

Appendices



Case Studies

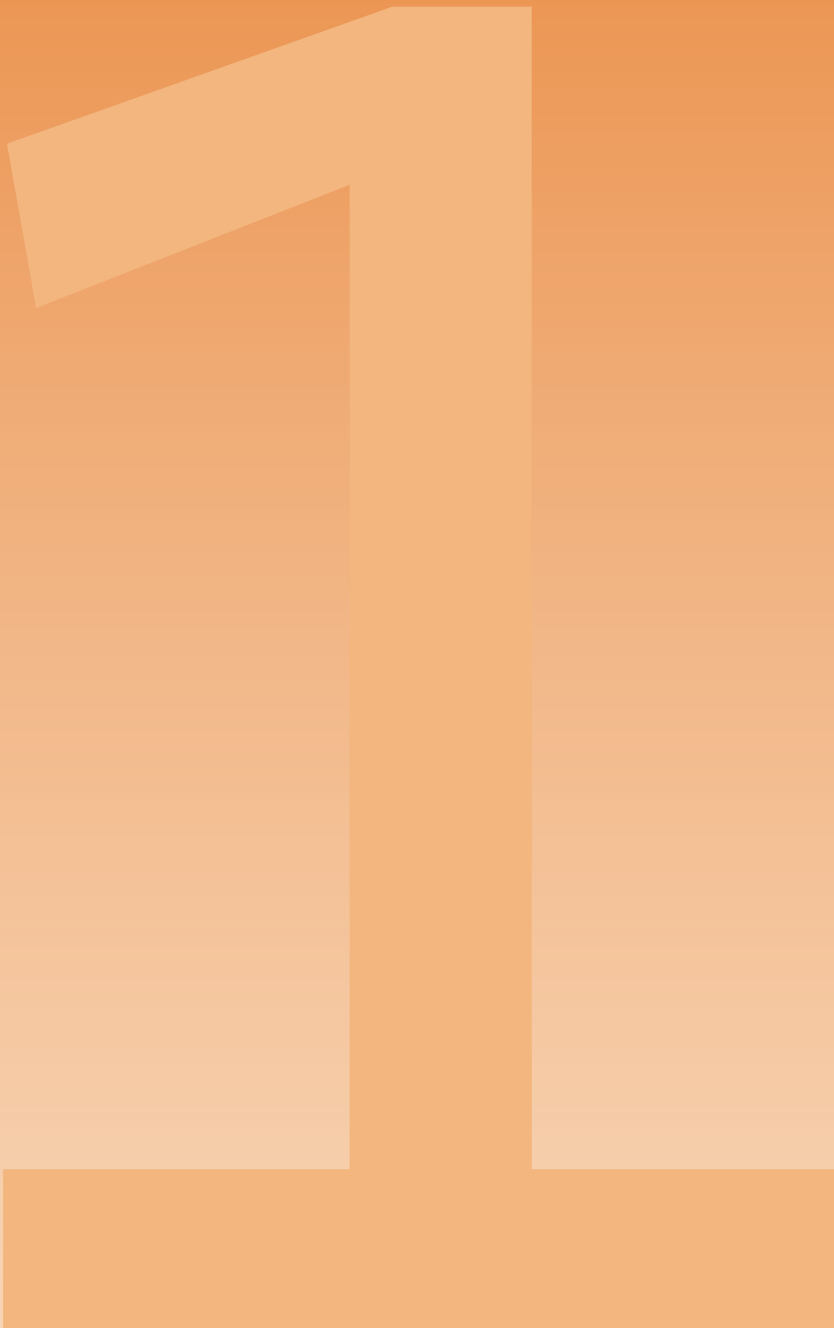
Case Studies

Appendices

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Case Studies





Case Study 1 - Newtown College

Newtown College is a large post-primary school with over 800 students and 75 teachers and support staff, including resource teachers and special needs assistants. The school has a Junior Certificate programme, a Transition Year programme and both Leaving Certificate and Leaving Certificate Applied (LCA) programmes. The school has an increasing number of international students and caters for students with a range of learning disabilities. Currently there are three students with recognised physical disabilities in the school. The original school building was built in the late 1960s and a new building was added in the late 1990s.

Where we were (Review)

Some years ago the principal led the development of an ICT plan, using the NCTE *ICT Planning and Advice for Schools* pack. An ICT plan was completed by a small group of teachers with an interest in ICT.

Three years ago, in its review of posts of responsibility, the school included the position of ICT co-ordinating teacher as one of its posts. An ICT co-ordinating teacher was subsequently appointed. As it happens, the ICT co-ordinating teacher has good technical skills and deals with some of the technical issues in the school.

Following a recent Whole School Evaluation, the school reviewed and updated its school plan. The school took the opportunity to replace its ICT Plan with an e-Learning Plan. The principal and deputy principal met with the ICT co-ordinating teacher and at the next staff meeting they proposed an e-Learning team to lead this process. The e-Learning team consisted of the deputy principal, the ICT co-ordinating teacher, the assistant-principal, a member of staff who uses ICT on a regular basis and a member of staff who, by his own admission, was a reluctant user of ICT. The first action of the e-Learning team was to carry out an audit of ICT usage and provision within the school. They used the e-Learning audit template and the e-Learning Roadmap for this process. The audit revealed the following:

- The school had broadband internet access throughout the school, via a wireless network in the old building and via a cable network in the new building.
- Maintenance was carried out on an ad-hoc basis, with no maintenance contract in place. A company was engaged to deal with serious problems on a case-by-case basis.
- There was a mixture of new and old ICT equipment, which included desktops, laptops, printers, scanners, cameras and data projectors.
- All of the software installed in the computer room was licensed but a full audit of the software in use in the school needed to be carried out.
- There was a computer room in the new building, and about a third of the classrooms had a single desktop machine connected to the school's network, and there were three computers in the library.
- Every room in the new building had access to the school network and was fitted with data projectors and computers.
- A room adjacent to the library had been designated a Special Needs Resource Centre and it had its own ICT equipment and appropriate software and digital resources.
- Most teachers received some ICT professional development, though some of this occurred several years ago. This had been delivered through a combination of NCTE CPD courses, subject association meetings, informal help from colleagues and an outreach initiative with a local multinational pharmaceutical company.

