

**The impact of technology on children with physical disabilities: an
evaluative case study at a special school in the West Midlands**

Archived

Contents

Abstract	3
Research questions	4
Background	4
Data collection tools	4
Pupils: observation, questionnaire and assessments	5
Parents: questionnaire	5
Staff: questionnaires, staff meeting and selective questioning	5
Literature review.....	5
Analysis of data.....	8
Motivation	8
Accessing the curriculum	12
Extra-curricular activities	16
Technical support	18
Conclusion	19
Recommendations	19
References	20
Appendices	21
Appendix 1: Impact of technology – pupil's questionnaire	21
Appendix 2: Impact of technology – parent/carer questionnaire.....	22
Appendix 3: Impact of technology – staff questionnaire	23

The impact of technology on children with physical disabilities: an evaluative case study at a special school in the West Midlands

Paul South

Abstract

Reviews of literature show that information and communication technology (ICT) can have a positive impact on pupils when effectively managed. This research critically evaluates to what extent this impact is being experienced at a special school for pupils with physical disabilities. Focusing on a group of 13 pupils, the research collects and analyses the views of pupils, parents and staff, using both qualitative and quantitative methods. The findings show that pupils are highly motivated by technology and that its use is growing in the school. They also reveal the importance of building curriculum and technical support into technology assessments for pupils and monitoring their implementation.

Archived

Research questions

What impact does the technology have in the school?

- Which technologies are being used and why?
- How is the technology used in lessons?
- How is the technology used for extra-curricular activities?

What impact does the technology have at home?

- How does the technology help with homework?
- How does the technology help pupils to follow their personal interests?
- How are parents involved in the technology?

How could the technology help facilitate inclusion?

- What do parents think about the technology and inclusion?
- What do staff think about the technology and inclusion?
- What do pupils think about the technology and inclusion?

Background

The school where the issue of the impact of ICT will be explored is based in the West Midlands and caters for children with physical disabilities. The school has a population of 45 pupils covering all key stages and post-16. Some of the pupils are involved in inclusion programmes, being released to mainstream schools for agreed amounts of time. A proportion of these pupils are becoming, or have become, full-time mainstream pupils.

Technology is a growth area at the school. Recently it became involved in the Communication Aids Project (CAP). CAP is a Government-led scheme that provides funding for the purchase of technology for pupils with communication difficulties. This project, coupled with the school's own financial commitment to developing the use of technology, has enabled many pupils to benefit from a variety of technologies. The equipment includes laptop computers, printers, communication aids, touch screens and various software applications.

The pupils who have benefited from the equipment have a range of disabilities such as cerebral palsy, arthrogryposis, congenital muscular dystrophy and spina bifida. In some cases, these disabilities are compounded with learning difficulties and hearing or visual impairment. The equipment supports them by allowing computer access, face-to-face communication and recording.

Through observation, reviewing relevant in-house assessments/evaluations and questioning the pupils, parents and staff, I have produced a case study based on a selection of 13 pupils, some of whom attend a mainstream school either part-time or full-time. Through the study, I have explored how the technology mentioned has had an impact on the school.

Data collection tools

The key stakeholders in this issue are the pupils, parent and staff, which includes teachers, learning support assistants and other professionals. The data collection tools I chose to use to question each group are detailed below.

Pupils: observation, questionnaire and assessments

First, I observed the pupils while they used technology, which allowed me to evaluate their use and provide me with a general idea of the pupils' abilities. Following this, pupil questionnaires were conducted (see Appendix 1).

The range of the pupils' abilities was quite broad as most of them had learning difficulties in addition to their physical disabilities. Therefore the questionnaire took the form of simple, closed questions with the option to elaborate.

For the pupils with communication difficulties, it was important that the individual conducting the questionnaire knew them and was familiar with them and the way they communicated. It was also decided that being questioned by someone who knew them would help all the pupils feel more comfortable and provide natural responses. Therefore their teachers and support staff were used to help them complete the questionnaire.

In addition to this, where I felt it was necessary I made use of significant technology assessment data that the school already held on the pupils. This supplied me with details of the pupils' current technology provision.

Parents: questionnaire

The questionnaire was sent home to the parents with the pupils. It was an appropriate option as many of the parents were not local to the school. It provided clear answers and one of the questions also sought to allow the possibility of probing the parents' responses further if required (see Appendix 2). As some of the parents did not speak English in some cases an interpreter was used over the phone.

Staff: questionnaires, staff meeting and selective questioning

The staff questionnaire contained a mixture of open and closed questions that allowed staff to provide in-depth responses (see Appendix 3). They were given the questionnaires at a staff meeting, which provided them with a scheduled time in which to complete it. At a later date, another staff meeting was arranged, to take place during an in-service training day.

The questionnaire responses from all stakeholders were presented, in the form of bar charts, to staff at the meeting, and all were given the opportunity to respond and ask questions. The staff meeting functioned as a focus group and the dynamic was an excellent tool for developing, comparing and exchanging thoughts and ideas. I also separately questioned selective staff whom I felt might have more to offer outside the confines of the group.

Literature review

Few people would disagree with the ideal advanced by the Government that pupils with physical disabilities should have equal access to the education offered by the National Curriculum (DfES, 2001; DfES, 2004). However, in the Government's strategy for special education needs (SEN), it also concedes that there is 'some way to go in developing a curriculum that meets the needs of all learners' (DfES, 2004).

Research suggests that there is a the valid concern that 'a mismatch between the pupils' needs and the curriculum on offer can exacerbate or even create special educational needs' (London Borough of Newham, 1988, in Hardy, 2000). Pupils, therefore, can become disaffected due to a cycle of

sustained failure brought about by mismatched school tasks (Blamires, 1999, p 52). It should come as no surprise then if pupils with physical disabilities sometimes feel isolated by a seemingly inappropriate curriculum that, in theory, seeks to embrace them but which, in practice, appears to exclude them and even highlight their difficulties.

If a curriculum that meets the needs of all learners is to be made a reality, it is vital that effective measures are taken to manage any inappropriate aspects of the curriculum by making it accessible or more accessible.

Technology has proven its worth as an effective tool in supporting learners with physical disabilities and enhancing their access to the curriculum. Detheridge (in Bozic and Murdoch, 1996) states:

Information technology has been widely used with pupils with severe learning difficulties and those with physical disabilities for many years, with considerable success. It has provided unique and powerful opportunities for communication and access to learning ... For many pupils ... computer-based technology is going to provide an essential component in their armoury of tools. For this reason, it is vital that they develop IT skills.

Here the Government is in agreement, as it believes that technology 'enables staff to tailor their approaches more effectively to meet the individual needs of children' (DfES, 2004).

