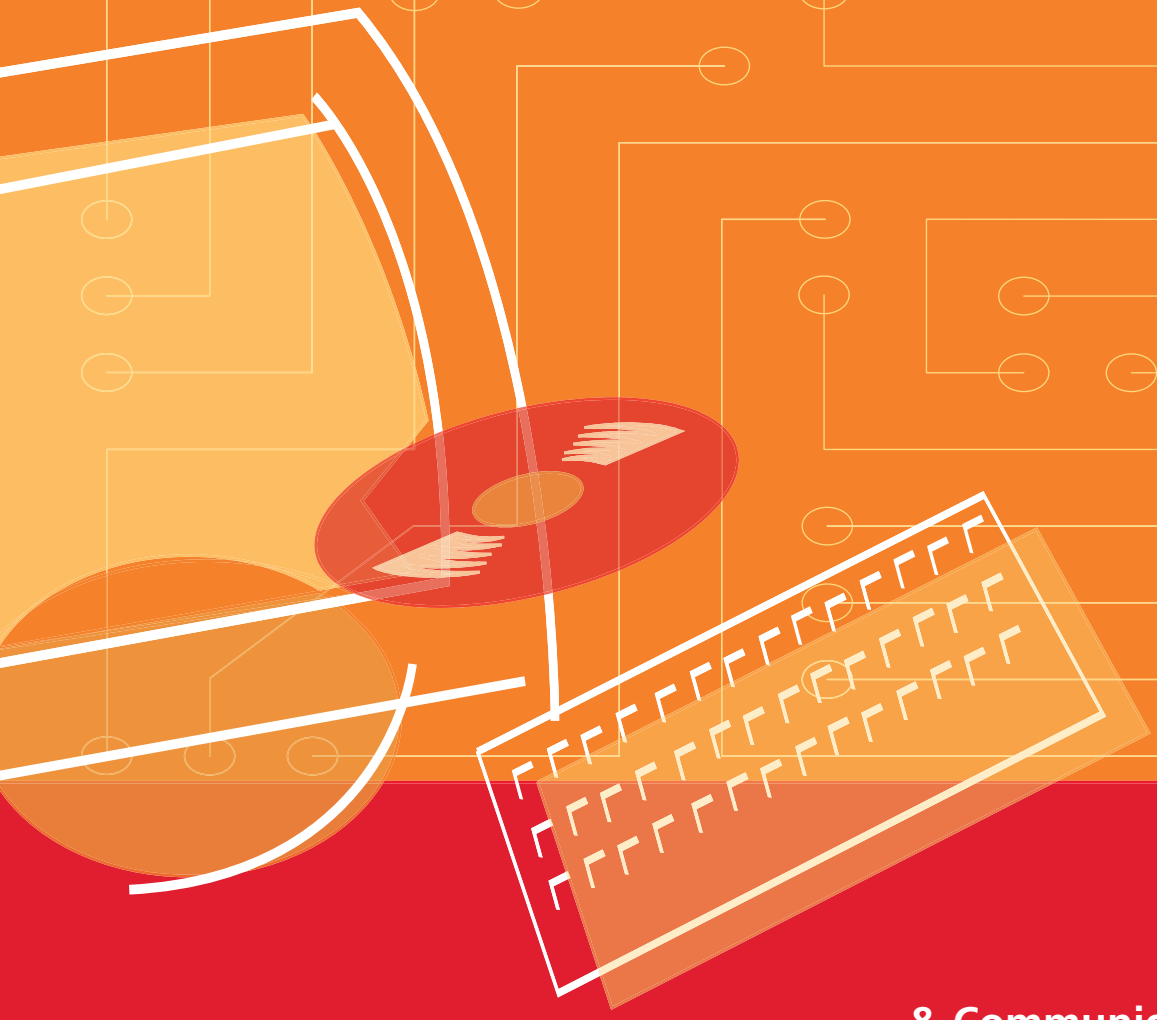
AN EVALUATION BY THE EDUCATION & TRAINING INSPECTORATE



# of Information & Communication Technology IN SPECIAL SCHOOLS 2001 - 2002

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The Education and Training Inspectorate - Promoting Improvement

Providing Inspection Services for

Department of Education
Department for Employment and Learning
Department of Culture, Arts and Leisure

INVESTOR IN PEOPLE

CONTENTS

1. INTRODUCTION

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1.1 This report summarises the findings from an inspection of the influence of information and communication technology (ICT) to support and enhance teaching and learning in special schools in Northern Ireland (NI). The inspection was undertaken by the Education and Training Inspectorate (Inspectorate) during March 2002. The objectives of the inspection were to evaluate:

i. the quality of teaching and learning using ICT;

ii. the effect that ICT is having on standards of the pupils' work and on how it assists them to access the curriculum;

iii. the quality of planning for the development of ICT across the school, and

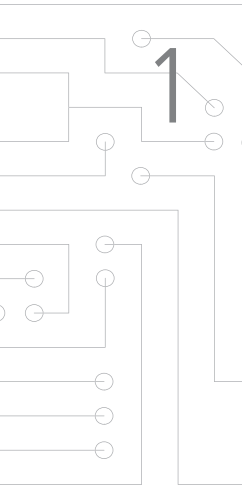
iv. the quality of resources available to support the development of the pupils' ICT competence.