- All teachers indicated that they were able to ‘use computers’ to access the internet and email, perform basic word processing and input student results at the end of each term.
- Some teachers were using ICT as a teaching and learning tool regularly; many were using ICT as a teaching resource infrequently; and a few did not use ICT as either a teaching or learning resource.
- Some teachers had the use of school-owned laptop computers and other teachers use their own laptops.
- Three teachers had been involved in projects which used ICT to communicate with schools in other countries.
- There were timetabling difficulties in accessing the computer room as Transition Year, LCA, LCVP, Technical Graphics and careers classes booked the room for most of the school week.
- The school had a website, which was regularly updated, but it did not contain specific teaching and learning materials.
- The school sent out an electronic newsletter once a term to parents and other subscribers.
- Most of the staff recognised the benefits of using ICT in teaching and learning. The use of ICT in Geography and Science received positive comment in the subject inspection reports as part of the recent Whole School Evaluation.

Where we wanted to get to (Priorities)

The results of this audit were made available to the staff and discussed at a staff meeting led by the principal. The e-Learning Team also presented the e-Learning Roadmap and asked each subject department to use this to identify the statements that best describe the school’s situation in relation to e-Learning. The e-Learning team facilitated this activity and at a subsequent staff meeting the ICT co-ordinating teacher presented the findings. With the help of the e-Learning Roadmap, e-Learning priorities for the school were agreed. The priorities were:

- That students would experience e-Learning activities regularly.
- That the school website would contain content developed by teachers and students and be used as a communicative tool.
- That the school would create and use its own digital content.
- That the school would work towards providing all learning areas with access to a range of ICT equipment, including mobile devices, over the next 5 years.

How we planned to get there (Targets)

The e-Learning team co-ordinated the development of targets and associated tasks, which detailed how and when each of the priorities were to be delivered. These targets and tasks resulted from a series of regular school meetings, including school leadership meetings, school planning meetings, subject department meetings and staff meetings.

The e-Learning Plan Overview was completed and shared with all subject departments. The targets identified included:

- Each subject department to identify where it can include appropriate e-Learning activities in its subject department plans.
- A school website editorial team to be established with student and teacher representatives.
- Each subject department to suggest how it could contribute to a revamped school website which included teaching and learning content and other resources.
- Professional development needs of staff in ICT to be identified and prioritised with a focus on generating digital content.
- Each subject department plan to address the desired learning outcomes of the NCCA ICT framework.

What we did (Tasks)

The tasks included:

- Increase the amount of ICT equipment available, especially laptops and data projectors for each classroom.
- Organise whole-school training through the local education centre following identification of CPD requirements in ICT (both skills-based and pedagogical).
- Establish an e-Learning notice board in the staff room to share e-Learning information, websites, etc.
- Update the school website at least once every two weeks.
- Move ICT productivity courses (i.e., word-processing skills, etc.), from TY and 5th year to 1st year classes.
- Provide information on ICT professional development to all staff at least once a term.
- Put a maintenance contract in place for technical support.

Based on the targets and tasks identified, each subject department completed its own Action Plan for the integration of ICT in the curriculum. The e-Learning team completed Action Plans for the other priorities identified (Professional Development, School Website). The e-Learning team facilitated the completion of the e-Learning Plan.

What we achieved (Review)

The following are some of the achievements reported during the first yearly review of the e-Learning Plan:

- Each subject department reviews its e-Learning practice as part of regular subject department meetings.
- The school website editorial team is in place; the website is updated regularly and contains a growing body of teaching and learning content, information and advice.
- Regular and planned technical support has ensured ICT equipment is available as needed almost all of the time.
- The ICT co-ordinating teacher is spending more time on promoting and supporting e-Learning throughout the school and a smaller proportion of time addressing technical issues.
- There is an increasing amount of digital content developed by teachers and students and shared within a subject department.
- Students are showing a greater interest where e-Learning is part of the classroom practice.
- There is an increased amount of 'informal' professional development taking place among staff.
- Teachers' confidence levels in the integration of ICT have increased.

What next?

The school community will address the following as it moves into its second year of the e-Learning Plan:

- Address the increased demand for ICT professional development for teachers.
- Develop links with other schools, known for their innovative use of e-Learning, and arrange for members of the e-Learning team to visit one or two of these schools.
- Meet with the student council and other groups of students to have greater student involvement in the school e-Learning Plan's design and implementation.
- Investigate how a virtual learning environment (VLE) could enhance learning and teaching.
- Develop a three to five year renewal plan for ICT equipment.
- Review the e-Learning Roadmap to see how the school has progressed in ICT integration and to identify future areas for greater integration of ICT.





Case Study 2 - Killana Primary School

Killana Primary School is a three-teacher school in rural Ireland. The school has 60 pupils in multi-grade classes. The school has access to a shared teacher for special educational needs three days a week. There is no ICT co-ordinating teacher in place and the principal takes responsibility for ICT in the school. There is active support from the parents and local community.

Where we were (Review)

In a review of the Whole School Plan, the staff evaluated how effectively the school was realising its ICT vision in relation to its integration of ICT in learning and teaching. They all agreed there were areas where this could be improved.

Acting as an e-Learning team, the staff decided to conduct an audit of the school's e-Learning practices to see what ICT resources the school had and how effectively they were being used. It was hoped that the process would highlight areas where improvements could be made.

The outcomes of the audit were as follows:

- The school had four desktop computers (four years old) and one laptop computer (two years old) connected to the Schools' Broadband Network.
- The school had not been fully networked and the internet was only available in the senior classes via the Schools' Broadband Network.
- A digital camera, a digital projector and one printer were available in the school.
- A limited number of software packages, generally aimed at literacy and numeracy, were available in the school.
- There was no school website in place.
- e-Learning was identified as being mainly an add-on to classwork and ICT was used primarily as a reward for pupils who had completed classwork.
- The teacher for children with special educational needs typically used the laptop with her pupils for word processing.
- Pupils printed out some of their written work having used word processing software.
- The principal used the internet with the senior classes to find information for project work.
- Generally, the staff were enthusiastic about using ICT but felt they needed to learn more about how ICT could be integrated into their daily work.

Using the e-Learning Roadmap, the teachers decided that the school was mainly at the *Initial* stage of ICT integration. They were aware that parents wanted to see more use of ICT in the school and that some neighbouring schools had achieved Digital Schools status and were progressing well in using ICT for learning and teaching.