Although it is not the only tool to be employed, technology has the ability to act as a bridge over the curriculum mismatch for pupils with physical disabilities by providing exceptional possibilities. It can provide a new start and new opportunities for pupils that are in an educational 'rut' or are not achieving the standards of which they are capable.

It is difficult to categorise seamlessly the benefits offered by technology, as they often overlap. However, by comparing various items in the literature on the benefits of technology I have produced Figure 1 which aims to show the main strengths that technology brings to pupils with physical disabilities. It reveals that these specific qualities enable technology to help bridge the curriculum mismatch in such pupils.

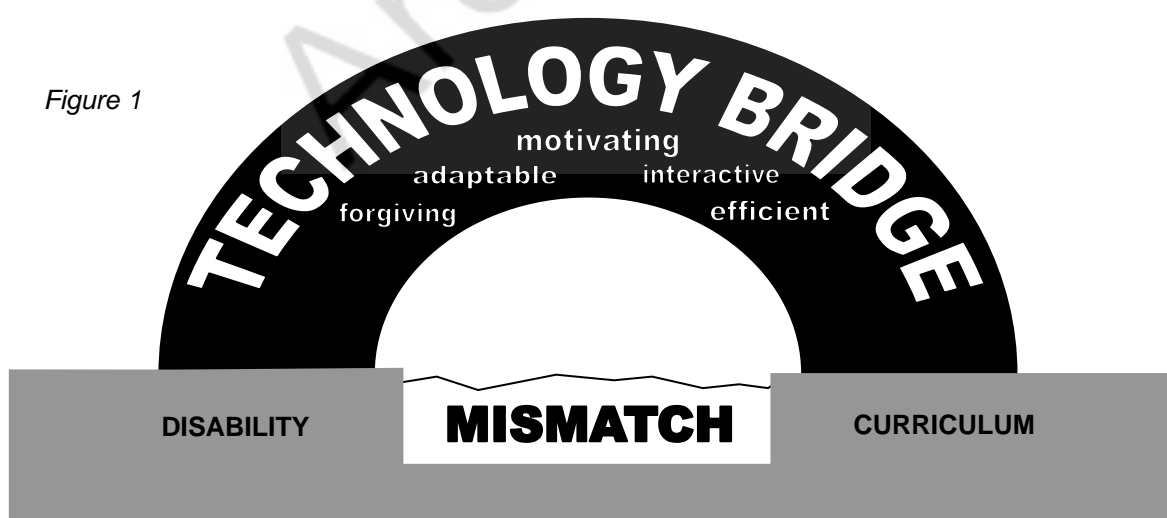


Figure 1 illustrates that technology's central quality is its ability to motivate (Blamires, 1999). The other qualities shown in the figure are, in many ways, the reasons *why* technology is so motivating when compared with traditional methods. The interactive, multi-sensory feature of technology enables it to engage and involve the learner's interest (Blamires, 1999; Hardy, 2000). Technology is forgiving in that it allows pupils to make mistakes and edit them out without trace. It also produces a high

standard of presentation (Blamires, 1999; Hardy, 2000). It is efficient because it replaces mundane, tiring and needless tasks with authentic labour (Hardy, 2000). Finally, technology is very adaptable, offering endless modifications that provide access for even the most limited physical ability (Hardy, 2000).

Although technology possesses many positive attributes, it does not come without potential problems. First, pupils who have been disappointed when using traditional tools for learning may believe that technology will be yet another port of failure and frustration (Blamires, 1999). Second, it should also be remembered that 'failure' is a possibility.

Other issues can counteract success. These include the end of a honeymoon period, when the good initial impact of technology peters away, and faulty or low-spec technology, which can frustrate both staff and pupils. Finally, bad choices of technology can also cause frustration and wastage (Blamires, 1999; Bozic and Murdoch, 1996).

With these potential pitfalls, it is important to know when technology is appropriate and when it is inappropriate. If technology is appropriate, it then becomes essential to find out *which* technology is appropriate through detailed assessment (Hardy, 2000). For pupils with physical disabilities, the most important yet difficult choice is determining a reliable input mechanism (Bozic and Murdoch).

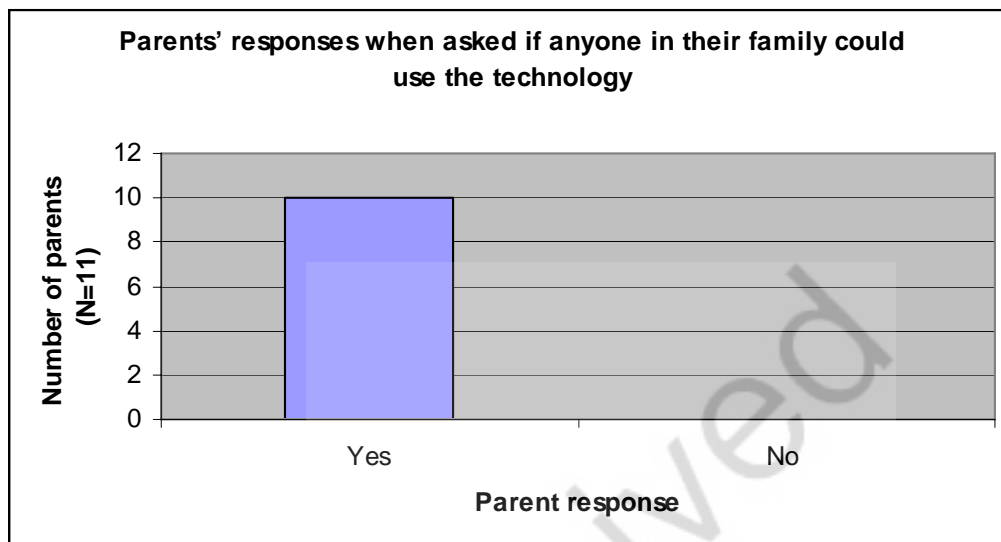
Time needs to be invested in showing the pupils how to use the technology (Blamires, 1999). Detheridge (in Bozic and Murdoch, 1996) presses for 'daily practice with support' for the pupils. In addition, it is important to appropriate time for technical and curriculum support (Hardy, 2000). Time taken to clarify these issues will not be wasted.