1.2 At the time of the inspection, the Classroom 2000 (C2K) initiative had not been installed in the special schools. This report creates a baseline for future evaluation by the Inspectorate when this significant investment in ICT resourcing and in staff development is implemented in full and should be showing measurable impact.

1.3 In order to provide the Inspectorate with important background information and an overview of ICT in special schools, the senior managers of all schools were asked to complete a questionnaire. A positive response rate of 84% was recorded. The Inspectorate appreciates the helpful contribution which the schools made to the database on which the inspection could draw.

1.4 The report is also based on evidence from the inspection of a representative sample of 21 special schools (see Appendix 1). The inspectors observed lessons across all key stages, and at post-16 level, in a variety of special schools providing for pupils with severe learning difficulties (SLD), moderate learning difficulties (MLD), physical disability, emotional and behavioural difficulties (EBD), speech and language difficulties and sensory impairment. Discussions were held with principals, members of the senior management team, ICT co-ordinators, heads of department, teachers and pupils. In addition, samples of pupils' work, school development plans (SDPs) and other relevant curriculum documentation were scrutinised. The inspectors identified a number of examples of good practice in the effective use of ICT in teaching and learning; a sample of these has been included in the report.

1.5 The ICT initiatives in the special schools emanate from the interest, research and experience of individual teachers and managers and, more recently, from the impact of the various strands of the Educational Technology (ET) strategy for Northern Ireland. The 'Connecting Teachers' initiative has resulted in a considerable increase in hardware available to teachers.



In a significant minority of special schools this resource has been supplemented by substantial investment by the schools. The New Opportunities Funding (NOF) training programme was also seen by a majority of schools as a catalyst to further development in teachers' skills and specialist expertise and, in these schools, there was often concern about sustaining developments following NOF training. A significant minority of schools report misgivings related to the slow progress in equipping the special schools through C2K and indicate that this is a constraint on further developments in their schools.

A number of quantitative terms are used in the report when commenting on aspects of provision for ICT. These terms should be interpreted as follows:

Almost/nearly all	more than 90%
Most	75% - 90%
A majority	50% - 74%
A significant minority	30% - 49%
A minority	10% - 29%
Very few/a small number	less than 10%

In assessing the various features of the provision for ICT, inspectors relate their judgements to four performance levels which may be interpreted as follows:

GRADE

1.	Significant strengths	good (ranging to outstanding)
2.	Strengths outweigh weaknesses	satisfactory (ranging to good)
3.	Weaknesses outweigh strengths	fair (ranging to satisfactory)
4.	Significant weaknesses	poor

2. SUMMARY OF MAIN FINDINGS

2.1 The quality of planning for the integration of ICT to support teaching and learning across the curriculum is always satisfactory or better in special schools.

2.2 The quality of teaching was good to excellent in around 45% of the lessons inspected and satisfactory in 42%. In the remaining lessons, weaknesses outweighed strengths with poor teaching observed in around 7% of the lessons. A majority of teachers now have a generally good level of personal competence in the use of ICT, and use ICT effectively to enhance and support learning.

2.3 In the majority of special schools, there is a need to develop further the assessment, recording and accreditation of the pupils' ICT achievements. Where the pupils frequently start at KS1 and stay for their full school career, schools could plan more effectively to assess their pupils' ICT knowledge and competence as it develops through the key stages (KS) and in post-sixteen provision.

2.4 The pupils' individual competence and confidence in the use of ICT varies widely but almost all pupils are motivated by the experience of ICT and are keen to participate in activities which involve the use of ICT. The majority of pupils work well either independently or with the support of the teacher or classroom assistant. There is a need for schools to promote a consistent approach to the development of ICT within and across the curriculum, to ensure appropriate progression in ICT skills for all the pupils.

2.5 A majority of schools have identified ICT as a key area for development, and the level of strategic planning for ICT is good. The majority of principals give a high priority to ICT and recognise the distinctive contribution that it can make to the work of special schools. Almost all of the schools demonstrate a strong commitment to ICT across the curriculum.

2.6 Senior management teams (SMT) promote strongly the effective integration of ICT into classroom practice in the majority of schools, and there is good support given to the work of ICT co-ordinator and the core team. In the large majority of special schools, principals have recognised the need to allocate sufficient resources in terms of equipment and time to maximise the potential of the various, ongoing initiatives.

2.7 Most schools have invested considerably in ICT training, often in the teachers' own time. Well-planned and carefully organised NOF ICT training has been mostly successful in raising the profile of ICT and in enthusing many teachers. It will be important to sustain and develop the specialist support in using the assistive technologies which schools have received through NOF so that CASS has the necessary expertise to provide this service in the future.

3. TEACHERS' PLANNING FOR INFORMATION AND COMMUNICATION TECHNOLOGY

3.1 The quality of planning for the integration of ICT to support teaching and learning across the curriculum is good to excellent in 52% of the schools, and satisfactory to good in 48%.