Where we wanted to get to (Priorities)

The teachers decided that they wanted the school to progress towards the *e-Enabled* stage as identified in the e-Learning Roadmap, and in some curricular areas they felt they could reach the *e-Confident* stage. In particular, they wanted to:

- Increase the use of ICT in the delivery of the school curriculum.
- Work with parents and the local community to help create an e-Learning culture in the school.
- Have a wide range of appropriate e-Learning resources to support learning.
- Have an active and up-to-date school website.

How we planned to get there (Targets)

The teachers were unsure, initially, how to advance as they felt that, collectively, they lacked knowledge and confidence about how to proceed. One of the teachers took responsibility for conducting some research on what supports were available.

It was clear from the NCTE website that there were a number of courses available through the education centre network which the staff could pursue, and that there were possibilities for staff to take part in workshops to upskill themselves on the use of different types of equipment. Various websites (www.digitalschools.ie, www.webwise.ie and www.scoilnet.ie) also provided an insight into what other primary schools were doing with ICT and how to handle issues of safety on the internet.

A visit to a local school, which received a Digital School award two years previously, provided further encouragement and guidance on how the school might proceed. *The e-Learning Handbook*, planning guidelines (www.ppps.ie), the *NCCA ICT Framework* and other documents were downloaded from the internet for review.

They informed the Board of Management (BOM) and parents that they had commenced the development of an e-Learning Plan and invited the parents and BOM to make submissions as to how they might support the plan over the following three-year period.

With all of this information the staff set about drafting the e-Learning Plan. They identified their key targets for the three-year period and the resources they would need to acquire in order to meet these targets. Their targets were as follows:

- To install digital projectors and teaching laptops in each classroom
- To provide network and internet access to the three classrooms over a wireless network.
- To use the digital camera as a means of exploring all aspects of the English curriculum.
- To develop a comprehensive educational software library that would include resources for pupils with special educational needs.
- To develop a resource bank of digital content for use in lessons.
- To develop a school website promoting the school's ICT culture and where pupils' work could be showcased to parents and the local community.
- To engage in whole school professional development.
- To use the *NCCA ICT Framework* to assist in lesson planning.

What we did (Tasks)

The e-Learning Plan's targets led to the assigning of tasks and the completion of an Action Plan. The following actions were undertaken:

- Teachers attended NCTE's professional development courses '*Website Design*' and '*Introduction to Digital Media*', which directly assisted them in meeting their targets. These courses gave them the confidence to try out new ideas and ways to integrate technology in their teaching.
- Digital cameras and laptops with wireless access were bought for each classroom, along with two data projectors. Network and internet access was made available to all classrooms over a wireless network.
- Teachers used digital cameras with the pupils to create digital photo stories on a range of cross-curricular topics using Microsoft's free *Photo Story 3* software. (Topics included *The Children of Lir*, *Our Locality* and *The School Sports Day*). Pupils published some of the photos of ruins and monuments in their locality on www.imagebank.ie.
- The teachers developed a school website with parental support. Pupils' work is showcased on the site and the site is used to inform the wider community about the school. Senior pupils are currently learning how to upload their own work to the website. The website is hosted on the *Scoilnet* webhosting service.
- Using *Scoilnet*, teachers identified a range of suitable digital resources for use with the data projector.
- A number of software titles for use with pupils with special educational needs were purchased, including an age-appropriate word processor with text-to-speech capabilities, phonological-based curriculum reinforcement software and specific numeracy titles focusing on tables and basic number operations.
- The teachers used the *NCCA ICT Framework* and action website to identify possible learning opportunities.

- The school bought a digital video camcorder and is exploring the FÍS methodology with a view to participating in FÍS in the coming year..
- Through the local education centre, the school formed links with the other Digital Schools in the locality and there is a meeting every term where schools discuss progress and new ideas.

What we achieved (Review)

- The school has implemented the e-Learning Plan and the realised targets have been measured against the *NCCA ICT Framework*.
- ICT has become integral to lesson planning and preparation and teachers feel their confidence has grown considerably.
- The pupils in the school are showing improved motivation and creativity in their work and there are greater opportunities for inclusion of children with SEN.
- ICT is supporting the development of co-operative and collaborative learning in the school.
- Teachers have noticed an improvement in the standard of pupils' writing and presentation when ICT is used for writing stories, poetry and in the preparation of work for display around the school and on the website.
- Teachers and pupils no longer see ICT as an add-on but as an essential learning tool and their confidence in using ICT has increased.
- The talking word processor purchased for use with special needs pupils has enabled them to create talking books which they take great pride in and can share with their peers.
- The school is in a position to apply for a Digital Schools award.

What next?

The school feels that it is ready to review its practice in light of its achievements and to move to greater integration of ICT into the curriculum. In particular, it is keen to explore the use of digital video in learning and assessment.

One teacher has learnt how to make podcasts and is working with his students to produce podcasts on the theme of the local environment. The teacher is also showing his colleagues how to do this.

Furthermore, teachers are planning to look more closely at the methodologies being used and to explore the possibilities of becoming involved in inter-school collaboration projects.

A further review of the e-Learning Roadmap is planned with a view to progressing.





Case Study 3 - Lawns Special School

Lawns Special School is a twelve-teacher school in a large provincial town. It has 62 pupils, three classes for students with severe/profound general learning disabilities (GLD), four classes for students with moderate GLD and two classes for students with autism. It has 12 teachers, including an administrative principal. There are five Special Needs Assistants; four of these are assigned to a specified class or group of students and one is assigned to a particular student with challenging behaviour. The school has created a new position for an ICT co-ordinating teacher. Many of the teachers and SNAs are committed to using technology to support the development of individual educational plans (IEP's) and as a learning and teaching tool.

Where we were (Review)

Following discussions at staff meetings and with the Board of Management, it was decided that a whole school e-Learning Plan was required. The school recognised that it needed the strong commitment of staff and also needed some advice and support from specialists and other professionals.

The teachers decided to seek assistance from their local education centre who organised an NCTE whole school training session for the school on the development of an e-Learning Plan.