Analysis of data

Motivation

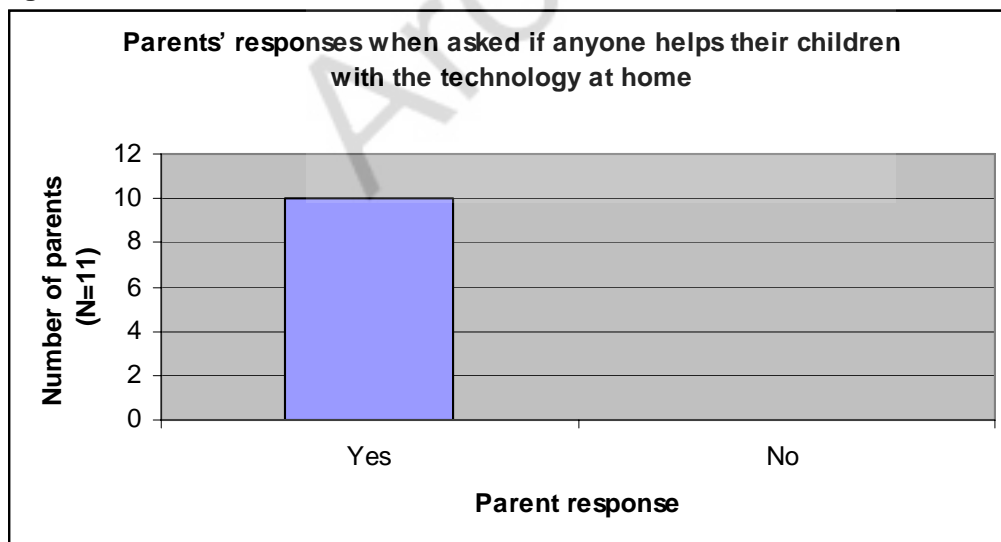
One of the most striking findings gained from pupil, staff and parent responses to the questionnaires is that a majority of them are positive and enthusiastic about technology.

Figure 2



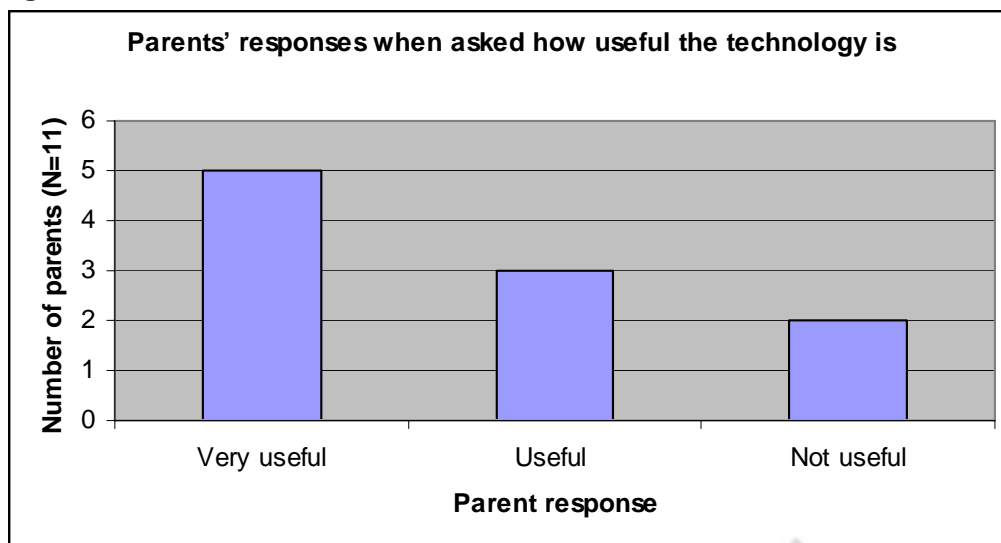
Note: not all parents responded to this question.

Figure 3



Note: not all parents responded to this question.

Figure 4



Note: not all parents responded to this question.

Parent responses demonstrated that they feel both keen and capable regarding the use of technology (see figures 2, 3 and 4). It is difficult to ascertain what level of capability these responses reveal or what induced the answers. Some parents may feel the need to give answers that will make a good impression of themselves and their level of involvement. Gascoigne (in Blamires et al, 1997), comments:

How [parents] appear and behave does not necessarily correspond with how they feel inside. If professionals only respond to them according to how they appear, the risks of partnerships breaking down are high.

If we are going to make the most of what I believe is the great potential of parental involvement, we must endeavour to adopt a sympathetic approach. This, in turn, will foster a positive relationship and influence attitudes (Plowden Report, 1967, in Cyster, 1979).

Although the staff agreed that there were problems involved in using technology (which will be discussed later), at the second staff meeting they conceded that the benefits substantially outweighed the difficulties. The fact that they are willing to persevere regardless of the frustrations is impressive. One of the factors for this choice is the impact that staff felt that the technology had on the pupils' motivation. This experience echoes Blamires' statement that '... improved motivation and self-esteem are frequently identified as resulting from the use of computer technology' (1999).

