote responsible and ethical use of the internet and related technologies.		
	13.1	Continue awareness-raising actions and programmes, through Webwise and other appropriate channels, which 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) – ongoing process	Q4	PDST-TIE; DES
	13.2	Continue to provide parents/guardians, students and teachers with information, advice and tools to promote safer, more responsible and more effective use of the internet – ongoing process	Q4	PDST-TIE
	13.3	Issue a circular to schools requiring a consultative approach with parents and other stakeholders on the use of smart phones in schools	Q2	DES
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 2017 Digital Strategy Action Plan and develop a 2018 Digital Strategy Action Plan	Q2	DES
	14.2	Publish a review of progress on the implementation of the 2018 Digital Strategy Action Plan and develop a 2019 Digital Strategy Action Plan (Q1 2019)		DES
	14.3	Scope a set of actions for the review of the Digital Strategy for Schools (2015-2020)	Q3	DES
15		To enhance ICT capacity and awareness in the education system in partnership with industry		
	15.1	Engage with industry and education stakeholders to agree measures to support robust and sustainable partnerships (to include digital technologies) between schools and business/industry (this will also link in with 12.1 above - clustering)	Q4	DES

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
Theme 4		**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**		
16		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 advise and support materials		
	16.1	Under the existing Schools Broadband Access Scheme, continue to improve broadband services to primary schools where available - target of upgrades to 400 additional schools	Q4	DES, PDST-TIE
	16.2	Through the interdepartmental working group (WG) - established in 2017, determine the technical connectivity requirements of primary schools having regard to the administrative and teaching needs of schools	Q3	DES
	16.3	The WG will Identify and assess a number of approaches to deliver those requirements, having regard to existing and planned provision by industry, the National Broadband Plan and any other relevant contextual or policy matters, it will provide a cost benefit analysis for each approach and make recommendations	Q3	DES
	16.4	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 – ongoing process	Q4	DES
	16.5	Continue to support the Schools Broadband Programme through the service desk, content filtering, security and anti-virus control – ongoing process	Q4	PDST-TIE
17		To provide funding for school ICT infrastructure.		

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

NUMBER		ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
	17.1	Continue to allocate funding, under the Digital Strategy For Schools 2015- 2020, for the provision of ICT equipment for schools, with the second tranche (€30 million) to be distributed to schools in respect of the 2017/2018 school year	Q1	DES
	17.2	Plan to review ICT Infrastructure Grant scheme compliance and expenditure to date, to include: * Mechanism to gather confirmation that all schools have spent funding in accordance with circular, and have a Digital Plan in place * Survey of random sample schools to gather data on usage of funds, and to receive expenditure reports * School visits undertaken (subset of the random sample schools) to validate survey results, and review expenditure in line with circular and digital learning plan	Q3-Q4	DES, PDST-TIE
	17.3	Define criteria for 2018-2019 ICT Grant Scheme, to include an element of conditionality of funding to be based on evidence of the embedding of digital technologies in teaching, learning and assessment in the school, precise items to be determined. Should include how that evidence can be gathered and validated.	Q3	DES, PDST-TIE
18		To review options for the provision of ICT technical support in schools		
	18.1	Establish an expert group with appropriate expertise to review and scope issues and identify options for consideration	Q2	DES
	18.2	Complete review and produce report and recommendations on technical support options	Q4	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

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NUMBER	ACTIONS AND SUB-ACTIONS	QUARTER	DELIVERED BY
19.2	Work with the Schools Procurement unit, Educational Training Boards and stakeholders to ensure that schools are aware of such Frameworks and drawdown mechanisms.	Q4	DES; SPU; ETBI;OGP; PDST-TIE

Table 1: 2018 DIGITAL STRATEGY ACTION PLAN

List of Acronyms and Abbreviations

CPD	Continuous Professional Development
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
MOOC's	Massive Open On-Line Course (unlimited participation/open access via the Web)
NCCA	National Council for Curriculum and Assessment
NCSE	National Council for Special Education
OGP	Office of Government Procurement
PDST	Professional Development Service for Teachers
PDST.TIE	Professional Development Service for Teachers (Technology in Education)
SID	Safer Internet Day
SPHE	Social, Personal, Health Education
SPU	School's Procurement Unit
STEM	Science, Technology, Engineering, Mathematics
TIE	Technology in Education
TPN	Teacher Professional Network