An e-Learning team was established and it reviewed the existing school ICT plan and carried out an e-Learning audit. It indicated that:

- The school had two desktop computers in each room; one laptop computer mainly for staff use, as well as a desktop computer in both the principal's and secretary's offices. Some of the class computers were quite old and needed to be replaced. A digital projector was available.
- The school was connected to the Schools' Broadband Network and all classrooms were networked.
- A small range of specialist devices were available in the school, some of which were not in use. Independent use of computers was limited for many students, due to the lack of specific access devices such as alternative keyboards and mice, switches and switch interfaces.
- The school had 12 printers: one per classroom, two in offices and one which was networked and in a common area with the photocopier. All printers were colour inkjet types. Cost and longevity of ink cartridges was identified as a concern.
- There were four digital cameras in the school which were shared by classes.
- E-learning was identified as being constrained by the lack of appropriate hardware, assistive technologies and software as well as staff expertise/confidence in using some of the existing resources.
- A limited library of software was available, but some was unsuitable for the particular needs of the students.
- Some teachers and pupils used the internet for learning and teaching to a limited degree. Staff were keen to explore the internet as a resource, as well as researching the suitability of interactive whiteboards, especially for the students with moderate GLD.
- Staff ICT skills were varied. Some teachers had previously attended NCTE courses, such as ICT & Special Needs – the Basics.
- The school had not developed a website.

Where we wanted to get to (Priorities)

Using the e-Learning Roadmap, the e-Learning team established that the school was mainly at the *e-Enabled* stage but decided that they had the interest and capability to progress to the *e-Confident* stage in some areas.

The following priorities were identified:

- The school should support and encourage the use of a wide range of ICT, in particular assistive technologies throughout the school to facilitate learning and teaching.
- Teachers should acquire the skills to use some assistive technologies and other technologies and to integrate ICT into their teaching methodologies.
- There should be access to appropriate software for use with groups and with individual pupils with specific needs.
- A wider range of assistive software and technology devices, including alternative keyboards and mice, switches, and switch interfaces as well as simple communication devices and switch-adapted toys should be provided.

How we planned to get there (Targets)

Key targets identified:

- Equip each classroom with a digital projector and teaching computer
- Upgrade or replace any older computers that were causing problems and acquire access devices and peripherals essential for individual pupils.
- Acquire a range of assistive technologies for pupils with more complex needs, e.g., switch-activated equipment, communication devices, etc.
- Develop a comprehensive educational software library to meet the diverse needs of students but with an emphasis on core software packages such as Clicker and content-rich software that may be used right across the school.
- Improve internet access throughout the school building.
- Develop a school website.
- Agree a plan for professional development which meets the needs of individual teachers and whole school needs
- Refer to the NCCA Guidelines for teachers of students with General Learning Disabilities and the *NCCA's ICT Framework* when planning Individual Educational Plans (IEPs).

As the pupils have access to therapists from Community Services, it was decided to collaborate with both the Occupational Therapists and the Speech & Language Therapists when deciding on what technology should be acquired for individual students. The e-Learning team organised meetings between teachers and therapists working with pupils in classes for Severe/Profound General Learning Disabilities (GLD).

What we did (Tasks)

- The principal and ICT co-ordinating teacher reviewed and distributed information relating to assistive technology and ICT software for pupils with special needs from the NCTE website www.ncte.ie.
- The ICT co-ordinating teacher arranged for a tutor to provide an initial professional development course for teachers and SNAs on specific software. Some staff attended NCTE ICT & Special Needs courses available in the local education centre.
- A meeting was facilitated for teachers to meet with therapists assigned to the school in order to discuss the individual students in the classes for severe/profound GLD and on a class-by-class basis. These meetings resulted in a technology plan for each pupil, including the equipment, software and type of access required for each pupil as well as strategies for use of the technology in the classroom and at home.
- Similar inter-disciplinary meetings were held to discuss the individual pupils with autism and a more general meeting was held to discuss the group of students with moderate GLD.
- Two teachers agreed to start work on a new website in conjunction with the rest of staff and parents.
- Two teachers volunteered to develop a bank of suitable digital photographs to support learning and teaching and upload these to www.imagebank.ie where they could be shared by other teachers. They used the school's digital cameras to take relevant photos as well as sourcing images from www.imagebank.ie and other educational sources.
- New devices, equipment and software were purchased based on the needs of individual students following the inter-disciplinary meetings. 3 new data projectors were purchased and installed in classrooms. Staff and therapists collaborated on planning for the effective introduction and use of new equipment. A review schedule was established.
- The staff consulted both the *NCCA ICT Framework* and the NCCA curricular guidelines for students with special needs to inform their use of ICT across the curriculum.
- The ICT co-ordinating teacher arranged for the demonstration of ICT equipment in the school. They consulted other schools regarding the use of interactive whiteboards, their cost implications and the use of alternative technologies.

What we achieved (Review)

- Pupils have access to assistive technology and appropriate software to suit their age, ability, access, educational and communication needs. Schedules for reviewing, upgrading and purchasing new technology are in place.
- Parents have been invited to see the technology in use and have been encouraged to use similar technology at home. A training session for parents is planned soon.
- Collaboration between staff and therapists is proving very beneficial for all concerned.
- Staff are using technology in a more creative way and many staff want to continue to up-skill themselves.
- Informal learning is taking place among staff who are sharing their ideas on the use and integration of technology in their classrooms.
- The school website has been launched.

What next?

- The e-Learning team plans to compile a training and information guide on e-Learning for new or temporary staff.
- A training and information session for parents will take place shortly.
- Visits are planned to other special schools who are successfully integrating ICT into the curriculum.
- Some collaborative project work with pupils in other schools via the school website and/or by email is planned; initially pupils with moderate GLD will be involved.
- The school plans to purchase 3 additional data projectors and install these in classrooms. It also plans to purchase an interactive whiteboard to be shared between the four classes for students with moderate GLD.





Case Study 4 - Ballyronagh College

Ballyronagh College is a co-educational post-primary school in a provincial town with 300 students and 20 teachers.