Figure 5

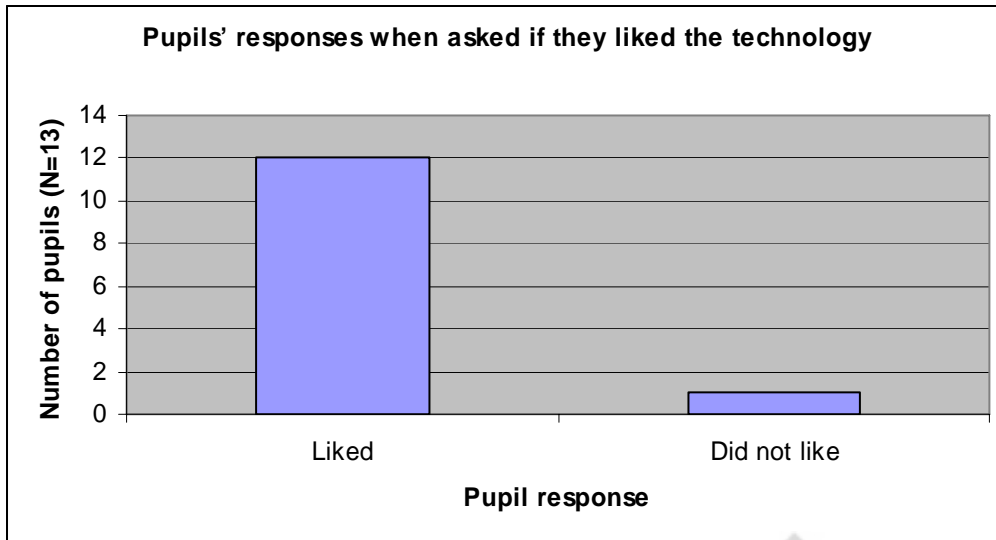


Figure 6

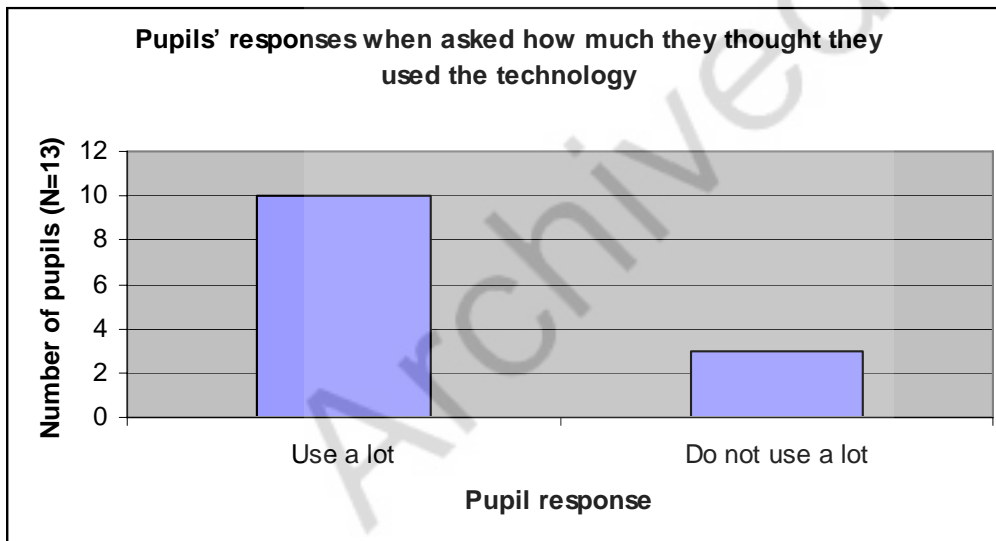


Figure 7

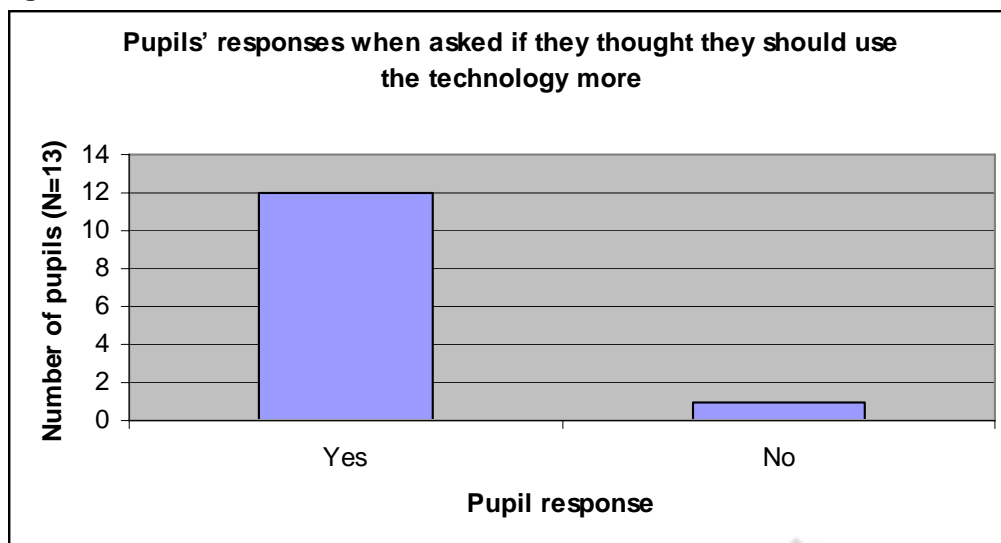
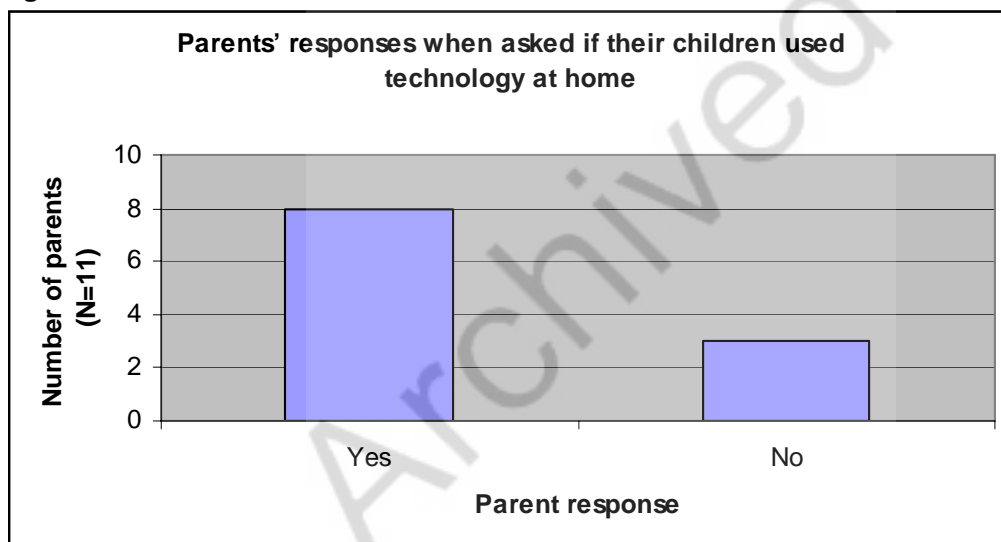


Figure 8



The responses of pupils themselves further validate the views of the staff and the research. Figures 5, 6, 7 and 8 reveal that pupils like technology, use it a lot and are keen to use it more. The following observed examples of pupils confirm the genuineness of their responses:

Staff said Calum gained enjoyment through the independence and achievement he experienced. Mark was very motivated and confident as he paraded his use of his laptop and was very keen to have more independence at home by connecting to the internet. Though Gregory's and Balbir's use of their communication technology was limited, they were both very excited by its interactive features. Akshama was very capable using her electronic speech aid for telling jokes; her increased ability to socialise gave her great satisfaction.

This platform of enthusiasm, especially that exhibited by the pupils, is key to the successful impact of technology within the school. It is essential that this motivating factor is prized and preserved as the school takes steps to increase the impact that technology has at the school.

Accessing the curriculum

It could be argued that the motivational quality of technology is not reason enough for schools to invest in it. Hardy (2000) states:

The arrival of an expensive multimedia computer, switches, touch screens, colourful programs and other paraphernalia is a powerful distraction, which may lead to success being judged by how good the pupil is 'on the computer'. The true test is how good the pupil is on the curriculum.

This assertion makes the legitimate point that, within an educational setting, achievement within the curriculum is the main aim. However, for pupils with SEN, the fact that they are engaged and motivated by an activity may be an essential precursor to getting back on the curriculum ladder, especially – as suggested by Hardy (2000) – for those who have become disaffected. Nevertheless, the ultimate aim in using technology remains advancement in the curriculum.

