1. **What works**
2. **How can ICT help?**
3. **How have teachers and pupils used symbols?**
4. **Meeting individual needs**

**What works**

The word processor can be used to

- draft work,
- edit
- restructure passages,
- develop ideas collaboratively,
- look at different styles and format for different purposes.
- produce text faster
- write more accurately.

**How can ICT help?**

- text to speech,
- speech to text,
- text to Braille,
- text to pictures,
- switches,
- screen enlargement
- whole-word input

**Editing**

For anyone who tends to make mistakes or has disjointed thought processes, it can be a great relief to know that text can be put right before you’ve finished. The ability to develop a piece of writing over several lessons also helps pupils to become more involved in the process and may help them to understand the way text can be edited and improved.
Presentation
Work nearly always looks good when it’s printed out from the computer, looking crisp with clear writing. For some pupils this is the only way they are going to produce legible, smart and tidy work. It’s something they are happy to revisit, something to show to other people.

Collaboration
Members of the group may take different roles, such as the thinker, the typist, the editor, the illustrator, or perhaps work simultaneously or successively on their own parts of the work, planning together at the start and bringing it together at the end. It helps to make the process much less threatening and encourages pupils to take a more objective view of their own work.

Checks
There are all sorts of automated features within word-processing software: spelling and grammar checkers, word count, speech facilities and print previews amongst others. These help writers to keep on track, check their work as they go along and keep writing. The 'danger' of making pupils dependent on the spelling checker does not seem to be borne out in practice. People with genuine spelling difficulties see correct spelling models more often and consequently many of them also start to spell better away from the computer.

Valued context
It is often quite a privilege to be able to work on a computer, so it builds a good self-image as well as sending messages to the rest of the world. Pupils tend to work harder, faster and spend more time on tasks. These combine to give them more opportunities for learning, reinforcement and mastery.

Objective view
It is much easier to look at and think about work on a computer screen. The anonymity of type, along with the clarity of presentation, gives pupils a more objective view, so that they can consider their work in a more critical light.

Vocational opportunities
Almost all jobs these days assume keyboard skills at some level. This is one important vocational skill that we can teach at school.
How have teachers and pupils used word processing?

Mark is six and goes to a local primary school. On entering the school he caused some concern because he was so shy and withdrawn, making no attempt to move around and explore the vibrant, open-plan infant environment. Having a severe visual impairment, he has in-class support for some of his lessons. He has discovered that it is much easier to see what he has written when he works on the computer, and finds black on yellow in 48pt type best. He’s learning to touch type, too. When we visited him we asked if we could see what he was doing on his computer. “No, sorry,” he replied, “I’ve finished for this morning. I’m going to the library” and picked up his books and went. ICT is helping him become a very confident and competent young man.

A group of boys with specific learning difficulties in a school in Scotland developed their own spelling strategy using a combination of the spell-check facility and thesaurus. If the word they had written was too inscrutable to be recognised by the spell-checker after a couple of attempts, they would think of a synonym or something close, and nine times out of ten would find the word they’d been unable to spell. Over the next school year their vocabulary became richer and they, as well as other language groups, were encouraged to go back through their work using the thesaurus to see where they could have used more interesting words.

Anne Walker has been working with reluctant writers, using colour laptops. Each pupil has spent time going through the possible font and colour combinations and produces work that looks quite different from that of their classmates. One pupil is writing in curly red script, another in a nice casual brown marker font and yet another works in the drawing module so that he can write white on black. All of them are now really keen to work and get what they have written printed out at the end of the lesson.

Andrew was in Year 10 before he started to use a computer regularly for his coursework. He was bright but had difficulty with handwriting and spelling. He was reluctant to use the computer to start with, seeing it as cheating, but quickly became fascinated with the way he could play with formatting. He spent a great deal of time looking at his work, emphasising particular words, centring and re-sizing headings. He was also delighted with the ability it gave him to check spellings. It gave him the confidence
to produce far longer pieces of work (his philosophy had been that if 30 percent of words were going to be spelt wrongly then the shorter the homework was, the better). The initial benefit was longer, well presented pieces of work. Over a greater period of time, his spelling became much better and he was less reluctant to write by hand, knowing that it could be typed up and edited later if necessary.

Peter is the archetypal electronic whizz-kid with a bedroom full of cast-off amplifiers, dismantled radios and the occasional exploding transistor. He uses a laptop computer because of his visual impairment. He has to print out his work on the school office printer and so has casually gained access to faxes and e-mail as well. He has obtained all sorts of technology and science equipment for the school from local firms by persistent and friendly e-mailing, and is always the first port of call when technical support is needed. He lies in bed at night dreaming of the fun he can have with all the wonderful resources at his new secondary school in the autumn.

**Meeting individual needs**

- Configure/customise menus and toolbars to emphasise or hide features
- Design macros that automate particular tasks
- Provide on-screen frames (scaffolding)
- Encourage use of spelling and grammar checkers
- Provide whole-word input systems via word lists, clickable grids or overlay keyboards
- Use word processors that allow picture or symbol support
- Design and write-protect templates set up with particular colour, fonts and sizes so they are ready to use.