Where we were (Review)

As part of the Whole School Planning process, the principal decided to set up an e-Learning team to lead the development of an e-Learning Plan for the school. The e-Learning team consisted of the principal, the ICT co-ordinating teacher and two teachers in the school who had an interest in ICT. An e-Learning audit was conducted and its outcomes were:

- There was a computer room in place in the school with 18 computers, most of which were 4 years old or older. There were frequent technical problems experienced by teachers in the computer room.
- The school was connected to the Schools' Broadband Network with access to the network in most classrooms
- A desktop computer was located in the staff room, connected to a printer, which was used regularly by teachers to print notes, lesson plans and other documents. It was also used for internet research.
- The school had recently purchased two digital cameras and a digital video camera
- Most teachers had basic ICT skills, however, many of them lacked the confidence or the knowledge to use these skills to enhance learning and teaching in their classrooms.

When the audit was completed the e-Learning team, with the input of the principal and staff, used the e-Learning Roadmap to assess the school's overall situation in relation e-Learning. The general agreement among staff was that the school was mainly in the Initial stage on the Roadmap, one of the main findings being that ICT was treated as a standalone subject only and that teachers were discouraged from using ICT because of the lack of sufficient equipment and the unreliability of existing equipment. The staff were very enthusiastic about progressing to the *e-Enabled* stage on the Roadmap and felt that the school would benefit from the development of a plan for e-Learning.

Where we wanted to get to (Priorities)

Within the context of the Whole School Plan, the principal, in conjunction with the other members of the e-Learning team, set out their e-Learning priorities. These were:

- To increase the use of ICT across the curriculum to support learning & teaching.
- To increase the confidence of teaching staff in the integration of ICT in their subject areas.

- To procure external technical support so that teachers could focus on integrating ICT rather than trying to resolve technical issues and so that the ICT co-ordinating teacher can focus on helping teachers integrate ICT rather than maintaining ICT equipment.
- To facilitate the integration of ICT by equipping all classrooms with a digital projector and a computer over the next three years/as the budget allowed.

The principal presented these priorities at the next staff meeting and there was agreement among all staff that these areas should be prioritised.

How we planned to get there (Targets)

The e-Learning team examined the priorities with a view to creating a number of targets both for the forthcoming year and for the longer term. Following consultation with staff, they decided to:

- Get external technical support to maintain the ICT facilities.
- Provide a laptop and projector to four subject departments in year one.
- Have each subject department identify, within the context of the Whole School Plan, what steps they would take to start to integrate ICT into the curriculum and to develop subject department action plans for ICT integration.
- Have each department undertake one clearly defined project that integrated ICT into their subject area for year one, with a view to how this might be expanded in year two.
- Provide in-house training and support for teachers as they explored new approaches to learning and teaching with ICT. They also intended to source and disseminate information about relevant CPD courses available through the local Education Centre.

What we did (Tasks)

The ICT co-ordinating teacher took on the task of finding appropriate outside technical support. By reviewing NCTE's guidelines on procuring technical support and by contacting other schools, a local support company was contracted to work a number of hours a week in the school.

Using the procurement frameworks available through the NCTE website, the ICT co-ordinating teacher purchased four laptops and projectors for use by four subject departments.

In the development of the subject department action plans, the teachers reviewed the *NCCA ICT Framework* which was an invaluable tool for assisting teachers in understanding the kind of learning activities they could use with their students.

The ICT co-ordinating teacher contacted the local education centre and arranged two short courses for the staff to take place within the school; one on using digital cameras and the other on the Internet, both focussed on their application within learning and teaching.

Each department developed its own Action Plan for ICT integration and, with the help of the e-Learning team, made considerable progress:

- in the French Department, the teacher and students identified and used Internet resources located via www.french.ie and www.scoilnet.ie.
- in the Geography Department, students used a digital camera on a field trip and uploaded their photos to **Scoilnet Maps** where they then 'georeferenced' them on Ordnance Survey Ireland maps.
- in the Business Studies Department, students created a basic blog and wrote articles on different topics of interest, linking to other relevant websites. Students were able to access this from home and contribute remotely as well as in the classroom.

What we achieved (Review)

- Having an ICT technician available on a regular basis removed technical hurdles and allowed teachers to concentrate on ICT integration instead.
- With technical issues no longer the predominant issue, the ICT co-ordinating teacher was able to concentrate on ICT integration and assisting teachers to organise e-Learning activities. Overall, this resulted in a gradual but significant shift in the ICT culture within the school.
- Having the additional laptops and projectors made it possible for teachers to integrate ICT into their classrooms. All subject departments undertook and completed some form of integrated e-Learning activities during the year. The positive outcomes increased demand among the staff for more ICT equipment and it became evident that increased resources would be needed for years two and three.
- The primary goal of integrating ICT into the curriculum seemed elusive and somewhat daunting to many at the outset, but over the course of the year teachers saw that, through small practical steps, much can be achieved.

- Teachers have reported an increase in student motivation and engagement because of wider use of ICT.
- Teachers' confidence in ICT increased greatly. As well as attending the NCTE workshops, teachers are now learning informally from each other as well as from the e-Learning team. Beyond this informal arrangement, a clear need has been identified for additional ICT professional development for the staff.

What next?

The plan has now been revised to take account of the progress made during the year and the findings of the review.

- It is now planned to permanently mount the projectors bought last year in classrooms as well as buying three more this year.
- The e-Learning strategies developed by each department in year one will continue to be developed in years two and three.
- The ICT co-ordinating teacher is to be given opportunities to visit other schools to get ideas from their experience following involvement with a number of NCTE and other ICT initiatives.
- The e-Learning team will research what courses are available through the local Education Centre or online and make this information available to teachers. There has been a specific request from a number of teachers who would like to learn more about using digital video. The e-Learning team will consult with the local education centre to organise whole school training in this area.
- The e-Learning team will look into developing a school website where the school's e-Learning culture can be shared with parents and the wider community.





Case Study 5 - Kilmore Primary School

Kilmore Primary School is an urban girls' primary school, participating in the DEIS scheme, with 253 pupils and 20 teachers, including an administrative principal. There are 12 mainstream classes and two special classes.

Where we were (Review)

The school had been involved in an NCTE SIP project (2001) in the past. A new staff member was assigned the role of ICT co-ordinating teacher. This person had an interest in ICT but little formal ICT training. Both the principal and the ICT co-ordinator believed that ICT could be a great source of motivation for children and were looking for opportunities to take some action in introducing more ICT use.