Figure 9

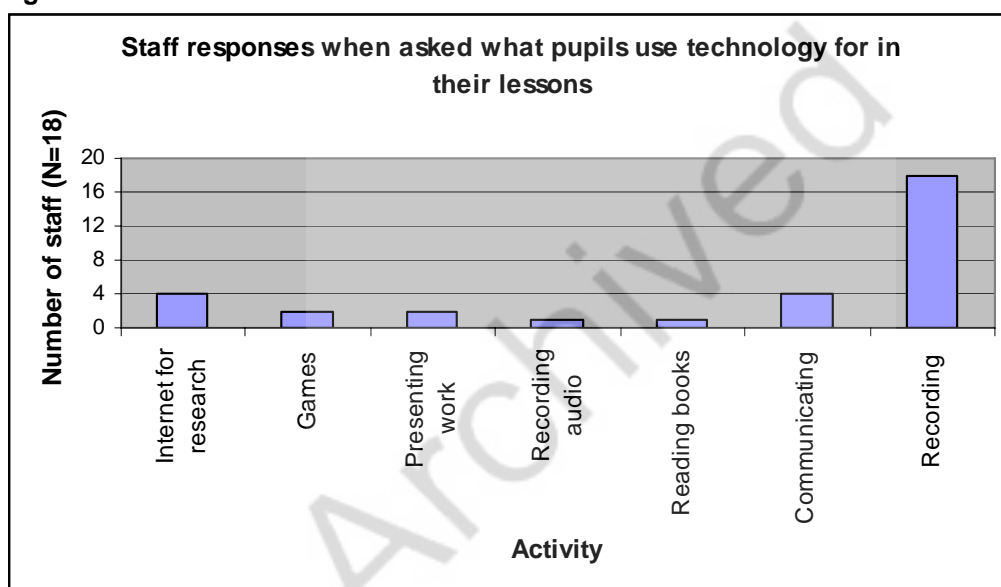
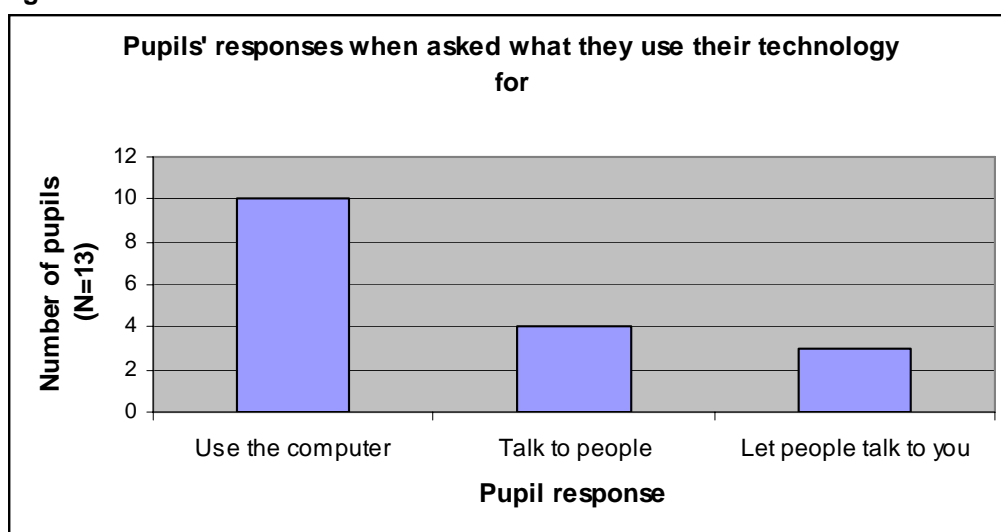


Figure 10



Note: pupils could have more than one response.

Recording

At the school studied, technology is used to access the curriculum in a variety of ways, including communication, the internet, CD-ROMs and other activities. The most popular use, by a long way, is recording work (see Figures 9 and 10). Responses show that it is predominately used in maths and English.

This type of use was effectively demonstrated by a number of pupils. Haroon used a joystick and keyboard with a key guard to record his spellings and write sentences. The level of presentation was excellent and would not have been possible without the technology. Sanjay was able to produce similar work using a touch screen, grid software and a keyboard with a key guard. Staff had prepared a grid using the grid software, which enabled him to work more quickly and focus on the lesson's objective.

Aisha used a laptop to record a description of a character. Although she did not appear particularly excited about using it, she related to it as an effective tool. She was able to use the word-processing application to update and edit her work, and worked with great independence from beginning to end. Finally, Tristan used a tape recorder with his class to retell a story. He contributed effective sentences to the story and enjoyed listening to the voices being played back, especially his own.

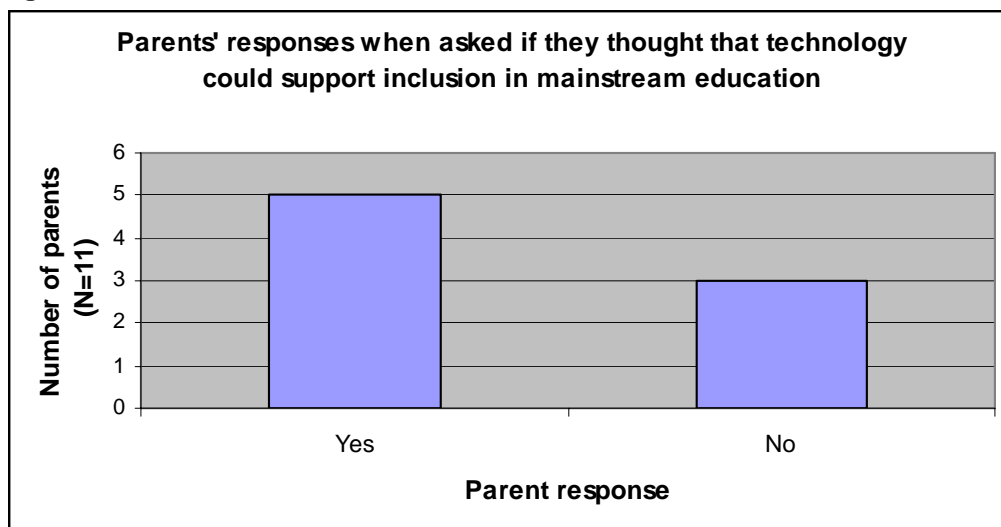
Two concerns were voiced regarding the use of technology for recording. First, some staff said that using technology to record was slow because of difficulties that the pupils had with hand to eye co-ordination. Second, it was thought that using technology could take up time that could be spent on developing handwriting skills.

These are both valid concerns and lead to the question: What is the most efficient alternative? For pupils who had a level of handwriting, it was pointed out that the choice of recording tool depended on the objectives of the lesson and that the teacher had the responsibility of maintaining a reasonable balance by providing a set time for handwriting practice. Pupils should also be allowed to develop their own preferences by being given opportunities to choose their favoured tool.