**Activities**

Organise pictures and words to convey ideas

Use the mouse to match words and pictures

Use an appropriate input device to position elements on screen
Create movement on screen

Resources
An object-based drawing package
Scanner
Photograph of one of the children

Teachers should be able to:
scan a photo or take a digital photograph
create a file within the drawing package

The activity
Scan the photograph or create a digital one and save it as a screen sized photo into file and lock this so that children cannot move it around
Make labels of parts of the face and body
Ask pupils to move the labels so that they match the right parts

2. Organise pictures and words to convey ideas

Use a word bank to assemble sentences that communicate meaning

Make deliberate selections from a clickable grid supported by symbols

Select elements from a clickable grid containing sounds and pictures

Resources
Word processor with word-bank facility which inserts pictures alongside text

Teachers should be able to:
use an appropriate word processor
create an on-screen grid containing pictures
record or capture and add sound to the cells

The activity
Create grids for regular tasks, such as news, weather and timetables

2AWriting stories

Use a word processor to produce sentences that communicate meaning
Use a word processor, which has symbol support, to tell a story

Make decisions in a branching story

Resources
Word processor with word-bank facility which inserts pictures alongside text
Scanner

Teachers should be able to
use an appropriate word processor
create an on-screen grid containing pictures
use a scanner

The activity
Select pupils for a small group supported by an adult if necessary

Read and re-tell the story of Red Riding Hood (or any other you can find pictures of) using a prepared grid
Combine the text and pictures to make big book

An alternative
The class or a group can compose their own story
Each child illustrates one page
Children draw characters and any significant items
The teacher makes a grid containing children’s scanned pictures and necessary vocabulary
Each child writes their own page of the story to go with his or her drawing
Combine the pages to make a big book.

3ACombine text and graphics

Combine graphics with text, use appropriate effects and re-size graphics
Use a painting package to create an appropriate picture to illustrate children’s writing and insert this with adult support
Operate a single-switch presentation which contains familiar photographs with spoken captions
Resources

Painting package
Word processor which allows pictures to be inserted

Teachers should be able to:
use the chosen software
configure menus so that unnecessary functions are not available to pupils
set up a template with particular fonts and colours
write-protect files
design a clickable grid, if pupils need this type of support for their word processing

The activity
Pupils write about a particular animal and its habitat using the class word processor, perhaps with the support of a clickable grid with the appropriate vocabulary (Science KS2 2.5a)
Each child creates a picture of his or her animal and is supported to combine this with the text
Combine pages to make a class book about animals and their habitats

4A Write for different audiences

Use the more advanced features of a word processor to help pupils match their work to an audience

Select appropriate font and size of text for different audiences

With support, choose favourite font, colour, effect for print-outs to label books and possessions

Resources

Word-processing software that allows formatting of text
Samples of different styles of text & colours, fonts and format greetings cards, mail shots, magazines for people of different ages
Activity cards with challenges

Teachers should be able to:
use the full range of formatting features on word processor
configure menus to focus on desired features

The activity
Create challenge cards (or use the ones below)
Discuss examples
Give challenges to pupils
Discuss the final result as the full class
Create a display of different styles of text

Name plate for child's bedroom

Letter to the bank manager

Invitation to a Hallowe'en party
Poster for a jumble sale
Wedding Invitation

Supermarket shelf

KS3 unit 2

Gather, process and output information in text and image form within the context of a newspaper

Use a newspaper template, designed through analysis of audience needs, acquire and process images

Contribute to production of a newspaper

With support, participate in selection and production of articles, digital photos and images

Resources
Desktop publishing software such as MS Publisher, Apple Works or Textease
Digital camera
Scanner
Access to CD-ROMs and the Internet (optional)
A range of newspapers showing different styles and content
Where appropriate, a symbol-based word processor

Teachers should be able to:
select appropriate desktop publishing software
understand how the program handles pictures and text (each program is different!)
set up style sheet, for headings, titles, body text and so on
use a digital camera and alter size and resolution of pictures
use a scanner
capture pictures from CD-ROM and the Internet (if used)
capture and manipulate screen shots, for example to use output from symbol word processor

The activity
Visit your local newspaper and find out about the different jobs that people do
Invite the press to a significant school event so that pupils can follow the process of producing an article from their own experience
Look at a range of newspapers, and learn the vocabulary of newspaper layout
Conduct a survey of other pupils or parents to see what they would be interested in reading
Give roles and responsibilities to different members of the group
Have meeting to make decisions about articles, try to get balance of local developments, events (take your own photos), current interest (music, sport

The Internet is an excellent source of information and pictures), jokes, opinions
Prepare content as separate files
Compile the paper
Evaluate and edit the result
Duplicate and sell!

More ideas for using templates and styles include

Creative writing frames
Headed notepaper
Reports
Records of achievement
Follow with Accessing Text