To get a more accurate view of the school's ICT status, an audit was carried out by the ICT co-ordinating teacher. This audit indicated that the school faced many challenges:

- There were vastly different levels of skills and experience amongst staff members.
- The school had a basic website in place, developed by the ICT co-ordinating teacher
- The school was connected to the Schools' Broadband Network and all classrooms were networked
- There were 20 computers distributed throughout the classrooms and one digital projector.
- Two digital cameras that the school had received had not yet been used by staff.
- There was little technical expertise or knowledge within the school; for example, few teachers were able to install new programs.
- Some teachers were nervous that the children would know more than they would or that they would not know what to do if a problem arose with a computer or a program.

It was agreed at a number of meetings between the principal, the ICT co-ordinating teacher, the Board of Management, representatives of the Parents' Association and whole-staff meetings that the school's vision "*to help each child develop to the best of their ability using all means possible, including ICT in learning and teaching and motivating of children*" required the school to focus more on:

- Integration of ICT in learning and teaching.
- Prioritising the use of ICT to strengthen home-school links.

It was also agreed that the formation of an e-Learning team was an effective approach in progressing the school's e-Learning planning process. A three-person e-Learning team was set up – it was chaired by the principal and included the ICT co-ordinating teacher and another senior staff member with responsibility for Special Education.

Where we wanted to get to (Priorities)

Using the e-Learning Roadmap, the principal, in consultation with the e-Learning team, all staff, the Board of Management and parents, agreed the following e-Learning priorities as the school's main focus for the three years ahead:

- To increase the e-Learning culture throughout the school.
- To encourage further integration of ICT into classroom activities.
- To increase access to and fully utilise available ICT resources and upgrade them where possible.

Work on all of these priorities could begin immediately.

How we planned to get there (Targets)

With the priorities set, the e-Learning team made a commitment to meet fortnightly. Initially, the focus was on the drafting of the e-Learning Plan for the school. The team decided to consult with all stakeholders (staff, BOM, parents) during the drafting process and, once the plan was agreed, meetings focussed on reviewing the progress being made with regards to the e-Learning targets.

The targets outlined in the e-Learning Plan were as follows:

- The school would produce an electronic newsletter biannually which would contain information and photographs of activities taking place across all classes.
- Communication among the staff was to expand to include the use of email. The e-Learning team was to use ICT applications, such as PowerPoint and the internet, at staff meetings to show the effectiveness of ICT to staff.
- It was agreed to consult with other schools in the area who had achieved Digital Schools status to see if the school could learn from the practices of these other schools.
- All teachers would use appropriate online resources regularly in their classes
- Teachers would use the NCCA ICT Framework and action website to help identify appropriate e-learning activities and learning outcomes.
- Digital cameras would be used to record school events, such as sports days, school trips, school concerts. With parental permission, these would be published in the school newsletter and on the school's website.
- The e-Learning team would provide help to members of staff on the use of digital cameras and the internet.

- At least six new computers and four digital projectors were to be acquired and installed.
- A colour laser network printer was to be purchased and installed.
- The school was to work towards applying for and achieving a Digital Schools award in the long term.

What we did (Tasks)

- The members of the e-Learning team presented updates as to how the school was progressing at staff meetings. Any changes or modifications to the agreed targets were presented to the staff for acceptance.
- A member of the e-Learning team co-ordinated the production of the newsletter. Senior classes assisted in the layout and production of the published material. All teachers were asked to contribute content, electronically, from their classes.
- Using NCTE guidelines, the school's ICT Policy was updated and an AUP was created using a similar consultative process at staff meetings. The Parents' Association also signed the AUP.
- Two members of the e-Learning team visited a Digital School in the area
- The school availed of advice, training courses and workshops provided by NCTE through the local Education Centre.
- One workshop dealt with image editing and demonstrated the use of the image editing software. The school installed a common image editing program on at least one computer in each classroom to ensure all classes could produce material for the newsletter.
- Teachers were given email addresses if they did not already have one, to enable them to submit content to the newsletter.
- Staff began to informally support each other when colleagues experienced difficulties using technology.
- The ICT co-ordinating teacher, using the NCTE's guidelines for procuring technical support, sourced a local contractor to network the school.
- In the first year, by using the procurement frameworks on the NCTE website, four new computers were purchased. Two additional computers were donated by the Parents' Association.
- Guided by the purchasing advice on the NCTE website, two new digital projectors were purchased and installed in classrooms.

What we achieved (Review)

- The process of deciding on and producing content for the newsletter presented many new opportunities for learning in classrooms, much of which involved discussion, collaboration, active learning and creativity. ICT was an integral part of this process. It also presented children with another audience for their work.
- Teachers became more confident in using the internet as a resource for project work, enabling pupils to research facts and information for the newsletter as well as other projects.
- The first newsletter was received with great interest by the parent body.
- Many teachers' ICT skills improved significantly. This was achieved through needs-based, in-school learning which was directly related to their everyday work and supported by the NCTE and their local education centre.
- A culture of peer-to-peer support grew among the staff as teachers informally began to support each other.
- There was increased evidence of pupils' computer-generated work on display in the school, often illustrated with authentic photographs.
- Pupils showed greater motivation through the use of ICT in their classes.
- Parents indicated a greater understanding and appreciation of the work of the school, in many different ways, including e-Learning activities.
- Sharing of resources/equipment between local schools was very successful and continues.
- The school applied for and achieved a Digital Schools award.

What next?

Having achieved Digital Schools status, the school feels it has moved to the *e-Confident* stage on the e-Learning Roadmap in many areas. Using the e-Learning Roadmap, the school is identifying other areas where it can become *e-Confident*.

The e-Learning team, having consulted with all stakeholders, is currently investigating how the school's website may be enhanced to further develop the work being done to improve communication and collaboration between school, home and the wider community. A plan to replicate the lessons and successes from the newsletter project in the area of video production is being considered. The school is planning to use video and animation and hopes to get involved in video projects with other schools. It also intends to look at how self-assessments for pupils using video may be possible. Ongoing CPD support for staff at all levels is planned. The school plans to purchase and install a further two digital projectors.





Cás-Staidéar 6 Gaelscoil Mhuire

Is scoil lán-Ghaelach chomhoideachais í Gaelscoil Mhuire. Tá ocht rang sa scoil agus príomhoide riaracháin, beirt mhúinteoirí acmhainne agus foireann chúntóirí. Tá múinteoir ar an bhfoireann atá freagrach as cúrsaí ríomhaireachta agus bíonn sí ar fáil chun cabhrú le múinteoirí tionscadail áirithe a chur i gcrích agus cúrsaí ríomhaireachta go ginearálta a stiúradh.