For those who are not able use handwriting, other strategies are needed. For example, Sam, who attends a mainstream school for most of the week, needs an amanuensis to record his notes in lessons. However, using a laptop he is able to record for himself. He works a lot slower than his peers, but he works independently, with some precision and at his own pace.

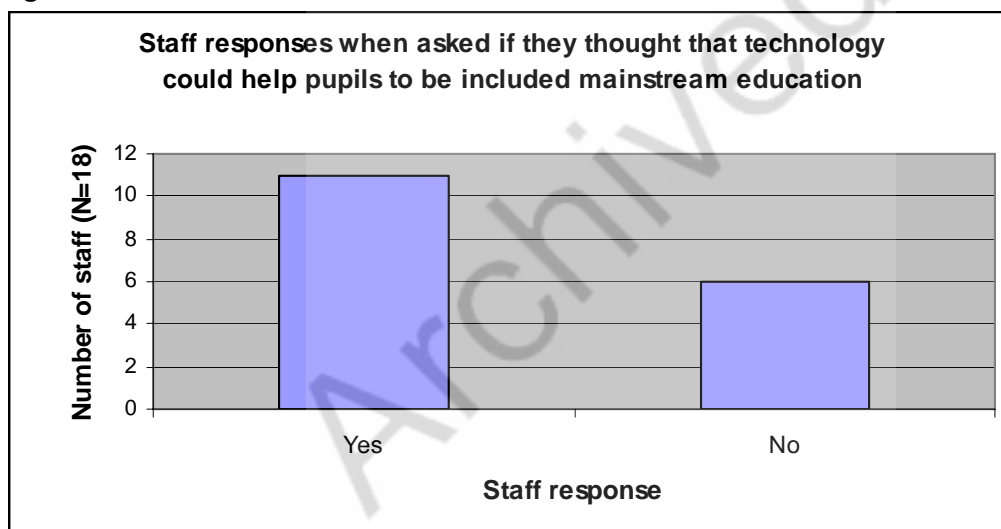
Blamires (1999) states that enabling technology '...is about being helped to achieve something that could not be achieved at all without that aid or without great personal effort'. For many pupils, recording using technology is the most efficient and sometimes the only option and avoids the 'inauthentic labour' referred to by Blamires (1999). In addition, Sam's case also demonstrates the greater independence provided by technology and the contribution it can make towards inclusion.

Figure 11



Note: not all parents responded to this question.

Figure 12



Note: not all staff responded to this question.

Questionnaire responses showed that parents and staff feel technology has a role to play in facilitating inclusion (see Figures 11 and 12). Although a member of staff rightly commented that 'technology does not solve inclusion ... it is just a part of it', another staff member who supports a pupil in a mainstream school noted that technology 'would help pupils in mainstream because they could access the curriculum and work at their own pace'. Another pupil, Rhys, currently attending a mainstream school and having very limited physical ability, was able to access a spreadsheet with great capability and independence. Without technology, he would never be able to complete work to such a high standard, which is comparable to that of his peers. His support assistant said, 'Rhys does his own work. There is always the question of whose work it is – is it my work or Rhys?'

Communication

A small number of pupils use technology as a means of communication. They seemed to like this, but its use was very limited.

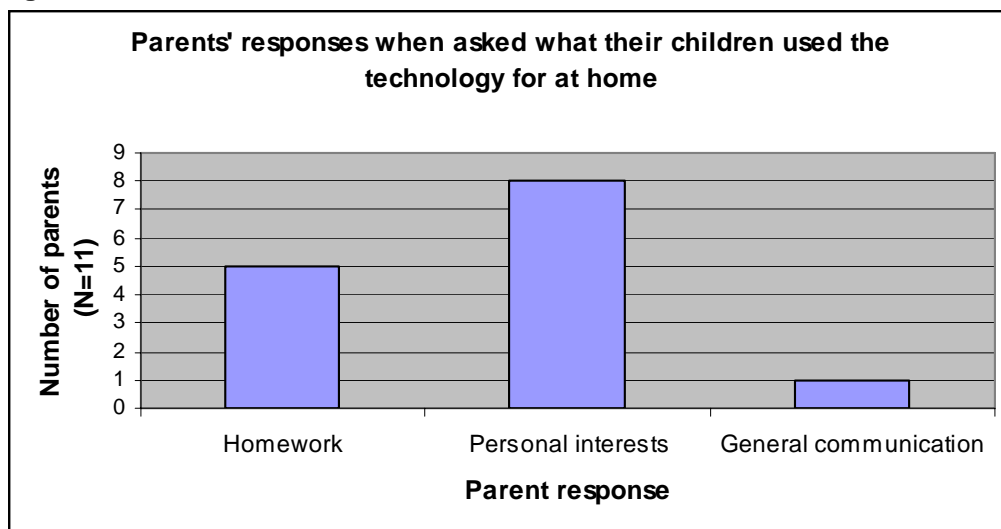
Akshama, who could express 'yes' and 'no' using her thumb, employed an electronic speech aid to do the same thing. Although she enjoyed the experience, it did not offer any advancement in the curriculum. It was very difficult to use the aid in general conversation as the desired comment was not always in its bank, and if it was, it could be time-consuming to find it. A member of staff noted that '[the electronic speech aid] is very limited for communication purposes since it is restricted to what is programmed on to it and it is often inappropriate to needs'. Other resources can be made for this particular electronic speech aid, but only by individuals officially trained to do so. Without appropriate resources, it is more likely that the child will be made to fit the technology instead of the technology being made to fit the child.

The example above highlights the need for additional resources to be used with the electronic speech aid that have been specifically planned and produced for curriculum use. The same concern was apparent for other types of technology, such as grid software.

Various ideas for producing resources were discussed by staff, such as resource sharing with other schools and downloading resources from websites. However, this would not eliminate the need for the school to generate its own resources that cater for the individual needs of its own pupils. Having a range of devices and applications in use requires a substantial investment of time to make the technology useful. This supports Hardy's assertion (2000) that when technology is being purchased, we should not only focus on assessing the child and the relevant qualities of the technology, but the future management of the technology should also be an essential part of the assessment package. When, in some cases, tremendous amounts of financial resources are available for spending on technology, it is inexcusable not to make this type of complete assessment, and to proceed only if all requirements can be implemented.

One particular pupil illustrated the importance of looking at all the above questions in depth. Sharon had previously accessed a keyboard using a head pointer – a very low-tech method but effective in its own way. A sizeable investment was made in an infrared head-movement-controlled mouse. The new technology rarely worked properly and caused the pupil such frustration that the very mention of the equipment agitated her. It is difficult to say why a situation like this occurred, as the technology was chosen after a detailed assessment of her needs. However, if the above *complete* assessment had been applied in her case, I am confident that her problem would have been resolved.