3.2 In the majority of schools, the SDP identifies ICT as a priority area for improvement, and there is a whole school ICT policy which provides good guidance on the place of ICT in the curriculum. In these schools, the teachers integrate ICT effectively into lesson planning and into Education Plans (EPs). The common strengths of the schools which plan well for ICT include a commitment to the development of ICT across the curriculum, a clear focus on the use of ICT to support EPs, and a co-ordinated plan for ICT led by a group which meets regularly and constantly focuses on improvements in provision. In addition, for those pupils with more severe learning difficulties, sensory impairment or physical disability, the members of staff clearly identify opportunities to maximise access to the curriculum through ICT.

3.3 The majority of teachers make effective use of ICT to improve lesson planning and preparation. They use ICT to improve and enhance the production and presentation of learning materials. A minority of schools have developed a common font for the teaching materials which they prepare and an agreed format for displays on school noticeboards and information newssheets. The quality of display has been enhanced significantly in a majority of schools with effective use of digital images to show the pupils engaging in the daily life of the school and in their community. Almost all schools have invested considerably in digital cameras. An increasing number of teachers make good use of resources which are downloaded from the Internet and are modified to meet the needs of pupils. In addition, it is clear that in a majority of schools, staff have evaluated CD-ROMs, along with other software and peripherals, to identify those resources which are most appropriate for their pupils. Almost all schools invested in this additional hardware and software prior to NOF training and recognised the contribution of the trainers in identifying their potential for their pupils. A significant majority of schools for children with SLD now produce learning materials of a very high standard to support the development of the pupils' literacy skills, in particular, for those requiring symbols to support language development and communication. Another significant success is the development of talking books related closely to the interests of the pupils both in school and the wider community. Good progress is also evident in the use of specialist ICT to support young people with sensory impairment and physical disability.

In one school for children with severe learning difficulties there was very good use of ICT to aid the preparation of symbol-based materials for communication and literacy, to support autism schedules and in the provision of alternative keyboards. The teachers also made very good use of ICT for preparation and planning of all displays, timetables and notes in a standard font. The teachers effectively used the digital camera and demonstration software

to create individualised reading materials. As a result, when the school had a visit from a VIP the leavers' class had developed the necessary skills to record the visit on a digital camera and produce a high quality written record of the day combining text and digital images.

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3.4 In the majority of schools inspected, assessment is not well developed and there is no overall agreed view at each key stage of how to extend and record the pupils' competence in ICT. Consequently, there are some inconsistencies across classes in the range, challenge and frequency of opportunities provided to the pupils to learn and apply their ICT skills.

4. TEACHING AND LEARNING

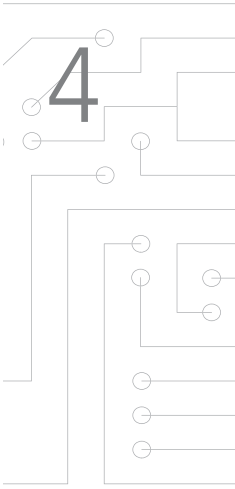
4.1 The quality of teaching observed was good to excellent in around 45% of the lessons observed and satisfactory in 42%. In the remaining lessons, the weaknesses outweighed strengths with poor use of ICT observed in around 7% of the lessons. There are considerable differences, both within and across schools, in the quality of teaching using ICT. A majority of teachers have a good level of personal competence and confidence in the use of ICT, and they use ICT effectively to enhance the pupils' learning. The incorporation of ICT to support learning is now more widespread and effective, and there were many examples of interesting and innovative use across the curriculum.

4.2 In the more effective lessons, the teachers plan well for the integration of ICT, take good account of the individual abilities of the pupils in each class and plan carefully for the wide difference in ICT competence. Most of the teachers effectively integrate ICT into their lessons and use it well to support other work. The teachers set tasks which are both challenging and well matched to the pupils' interests and experiences. In the most effective lessons, where there is a clear purpose to using ICT the lesson outcomes are enriched.

For a group of children with MLD, the session was organised effectively to provide a variety of ICT-based activities to support the work. The teacher made good use of software, a data projector and laptop to support the development of the pupils' writing skills and had developed a range of stimulating talking books on a variety of topics. A task board displayed the activities for the day and four out of five groups made effective use of ICT to support their work. On the display boards, the pupils' project on the jungle was enhanced by attractive word-processed creative writing. On another display board in the school foyer, the same class had attractively presented their award-winning school newsletter. Information and communication technology was an integral part of the learning process and was used effectively to enrich the pupils' learning and to extend the lesson.

4.3 There are weaknesses in teaching using ICT in around 13% of the lessons. These lessons are not well planned or organised and do not sufficiently challenge the pupils. The most common weakness is an inappropriate emphasis on the completion of discrete, decontextualised tasks rather than the use of ICT as a tool to support the work of individual pupils. In these lessons, the pupils are often engaged in responding to dull and routine tasks using inappropriate software with little to interest or motivate them.

4.4 There are various examples of the effective use of ICT to aid whole-class teaching, mainly through the use of data projection or interactive whiteboard equipment. The use of this technology enables teachers to give clear instructions or demonstrations, and enhances significantly lessons requiring multimedia inputs such as video or audio, demonstrations of web sites or software functions and simulations. The pupils respond well to the new technology and most interact effectively with the teacher and their peers. Where there is skilful questioning from the teacher and good responses from the pupils, the use of this new



technology enhances the pupils' learning across the curriculum. The use of ICT by a minority of teachers to prepare lessons using whole class technologies raises their expectations about the quality of their pupils' work and results in increased motivation and improved outcomes.