Nóta: TFC – Teicneolaíocht Faisnéise agus Cumarsáide (ICT)

Conas a bhí cúrsaí ar dtús (Súil siar)

Ag cruinniú foirne thug an príomhoide cuireadh do mhúinteoirí a mbeadh suim acu ann, páirt a ghlacadh san fhoireann ríomhfhoghlama, grúpa a bheadh faoi stiúir mhúinteoir comhordaithe na TFC. Tháinig triúr chun tosaigh, beirt ina measc a raibh ardscoiléanna TFC acu agus a bhain úsáid rialta as an teicneolaíocht sa seomra ranga. Ba mhór ba shuim leis an triú duine TFC a chomhtháthú sa teagasc ach ba é a thuairim nach raibh ach scileanna bunúsacha aige sa teicneolaíocht. Ag baint úsáide as scarbhileog iniúchadh an ríomhfhoghlaim, rinne an fhoireann nua r-fhoghlama iniúchadh ar bhonneagar agus acmhainní scoile TFC mar atá siad faoi láthair. Seo thíos cuid de na príomh-thorthaí a fuarthas:

- Tá 18 ríomhaire sa scoil –Windows 98 mar chóras oibriúcháin sa chuid is mó díobh. Níl seomra ríomhairí ann faoi láthair ach tá dhá ríomhaire i ngach seomra ranga.
- Tá ceangal idirlín leathanbhanda ar na ríomhairí go léir.
- Tá clódóir i ngach rang ach toisc go bhfuil na ríomhairí in aice na dtéitheoirí tugadh faoi deara go raibh an dúch ag triomú go tapa agus bhí a lán airgid á chur amú. Mar sin úsáidtear clódóir na hoifige chun rudaí a phriontáil amach.
- Tá ceamara digiteach ar fáil a bhíonn in úsáid chuile lá timpeall na scoile.
- Is léir go bhfuil an scoil ag obair ag an leibhéal “cumasaithe” in úsáid na teicneolaíochta in áiteanna agus ag obair ag an leibhéal “muinín ó thaobh ríomhoibre” in áiteanna eile.
- Tá cumas TFC na múinteoirí agus na gcúntóirí uile réasúnta maith agus baintear úsáid as na ríomhairí sna seomraí ranga go laethúil.
- Tá réimse maith cláracha agus bog-earraí a thacaíonn leis an gcraclam ar fáil i ngach rang ach baineann an chuid is mó díobh le Mata agus Béarla, agus níl mórán bogábhair ar fáil a thacaíonn leis an teagasc trí Ghaeilge.
- D’fhreastail an chuid is mó de na múinteoirí ar chúrsaí éagsúla i bhforbairt phroifisiúnta sa TFC san ionad áitiúil oideachais ach d’aontaigh siad go ginearálta gur mhaith leo a gcuid scileanna a fhorbairt go háirithe i réimse na gceamaraí digiteacha agus sna meáin dhigiteacha.

Tar éis plé ag cruinnithe foirne socraíodh go raibh géarghá le teacht le chéile chun plan ríomhfhoghlama a ullmhú, agus a shoiléiriú gur áis thábhachtach lárnach a bheidh sa TFC i saol na bpáistí san am atá romhainn.

Tugadh aitheantas do na scileanna teicneolaíochta atá ag na páistí ó bheith ag plé le fóin phóca, teicneolaíocht Bluetooth, seinnteoirí MP3, iPodanna srl.

Cinneadh gur chóir do phobal uile na scoile – múinteoirí, bord bainistíochta, cumann na dtuismitheoirí – an teicneolaíocht a úsáid i ngach gné d’obair na scoile oiread agus is féidir – san obair ranga, i gcumarsáid scoil/baile srl.

Aithníodh nach raibh airgead ag an scoil chun fearas teicneolaíochta a cheannach, agus de bhrí go bhfuil ar an scoil oibriú sa chomhthéacs teoranta seo, aithníodh go gcaithfí an leas is fearr a bhaint as an bhfearas agus as na háiseanna atá ann cheana féin.

An fhís (Tosaíochtaí)

Ag baint úsáid as an bPlean Oibre r-Fhoghlama, d’aithin an príomhoide agus an múinteoir comhordaithe TFC, le hionchur ón fhoireann iomlán, cén stádas a bhí ag an scoil maidir le comhtháthú TFC. Bunaithe air seo, d’aontaigh an fhoireann iomlán ar na tosaíochtaí seo a leanas chun na ríomhairí a chur in úsáid: go gcuirfeadh na múinteoirí an plean ríomhfhoghlama i ngníomh ina gcuid oibre agus go mbeadh páirt ghníomhach á glacadh ag an fhoireann agus ag na daltaí i gcleachtas nuálach eiseamláireach, trí:

- Suíomh gréasáin scoile a fhorbairt.
- an TFC a úsáid chun cumarsáid a dhéanamh leis an saol mór – ag glacadh páirte i dtionscnaimh áirithe a mbainfeadh na páistí tairbhe astu.
- comhtháthú idir an teagasc ranga agus an TFC a chur i gcrích sa phleanáil a dhéanann gach múinteoir ranga.
- nascanna scoil/baile a threisiú trí TFC a úsáid.

An plean – conas an fhís a bhaint amach (Spriocanna)

Ag cruinniú foirne chuir an fhoireann r-fhoghlama Pleananna Gnímh ríomhfhoghlama faoi bhráid na foirne uile.

Mar thosaíocht socraíodh ar shuíomh gréasáin a fhorbairt. Bhí ceithre chuspóir leis an suíomh seo:

- Eolas ginearálta, nuacht agus eolas riaracháin a scaipeadh ar na tuismitheoirí, agus ar dhaoine sa phobal mór a bhfuil suim acu sa scoil.
- Obair na bpáistí a chur ar taispeáint agus a fhoilsiú go minic. Fuarthas cead scríofa ó gach tuismitheoir grianghrafanna de na páistí a thaispeáint ar an suíomh. Ní luaitear ainm an pháiste le grianghraf riamh.

- Úsáid an cheamara digitigh a leathnú chun leabhair dhigiteacha a chruthú. Go dtí seo chuirfí na grianghrafanna i gcló agus scríostaí iad nuair a bhítí réidh leo.
- Úsáid Chreat ICT an CNCM agus an suíomh Gréasáin ACTION go rialta chun gníomhaíochtaí ríomhfhoghlama oiriúnacha agus torthaí foghlama a aithint.

Na rudaí a rinneadh (Tascanna)

- Cuireadh an suíomh gréasáin le chéile. Chuir an scoil iarratas isteach chuig an NCTE chun óstáil suíomh gréasáin saor in aisce a fháil agus chun ainm fearainn a chlárú. Nuair a cinntíodh é seo trí Google a úsáid cruthaíodh seoladh ríomhphoist scoile chun cur le híomhá phroifisiúnta na scoile – ceann ginearálta don scoil, ceann don oifig agus ceann don príomhoide:
 - eolas@gaelscoilau.ie
 - oifig@gaelscoilau.ie
 - príomhoide@gaelscoilau.ie
- Tá suas le 99 seoladh ceadaithe – mar sin dá mbeadh suim ag rang nó múinteoir ar bith a sheoladh féin a bheith aige agus é ceangailte le ríomhaire sa scoil, is féidir é sin a dhéanamh ach é a lorg.
- Seoladh an suíomh gréasáin ag ócáid mhór. Tá ag éirí go maith leis agus taitníonn sé go mór le tuismitheoirí agus páistí uile na scoile. Tá na páistí bródúil as a gcuid oibre a bheith á foilsiú ar an idirlíon.
- Maidir leis na nuachtlitreacha a chuirtear i gcló ag an oifig – déantar tagairt don suíomh go minic chun breis eolais a fháil faoi ábhair éagsúla. Ó staitisticí an tsuímh agus ó fhianaise ó bhéal, is léir go bhfuil sé in úsáid go rialta ag tuismitheoirí.
- Bhí comhoibriú maith idir na múinteoirí agus roinneadh eolas mar gheall ar shuímh ghréasáin éagsúla a bheadh oiriúnach do ranganna nó d’ábhair áirithe. Rinneadh liosta de na suímh agus rangú déanta orthu de réir gnéithe éagsúla den churaclam. Baintear úsáid as www.cogg.ie mar go mbíonn réimse leathan ábhar ar fáil trí Ghaeilge ar an suíomh seo chomh maith le naisc chuig suímh Ghaeilge eile. Ar ndóigh, is féidir úsáid a bhaint as suímh Bhéarla, ach is trí Ghaeilge a mhúinteoir na hábhair eile, agus bíonn sé deacair teacht ar shuímh ghréasáin a bhfuil ábhar i nGaeilge iontu. Mar sin tá sé rithábhachtach eolas ar bith atá ag múinteoir amháin a roinnt leis an bhfoireann ar fad.
- Go dtí seo ba leis an gceamara digiteach a thógtai grianghrafanna. Chuirfí i gcló iad, agus scríostaí iad tar éis tamaill. Anois tá na grianghrafanna sábháilte le chéile agus iad eagraithe ó thaobh ranga de, ionas gur féidir leis na ranganna iad a úsáid chun scéalta digiteacha a chur le chéile le Photo Story.
- Ghlac an scoil páirt i dtionscnamh Eorpach Suantraí na hEorpa nó “Lullabies of Europe”. Sa tionscnamh seo bailíonn páistí suantraithe ina dteanga dhúchais.

Cuireadh suantraí traidisiúnta ó Éirinn ar aghaidh don tionscnamh, agus é á chanadh ag ceann de na ranganna.

- Tá an scoil cláraithe le www.etwinning.net agus tá sé i gceist páirt a ghlacadh i dtionscnaimh áirithe a bhíonn suimiúil do lucht teagaisc na scoile.
- Tá an scoil cláraithe freisin don scéim “An Duais do Scoileanna Digiteacha” agus faoi láthair táthar ag fanacht ar scéal uathu maidir leis an meastóireacht féin. Socraíodh air seo a dhéanamh chun aitheantas oifigiúil a fháil don méid oibre atá á dhéanamh ag an scoil. Cuirtear an scéim seo ar fáil go dátheangach, agus mar sin is féidir páirt a ghlacadh ann trí Ghaeilge nó trí Bhéarla.

Na rudaí atá bainte amach (Athbhreithniú)

- Cé gur síleadh ar dtús nach raibh fearas nua-aimseartha, cumhachtach sa scoil, is léir anois gur féidir an-chuid a dhéanamh leis an méid atá ann.
- Tá athrú meoin sa scoil, agus gach rang ag iarraidh a gcuid oibre a fhoilsiú ar an suíomh gréasáin.
- Tá fianaise ar obair dhigiteach le feiceáil mórthimpeall na scoile – scéalta clóite, grianghrafanna le lipéid, graif déanta in Excel, láithrithe Powerpoint – ní hamháin le téacs agus le híomhánna ach le glórtha na bpáistí féin fite fuaite iontu.
- Tá níos mó comhoibriú i measc na foirne, le gach duine ag cumadh ceachtanna éifeachtacha simplí ar na ríomhairí.
- Bhí seacht seanríomhaire sa scoil, agus iad réidh le caitheamh amach. Socraíodh iad a thabhairt do na hardranganna agus ceacht eolais faoi na ríomhairí féin a sholáthar dóibh faoi earraí crua is bog, agus conas a oibríonn na ríomhairí. D’oscail na páistí suas na seanríomhairí chun iniúchadh a dhéanamh ar an taobh istigh. Ba mhór an taitneamh agus an tairbhe a bhain na páistí as an gceacht sin.

An chéad chéim eile?

Seo iad na tosaíochtaí don todhchaí:

- Blag scoile a chruthú ag baint úsáide as Blaganna Scoilnet.
- Traenáil uile-scoile a eagrú ar theicneolaíocht Web 2.0 ionas gur féidir le múinteoirí ábhar arlíne a chruthú dóibh féin agus é a roinnt lena chéile.
- Díriú ar theilgeoir digiteach agus ríomhaire glúine teagaisc a chur i ngach seomra ranga laistigh de thrí bliana, ag brath ar an maoiniú atá ar fáil.

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