Figure 13



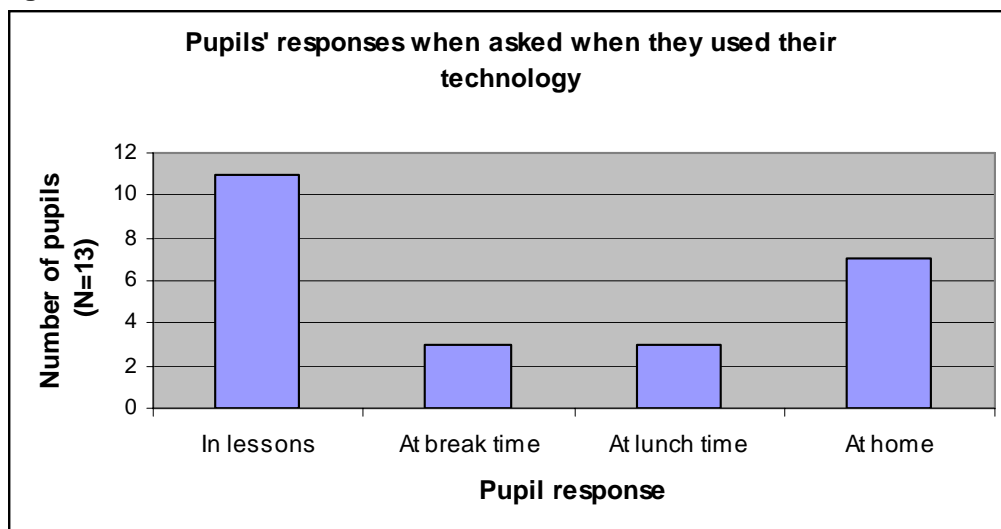
Note: parents could have more than one response

Extra-curricular activities

Pupils were keen to use the technology to follow their personal interests, and their parents said that they used it mostly for this purpose when at home (see Figure 13). This type of use is a great way to develop independence and capability and offers a lot of opportunities for pupils such as Mark, who was eager to have internet access at home. However, for him to have this, his parents would have to become involved, and there would also be financial and practical implications. The existence of obstacles such as these reaffirms, once again, the importance of strong links between schools and parents.

Rhys' support assistant said that there might be complications involved in Rhys using his technology at home because he 'needs to be set up first with his switches'. Another member of staff was concerned whether a portable PC being used at home regularly would be brought back to school every morning with the same regularity. Staff also mentioned that family members might misuse equipment intentionally or unintentionally. In many cases, these issues can be thought through and ironed out as the school works with the families.

Figure 14

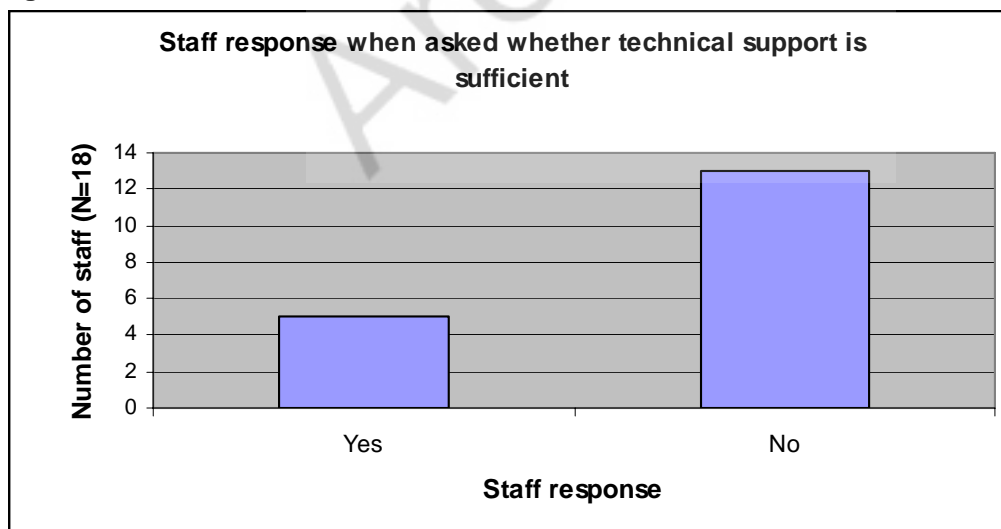


Note: pupils could have more than one response

Pupils use the technology mainly in their lessons and at home (see Figure 8), there being few opportunities for use during breaks and at lunchtime. The issue of whether opportunities should be given during these times is similar to the concern about handwriting – is it the best use of time?. However, concern that the technology could be overused by pupils has grown.

Can technology be overused by pupils? Before decisions can be made about individual pupils, a number of things need to be investigated. These include the impact on the pupils' health, the educational limits of the technology (which, in some areas of the curriculum, provides a very 'virtual' education), pupil preferences, the extent of their right to choose what they do in their free time and the degree to which they depend on the technology as an aid.

Figure 15



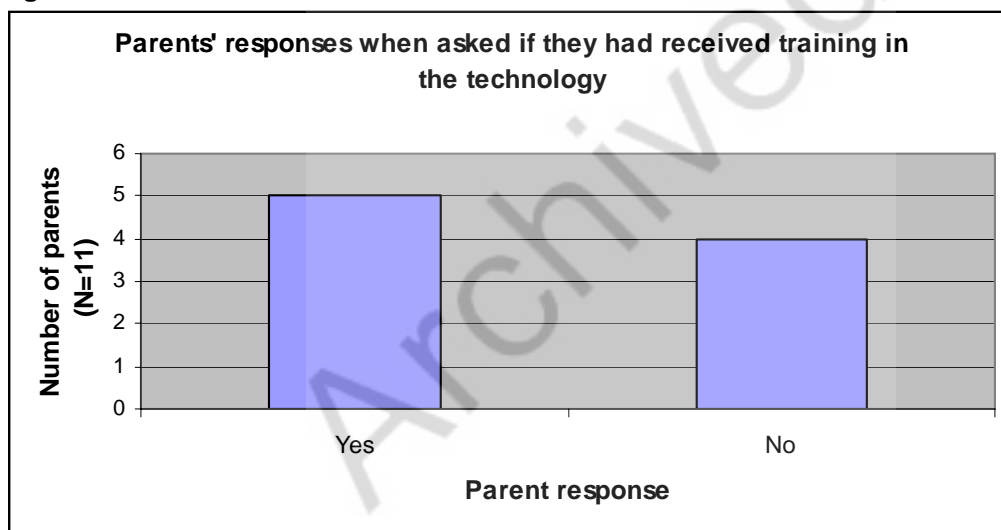
Technical support

The most ineffective aspect of the technology was, according to staff, the technical support (see Figure 15). This was seen as a major source of frustration. The current support provision is not always adequate and financial resources are not available. There is no obvious solution to this, but a number of possibilities should be investigated.