In one lesson a teacher enhanced whole class teaching with projector and laptop to teach pupils how to read bus timetables. Using multi-media presentation software, combined with digital photographs, he was able both to provide a local context to which the pupils could relate easily and to set examples at a level appropriate to their abilities. The teacher also produced good quality practice materials relevant to the social and lifeskills which the pupils needed as they developed an understanding of independent travel skills in preparation for their transition to work experience and further education.

4.5 A minority of schools organise timetabled, discrete ICT lessons, mostly at KS3. Lessons typically focus on the use of word-processing and database software. In the best practice, the work is integrated well into general class and subject work and the pupils undertake activities in suitable contexts. In a minority of schools, the staff help the pupils to develop and apply additional ICT skills, such as desk-top publishing, multimedia presentations, and the creation and manipulation of graphical images. The pupils report that they find this type of work to be interesting, challenging and motivating.

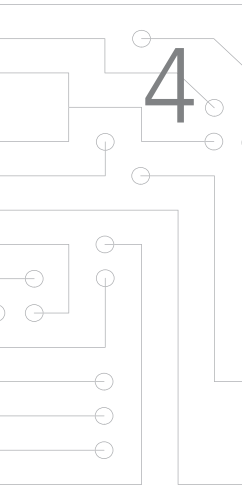
4.6 In a majority of schools, the teachers are well-informed about the individual competence of pupils in using a range of software applications, and, especially word-processing packages. In these schools, this information is exploited to provide pupils with good opportunities to consolidate and apply ICT skills in class and topic work. In the majority of schools, the teachers need to develop more effective arrangements to share information in order to consolidate and build on the pupils' ICT ability.

4.7 In a minority of schools, the teachers benefit from good technician support. This support is valued by the teachers and enhances their confidence. In these schools the technicians deal effectively with a range of problems and most provide help to teachers and pupils in an unobtrusive manner.

In one school, the class teacher was supported effectively by the technician as he used the interactive whiteboard to develop a lesson on classification. The technician was able to assist the teacher by operating aspects of the whiteboard as the teacher worked with pupils in small groups concentrating on the main points of collecting, classifying, inputting and sorting information. As a result the pupils were able to complete successfully pie charts on aspects of their local neighbourhood.

In contrast, the lack of technical support in the majority of schools constrains the use of ICT.

4.8 A majority of staff have made significant progress in utilising specialist software and hardware to assist those pupils with severe and complex special needs, sensory impairment and physical disability. New Opportunities Fund training has made a good start in



highlighting the potential benefits in teachers being more aware of the assistive technologies available to allow their pupils to access the curriculum. It will be important to sustain and develop this expertise after the NOF training programme has finished.

5. ASSESSMENT OF INFORMATION AND COMMUNCIATION TECHNOLOGY

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5.1 The assessment of pupils' achievements and competence in ICT is satisfactory to fair in the majority of schools. In the remaining schools, the weaknesses in assessment outweigh the strengths, with poor assessment of ICT in 12 % of the schools.

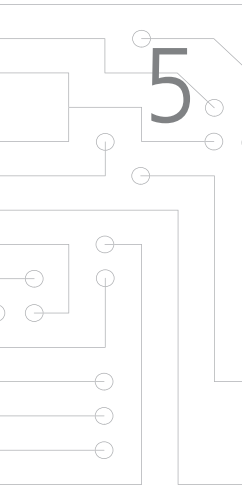
5.2 In a small number of schools, there is planning for progression across the key stages. These schools also plan effectively to ensure that the pupils have consistent and continuing opportunities to improve their ICT competence. Staff diligently record the pupils' progress in ICT. The teachers plan carefully to indicate the use of ICT to enhance work across the curriculum and to take account of progression as pupils move through the school.

In one school for children with SLD, for example, the teachers have worked hard to ensure appropriate assessment is in place. The pupils have individual files which record the variety of ICT uses and experiences they have had. The key stage 3 materials accredited by the Council for the Curriculum, Examinations and Assessment (CCEA) is perceived to be difficult for the pupils therefore the school takes them through in smaller steps; currently, there is no benchmarking against Northern Ireland ICT levels. The staff are planning to develop an appropriate assessment/accreditation programme with CCEA. A group of pupils attends a local Further Education College on a regular basis and, lately, one pupil completed key skills accreditation. The rest of the group get accreditation towards their individual portfolios. The pupils in the 14 to 16 year band have opportunities to attend an afternoon computer club each Wednesday. Here they have access to a three year programme which builds progressively their ICT skills, including opportunities to use multi-media presentation software. In all classes, the teachers maintain activity books for each class where photographs and other evidence record the activities in which the pupils have been involved.

5.3 In a majority of those schools where the pupils frequently start at KS1 and stay for their full school career, there needs to be more effective planning to assess the pupils' knowledge of and competence in ICT during their time in school. Very few schools have effectively audited, with a view to identifying strengths and weaknesses in the overall provision, the contributions which all members of staff can make to developing pupils' ICT competence.

5.4 In a minority of schools, staff are monitoring, assessing and keeping good records of their pupils' achievements in ICT. In most schools, there is a need to develop further the role of the co-ordinator and school managers in monitoring and evaluating the consistency and progression in the pupils' experiences and standards of achievement in ICT.

5.5 A very small minority of schools are registered with the CCEA Scheme of IT Accreditation at KS2 and 3. The external accreditation of pupils has raised the profile of ICT in these schools and accelerated and strengthened the development of ICT. Very few of the schools which



are not offering the CCEA scheme are able to assess and report accurately on pupils' ICT competence and achievements during, and at the end of, KS2 and 3. At the same time it is clear that the scheme is seen by some schools as not appropriate for recording the very small steps of progress made by pupils with more severe difficulties. It will be important for CCEA and the special school sector to consider accreditation for this group of pupils.

6. THE PUPILS' EXPERIENCES

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6.1 The pupils' individual competence and confidence in the use of ICT vary widely but almost all pupils are motivated by the inclusion of ICT and are keen to participate in activities which involve the use of ICT.

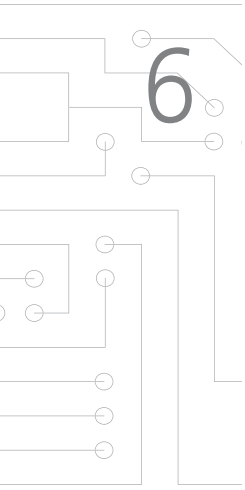
6.2 In almost all schools, the use of ICT to enhance work is improving. For those pupils with difficulties in fine motor movement, ICT enables them to produce work presented to a much higher standard than previously possible. For senior pupils, presenting work on multi-media presentation software affords opportunities to increase self-confidence, prepare work for an audience and share experiences and ideas. For pupils with EBD, ICT can be a powerful motivator. In general, these pupils in EBD schools are not as adequately resourced as pupils in other special schools and this deficiency is constraining progress. For all pupils in special schools, the teachers report an increasing rate of home ownership of computers and state that a majority of their pupils are comfortable with new technology and enjoy using it.

6.3 In the majority of schools, however, there is a lack of consistency in the range of the pupils' experiences. There is a need for most schools to promote a consistent approach to the development of ICT within and across the curriculum and to ensure appropriate progression in ICT skills for all the pupils.

6.4 Most pupils are developing basic ICT skills in communication and information-handling skills. Many pupils are competent in the use of word-processing and presentation software for the display of their work. Good practice in the use of word-processing involves the pupils drafting and amending work on screen, exploring different writing styles, awareness of audience and purpose and appropriate use of graphical images. In the lessons inspected there were many examples of pupils presenting work well through multimedia presentation software and using digital images.

6.5 In a minority of schools, the pupils have good opportunities to research information using the Internet. Most teachers carefully control access to the Internet and direct the pupils to suitable and useful websites. A minority of schools have carefully drafted policies for use of the Internet which have been shared with parents. A minority of pupils can locate information and can download text or images which they generally use well to improve subject work. They take a keen interest in Internet-based subject work and use the Internet to find up-to-date information or resources on almost any topic of interest. A majority of schools report difficulty with accessing the Internet due to shortage of available online facilities. All schools anticipate an improvement with the implementation of classroom 2000.

In one school for pupils with MLD there was good use of the Internet to support work on the Vikings using a website for a local heritage centre. Pupils were constrained by having to access the Internet in a technology and design room due to lack of Internet access in general classrooms. Nevertheless, the teacher was well prepared and the pupils were very



pleased to see on the web those local places they had visited and there were good opportunities to develop reading for a purpose. The classroom assistant supported the pupils effectively and the lesson was enhanced by the increased motivation, interest and information which the internet provided.

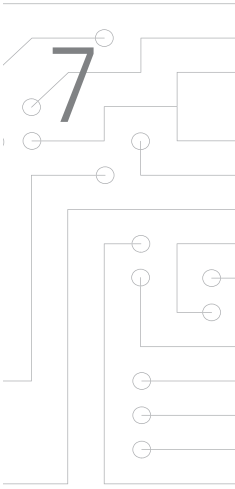
In a minority of schools, however, insufficient use is made of the potential of ICT to enhance and support the pupils' literacy, and examples of pupils transcribing from texts and other sources are still evident.

6.6 Those pupils with SLD use switches and other peripheral devices to interact with their environment in a way which was not previously possible.

In one school for pupils with SLD, the teacher in the infant class used the "talking wall" to good effect where the children had pre-recorded oral messages which could then be accessed through touching parts of the wall in relevant areas. The theme in the "wall" is changed every six weeks and included in planning for class themes and topics.

In another class in the same school ICT was used extensively to produce the pupils' own graded readers based on their experiences. ICT was also used to create picture exchange resources at a variety of important levels throughout the school.

7. MANAGEMENT AND LEADERSHIP



7.1 A majority of schools have identified ICT as a key area for development, and the level of strategic planning for ICT is good. The majority of principals give a high priority to ICT and recognise its unique importance in special schools. In the majority of schools, the SDP identifies ICT as a priority area for improvement and, effective action plans set out strategies and targets for its development. In these schools, the SDP is well focused on improving the quality of teaching and learning using ICT.

7.2 Senior managers promote strongly the effective integration of ICT into classroom practice in the majority of schools, and there is good support given to the work of the ICT co-ordinator and the core team. In the large majority of special schools principals have recognised the need to allocate sufficient resource in equipment and time to maximise the potential of the various ongoing initiatives but few have the flexibility within their delegated budget to allocate significant additional resources.

7.3 The good quality of ICT leadership at all levels is a key factor in determining that the pupils have worthwhile and challenging experiences in ICT. In the majority of schools, the management team, including the ICT co-ordinator, provides strong leadership for, and clear direction in, taking forward the development of ICT throughout the school. In many instances, the role of the co-ordinator is pivotal in identifying the levels of ICT competence and expertise among the staff, in devising an effective and well-paced programme for staff development and in setting targets for the further development of the pupils' attainments and skills in ICT.

7.4 In a small minority of schools, although ICT leadership is good and the co-ordinator has a clear vision for the development of ICT across the whole school, the SMT has not successfully obtained the full commitment and involvement of all staff in effecting improvements in the quality of the pupils' learning and the standards of teaching using ICT.

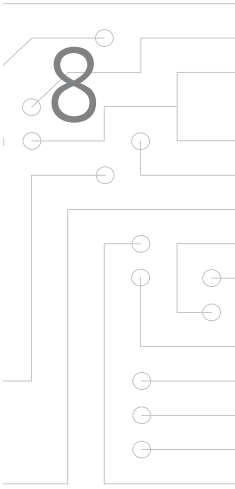
8. STAFF DEVELOPMENT

8.1 The NOF ICT training is a major national initiative designed to provide the framework for supporting teachers. It places ICT at the heart of staff development priorities in all schools. NOF training has been completed in the majority of special schools and has made a significant contribution to the continuing professional development of many of the participating teachers. The majority of SDPs set out a clear training strategy for ICT, often accompanied by action plans intended to achieve the objectives of NOF training. A range of school-based and other training opportunities, for example in twilight courses after school and in the evenings, have been undertaken in the majority of special schools and this has also brought a significant benefit to the teachers' confidence and competence in using ICT. Staff development is a priority in the majority of schools and the increase in the influence of ICT as a result of specialist advice and training from NOF and other trainers has been significant.

8.2 Most schools have invested considerably in ICT training, often in the teachers' own time. Well-planned and carefully organised NOF ICT training has been mostly successful in raising the profile of ICT and in enthusing many teachers. In a significant minority of schools, the NOF ICT training model has been instrumental in changing the attitude, culture and approach of schools and teachers to adopting the use of the new technologies in the classroom. In addition, the opportunity for the first time to access trainers skilled in using ICT to support pupils with severe and complex learning difficulties enabled teachers to use ICT in a new and potentially very beneficial way for their pupils. While a minority of teachers, with good ICT skills, found the training less necessary but useful, there is clear evidence that many others have derived significant benefits, particularly in improving their level of proficiency in basic skills and in enhancing both their confidence and competence in using ICT to support learning. It will be important to sustain and develop the specialist support which schools have received through NOF so that the Curriculum Advisory and Support Service (CASS) has the necessary expertise to provide this service in the future.

8.3 In a majority of special schools teachers have succeeded in integrating the new technologies effectively across the curriculum. Where this is happening, it is leading to improvements in the pupils' learning and it is extending their ICT experiences and standards. The teachers are able to apply in the classroom the skills and knowledge they have acquired as a result of the training. The main challenge, for most schools, is the further incorporation of ICT across the curriculum and the provision of effective support for those pupils requiring specific software to develop literacy skills. In addition, it will be important to develop expertise in the use of assistive technology to allow pupils to access the curriculum.

8.4 Since NOF training ended there has been insufficient time for attention to be given by the schools to evaluating NOF ICT training, to facilitating teachers in consolidating their skills, or for embedding the use of ICT to enhance the pupils' experiences across and within subjects. The review and evaluation of ICT in-service training (INSET) by the school management teams



needs to be strengthened further so that its influence on teaching and learning can be monitored closely. In most schools, however, staff in management positions at all levels have not yet put in place mechanisms to evaluate effectively staff development and do not have a firm understanding of the impact of staff development on classroom practice and on the pupils' learning.

8.5 In the special schools, there have been variations and inconsistencies in the level of support provided by CASS. Individual officers have established links with the majority of special schools. Some effective, good quality training has been given by ELB CASS in the general use of ICT but little specialist training has been provided to meet the specific needs of teachers working with children with special needs such as SLD or PMLD. Overall, there has been a lack of provision of ICT skills specifically designed to enhance learning for pupils in special schools. It will be important for CASS to consider future developments in this important area so that specialist training can be provided in the future.

9. ACCOMMODATION AND RESOURCES

9.1 The special schools have not yet received the C2K systems and as a result there is a wide variation in provision. The ratio of children to computers varies significantly across the schools. A significant minority of schools have purchased few resources preferring to wait for the C2K investment while others have made substantial investment to supplement initiatives like connecting schools. A small minority have dedicated computer rooms but in the majority of schools teachers prefer individual computers or clusters of computers available in the classrooms or corridor areas. All schools for children with SLD purchased peripheral equipment in preparation for NOF ICT training. This enabled schools to benefit from expert advice on using a variety of access devices.

10. SCHOOL EVALUATIONS OF ICT PROVISION

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10.1 In the questionnaire sent to all schools, members of senior management were asked to evaluate ICT provision within the school. The evaluations provided a detailed insight into the progress made by schools in relation to improving ICT. The development of a culture of critical self-evaluation of the effectiveness of the provision for ICT is an important area for development for almost all schools. According to the findings of the self-evaluations completed by the schools:

- the integration of ICT into the school development plan is well developed with over 90% indicating full or strong integration of ICT;
- almost 60% indicate little or no access by children of the Internet;
- nearly 100% of schools report that ICT is well used to support literacy and numeracy;
- just under 50% report little or no assessment or recording of pupils' achievements in ICT;
- over 70% indicate that ICT resources are good or excellent;
- nearly 80% indicate regular monitoring and evaluating of pupils' access to ICT by senior management;
- around 60% report that ICT is used well to support management; almost 40%, however, report little use of ICT for this purpose;
- around 31% report significant use of CASS to support ICT developments; a further 28% report some use of CASS to support ICT; in contrast, the remaining schools indicate little or no use of CASS to support ICT work;
- where teachers have undertaken NOF training over 60% report that the training had a significant or highly significant impact;
- almost 75% report good procedures for the evaluation and dissemination of the outcomes of ICT inset;
- almost 98% note good awareness by school management teams of the ICT competence of teachers.

10.2 As part of the inspection, the schools' self-evaluation findings were compared with the evidence from inspection. This report confirms that the school self-evaluations were mostly undertaken effectively, and that the findings from the self-evaluations match closely the findings of the Inspectorate.

11. CONCLUSION

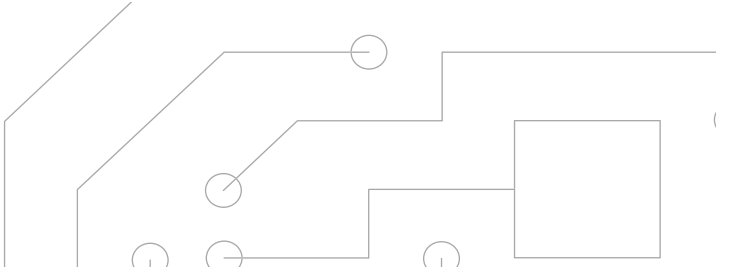
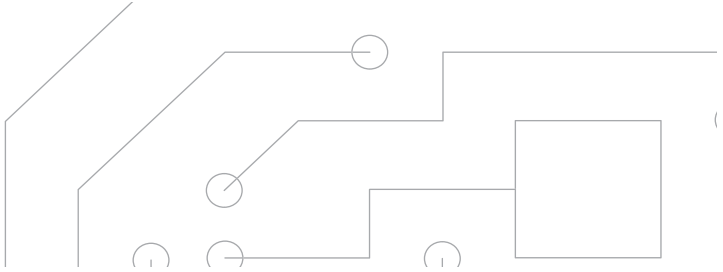
In general, it is clear from the evidence in this survey that the use of ICT in special schools to support teaching is widespread and effective. Staff and pupils are motivated by and value ICT work. In a majority of schools there is good ICT leadership and significant commitment from staff. The teachers have worked hard, often in their own time, and their ICT skills are improving. In addition, it is clear that a majority of schools have carefully evaluated existing resources to identify those most appropriate for their pupils. NOF training and the impact from the various strands of the ET strategy in Northern Ireland have resulted in initial progress in the development of specialist expertise in supporting children with complex difficulties. The teachers now use ICT well to improve lesson planning, to enhance the production and presentation of resources and to produce individual learning materials of a very high standard including, for example, talking books. The use of digital cameras and multi-media presentation software to enhance lessons is common and teachers use the internet effectively. Teachers are now well placed to take advantage of the additional resources planned through C2K.

In a small minority of schools, however, there remain important weaknesses in the use of ICT with insufficient use across the curriculum. Assessment is an area for improvement in the majority of schools. In addition, the pace of implementation of C2K has been slow and is a cause of frustration to many schools. A minority of schools have resourced ICT significantly from their own efforts, and supported by their Education and Library Boards, but others express disappointment that the managed service for schools is not yet available to enable them to develop and build on the training from NOF and other initiatives.

APPENDICES

ICT SURVEY REPORT SPECIAL SCHOOLS

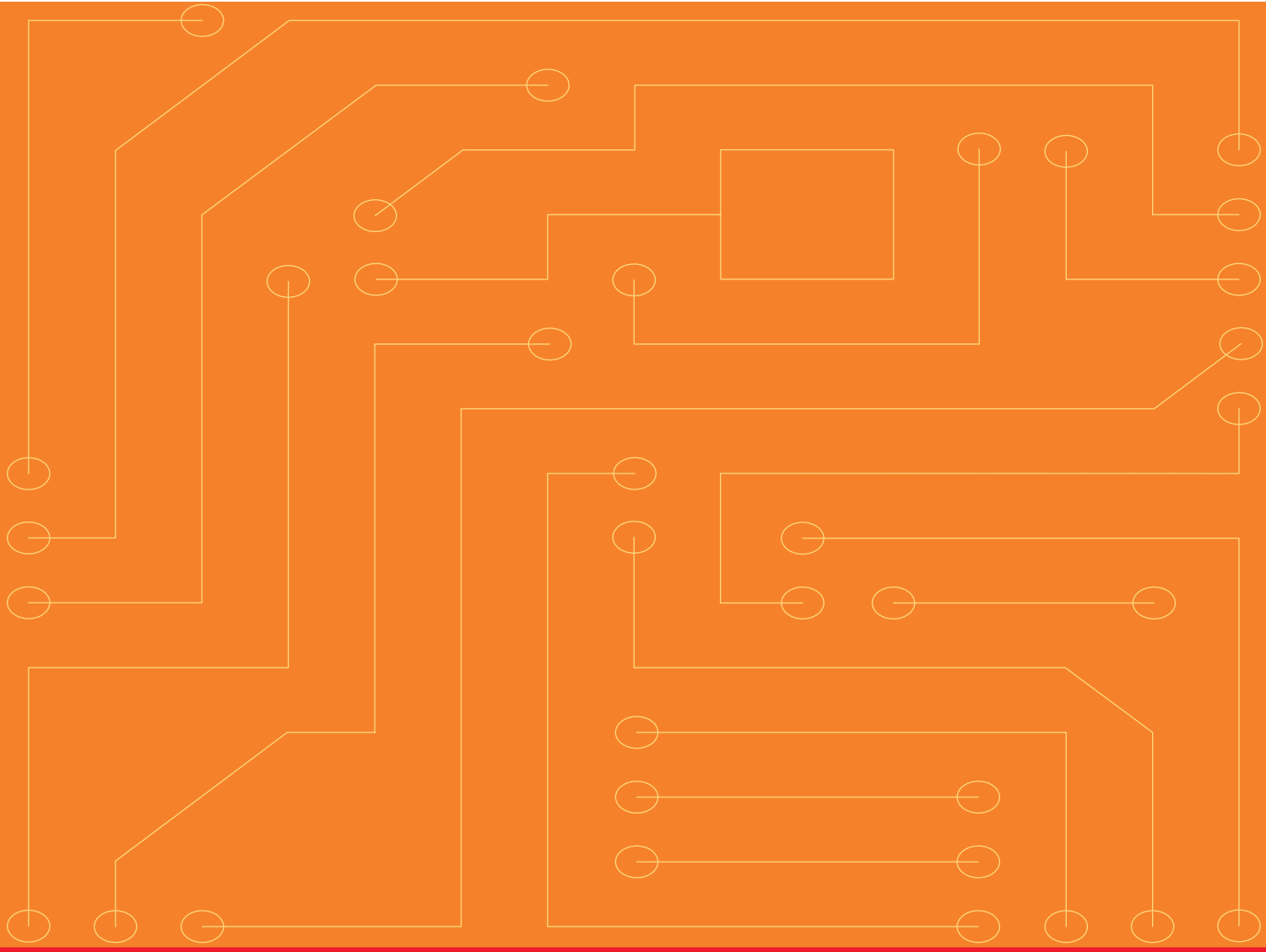
- Fleming Fulton
- Greenwood House
- Oakwood
- Clarawood
- Elmbrook
- Cranny
- Cedar Lodge
- Glasvey
- Dunfane
- Jordanstown
- Loughan
- Rosstulla
- Thornfield
- Beechlawn
- Ceara
- Longstone
- Killard House
- Knockevin
- Lisanally
- Sperrinview
- Tor Bank

GLOSSARY OF TERMS

Assistive Technology	Use of technology to gain access to learning for pupils with physical, sensory or cognitive difficulties.
C2k	An ICT managed service, providing infrastructure, wide area network integration, curriculum content and user support to all primary, post-primary and special schools in NI.
Data projector	Allows an image that would normally be displayed on the computer screen to be projected onto a larger screen, for example, for presentation to a whole class.
Desktop publishing	The process of creating publications and documents using software with good graphics capability. Desktop publishing software allows images to be included with text and to be moved around in blocks, placed into columns and so on. The software is often used by children to create leaflets, newssheets, brochures and to present coursework.
E-mail	Involves the sending and receiving of messages electronically normally using the Internet.
Internet	A worldwide 'network of networks' connecting millions of computers using telephone and cable communication links.
Internet Acceptable Use Policy	Every school must create an acceptable use policy document outlining the ways in which the computers and the Internet can or cannot be used. Children and their parents or guardians are required to sign this document.
Interactive (electronic) whiteboard	An interactive screen linked to a computer, based on the design of a standard whiteboard. The computer image is projected onto the screen, normally using a standard data projector and has touch-screen control. Teachers and children have control over the computer by touching a pointer to the screen and can interact with a presentation or website in front of the whole class.
Managed service	A service which will supply networked computers, software content, connectivity to the Internet, e-mail and links to range of other wide area services. The service is supplied, installed and maintained by a service provider from the

	private sector. The managed service in NI schools is being procured through C2k.
Network	A network connects computers together and enables the sharing of software and peripheral devices such as printers and access to the Internet. Computers within the same school are normally connected to a Local Area Network (LAN), and the networks from different schools could be connected to become a Wide Area Network (WAN).
PC	Personal computer.
Software	The applications (or programs) which run on computers, for example, databases, spreadsheets and word-processors.
Web browser	A software application that locates and displays web pages. The two most popular browsers are Microsoft Internet Explorer and Netscape Navigator.



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A copy is also available on the DE website: www.deni.gov.uk