For example, staff suggested that more training would help them solve some problems. However, because teachers and support staff are already pressed, the bulk of the difficulties would need to be taken on by another agency. A structured system needs to be put in place that would be able to respond to problems with a limited amount of delay.

Proper maintenance of the technology was also suggested as a way of avoiding potential problems. The absence of a network played a part in making maintenance a more time-consuming exercise. It was proposed that parents could make a contribution to the technology's maintenance. Parental attitudes and capability indicate that there might be a willingness among them to become more involved and take part in further training. Although all the parents had been offered training, for undisclosed reasons some of them had not taken advantage of this (see Figure 16). More work could be carried out to make training more accessible to parents.

Figure 16



Conclusion

Technology is having a growing impact on the school. There is an increasing amount of relevant technology in place and a desire to use it even more effectively – to ‘tap the potential for ICT to enhance teaching and learning’ (DfES, 2003). With the many other initiatives and requirements placed on the school, it is difficult to say to what level it will be able to fulfil them all and where technology fits into its agenda. It will be important, therefore, for the school to continue reassessing its goals by asking themselves: Which of the Government’s requirements will make the greatest difference to their pupils and most enhance their education and their future?

Recommendations

- Continue positive commitment to technology, which should include investigating networks.
- Value and nurture the motivational impact of ICT on pupils and other stakeholders.
- Seek to utilise the potential of parental involvement by continuing to develop friendly, open relationships and by seeking different ways to involve parents in training.
- Ensure that complete assessments are carried out and implemented for all future purchases of technology, which includes the provision for curriculum support, technical support and monitoring.
- Review the technical and curriculum support provision for current technology.
- Review and highlight any pupils that are having a negative experience with CAP technology and review their needs.
- Devise a philosophy regarding frequency of technology usage.

References

Blamires, M, ed. (1999) *Enabling Technology for Inclusion*. London: Paul Chapman.

Blamires, M, Robertson, C and Blamires, J (1997) *Parent-Teacher Partnership: Practical approaches to meet special educational needs*. London: David Fulton.

Bozic, N and Murdoch, H (1996) *Learning through Interaction: Technology and children with multiple disabilities*. London: David Fulton.

Cyster, R, Clift, P and Battle, S (1979) *Parental Involvement in Primary Schools*. Windsor: NFER.

Department for Education and Skills (2001) *Special Educational Needs Code of Practice*. Annesley: DfES.

Department for Education and Skills (2003) *Fulfilling the Potential: Transforming teaching and learning through ICT in schools*. Annesley: DfES.

Department for Education and Skills (2004) *Removing Barriers to Achievement: The Government's strategy for SEN*. Annesley: DfES.

Hardy, C (2000) *Information and Communications Technology for All*. London: David Fulton.

Archived

Appendices

Appendix 1: Impact of technology – pupil's questionnaire

Pupil: _____ Staff: _____

Instructions: The questions below refer to computer equipment used by pupils. Pupils should answer the questions by ticking **one box**, unless stated otherwise. A member of staff should support the pupil in completing the form.

1. Do you like your equipment?
Yes No
2. Do you use your equipment a lot?
Yes No
3. Do you think you should use your equipment more?
Yes No
4. When do you use your equipment? (**More than one box may be ticked**)
In lessons At break time At lunch time At home
5. What does your equipment help you to do? (**More than one box may be ticked**)
Use the computer Talk to people Let people talk to you
6. Can you use the equipment by yourself?
Yes No
7. Which lessons do you use the equipment in? (**More than one box may be ticked**)
Maths English Science ICT History
Geography RE Art D&T
Other _____ (*Written answer*)
8. Is there any other equipment you need? (*Written answer*)

Question 9 is only for pupils currently attending a mainstream school for any time during the school week. Enter the name of the mainstream school in the blank below before answering the question.

9. Does the equipment help you at _____ School?
Yes No

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN COMPLETED FORMS TO MRS SMITH.

Appendix 2: Impact of technology – parent/carer questionnaire

Parent/carer: _____ Pupil: _____

Whenever the word 'technology' is used in the following questions, it refers to computer equipment provided either by CAP, the school or the family.

1. Does your child use technology at home?

Yes No

2. Can your child use the technology by himself/herself?

Yes No

3. Do you or anyone else in the family know how to operate the technology?

Yes No

4. Have you received training in the use of the technology?

Yes No

If yes, who provided the training – eg school, supplier? (*Written answer*)

5. Does anyone help your child with the technology at home?

Yes No

6. What does your child use the technology for at home?

Homework Personal interests General communication

7. How useful do you think the technology is?

Not useful Useful Very useful

8. Do you think the equipment could help your child to be included in a mainstream school?

Yes No

9. Would you be prepared to discuss the answers given in your questionnaire?

Yes No

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN COMPLETED FORMS TO MRS SMITH.

Appendix 3: Impact of technology – staff questionnaire

Name: _____

Instructions:

Pupils

The questions on pages 2 and 3 refer to the use of technology by the pupils listed below. These pupils have access to technology through the Communication Aids Project and/or school and home provision.

Think about the above pupils/pupil you teach or support as you answer the questions. Please underline the pupils you work with.

[List of pupils' names supplied here]

In this context, the word 'effective' refers to the reliability of the technology and how well it impacts on inclusion in school, family and community.

1. In approximately how many of your lessons do pupils use technology?

0% 25% 50% 75% 100%

2. What do pupils use technology for in your lessons?

3. Please give below as many examples as possible of *Ineffective, Effective and Very effective* use of technology in your lessons.

Example 1: Ineffective Effective Very effective

Example 2: Ineffective Effective Very effective

Example 3: Ineffective Effective Very effective

4. On the whole, how effective is the technology in your lessons?

Ineffective Effective Very effective

5. Do you think technology could help any of the pupils to be included in mainstream?

Yes No

Please explain your answer:

6. Can you suggest any pupil assessments or evaluations that demonstrate the impact of the technology?

Yes No

If yes, please list the assessments/evaluations below:

7. Can you operate the technology used in your lessons without support?

None of it Small amount Half Majority All

8. Is the technical support in place sufficient?

Yes No

9. How many of the pupils listed above can use the technology independently?

None Some Most All

10. Do the pupils use the technology for extra-curricular activities?

Yes No

If yes, please list below:

11. Do you give the pupils opportunities to use the technology at home?

Yes No

12. Are there any difficulties with pupils using technology for homework?

Yes No

Please explain your answer: