

Multimodal – ICT – digital texts

Introduction

Digital technology and ICT texts will not replace traditional literacy. Since they are increasingly part of children's everyday experience, however, they need to be integrated into the framework in order to maximise children's potential for literacy and learning.

From their earliest years children are surrounded by texts which combine images, words and sound, on screen and on paper, in the home, in the street and in school. This means that they bring a wide experience of texts to their school work, expecting to read images as well as print and, increasingly, expecting to use computers in seeking information and composing their own texts. Many of these texts combine words with moving images, sound, colour, a range of photographic, drawn or digitally created visuals; some are interactive, encouraging the reader to compose, represent and communicate through the several dimensions offered by the technology. Not only are there new types of digital texts, however, but a massive proliferation of book and magazine texts which use image, word, layout and typography, often echoing the dimensions of screen-based technology.

The increasing number of texts which include words, images and sound are often categorised according to the medium of communication, for example:

- the computer – internet information and PowerPoint™ presentations
- on paper – picture books, magazines, novels, information books
- sound and visual media - radio, television, videos and DVDs

Whatever the medium, texts are made up of different combinations of modes. Multimodal texts combine elements of:

- gesture and/or movement
- images: moving and still
- sound: spoken words, sound effects and music
- writing

When children come to express ideas in the classroom they readily draw on their experience to create multimodal texts using words, diagrams, pictures, sound and layout. The texts children read on screen influence their writing, acting as models and examples of possible ways to express ideas and information. The digital texts that young people are familiar with – including computer games and hypertext – often follow a different structure from sequential narrative, instruction or explanation.

Presentational software and databases extend possibilities for composition. Mixed mode texts can be constructed on paper, but digital technology, with its facility for importing pictures and manipulating text, means that presentation of writing can be more varied, involving design features which paper-based writing does not allow. In addition, they often accompany those texts with spoken explanations.

Speak and Listen for a wide range of purposes in different contexts

1. Speaking

- Speak competently and creatively for different purposes and audiences, reflecting on impact and response
- Explore, develop and sustain ideas through talk

In the classroom, digital and technology allows greater opportunities for sustained forms of talk, asking and answering questions. Presentational software such as PowerPoint™ means greater classroom emphasis on presentation, explanation and discussion. The use of webcams extends interactivity, allowing for instant feedback and reflection on the processes of talk – both in groups and individually – enhancing children's experience of structuring and presenting information in different forms and styles. Interactive whiteboard (IWB) technology puts greater emphasis on shared and public talk.

2. Listening and responding

- Understand, recall and respond to speakers' implicit and explicit meanings
- Explain and comment on speakers' use of language, including vocabulary, grammar and non verbal features

While of course a great deal of classroom talk will take place as part of everyday exchanges, digital technology allows greater emphasis on response. Ordinary talk is ephemeral, so that the details cannot be easily remembered unless recorded in some way. Sound recording has been available for some years, of course, but it is now much easier to use sound recording transportable devices (mp3 or mp4 formats, for example) to support emphasis on listening. At the same time, since gesture, posture and facial expression are integral elements of spoken expression, digital cameras, particularly as they become cheaper and easier to handle, are likely to aid the ability to reflect and comment on language use. In more formal situations, video presentations allow for viewing and reviewing formal and informal presentations from the earliest years.

3. Group discussion and interaction

- Take different roles in groups to develop thinking and complete tasks
- Participate in conversations, making appropriate contributions building on others' suggestions and responses

Interactive whiteboards (IWBs), presentational software, digital video cameras and sound capturing devices increase opportunities for pupils to present ideas in groups. The IWB gives a focus for whole class work but it can also be networked for smaller group sessions making it more possible for learners to take an active part in group work as well as in teacher-pupil and pupil-pupil dialogue.

4. Drama

- Use dramatic techniques including work in role to explore ideas and texts
- Create, share and evaluate ideas and understanding through drama

One of the strengths of using drama is that it allows for being experimental, reflecting on learning and re-shaping ideas after reflection. Digital cameras, capturing moving and still images can greatly aid drama processes, particularly the development of dialogue. Capturing drama moments – freeze frames, for example – on camera and displaying the images on the IWB allows for ease of sharing, evaluating and extending understanding. Podcasting may seem to be a far-off development, but the increasing availability of transportable devices adds to the potential uses of digital technology for speaking and listening.

Read a wide range of texts on paper and on screen

5. Word reading skills and strategies

- Use phonics as first strategy for reading unknown words
- Use knowledge of syntax, context, word origin and structure to establish meaning

Digital technology can enhance early reading, particularly through the interactive potential of ICT texts. IWB technology allows importation of programmes which aid identification and highlighting of phonic elements. Individual computers or whiteboards mean that children can extend and strengthen their early reading experience through specially designed interactive texts. The essential discussion of sentence and word structure is greatly enhanced by the flexible uses of the IWB. Not only can texts be highlighted and marked, created and amended, they can be saved and returned to as learning is built from session to session.

6. Understand and interpret texts

- Retrieve, select and describe information, events or ideas
- Deduce, infer and interpret information, events or ideas
- Identify and comment on the structure and organisation of texts, including non-linearity and multimodality in on-screen texts
- Explain and comment on writers' use of language, including vocabulary, grammatical and literary features

Books will remain as central to the reading experience. However, digital technology has meant greater access to information sources, particularly through the internet. Web-reading is now an essential part of the reading repertoire and pupils need the research skills to read, select, and use information from digital texts. Importantly, these texts will need to be read critically as there is such an immense number of texts available on the web often produced by multiple authors, and constantly being updated. Interactive digital books also actively engage pupils individually and in groups in describing and interpreting information, events or ideas. Deduction, inference and interpretation become even more essential when pupils use digital sources of information.

At the same time, many books available in schools now cannot be read by attention to writing alone. Picture books have for some time provided pleasurable narrative reading experiences but also much learning in the curriculum is carried by images, often presented in double page spreads which are designed to use layout, font size and shape and colour to complement the information carried by the words. The routes or pathways taken through those texts vary, often involving reading radially rather than in the traditional direction required of a printed page of continuous text. The skills and expertise of teachers and pupils in reading books like these can be readily used to help pupils become discriminating navigators and readers of on-screen texts.

Using digital photographs of drama presentations of episodes of a story can help children understand sequencing and paragraphing. Similarly, discussing changes of scene in video narratives supports the use of connectives to indicate shifts of time and place.

Once again the IWB can greatly aid the process of identifying and commenting on text features, whether on paper or on screen. Using the IWB means that shared and guided reading can be more easily managed, allowing the teacher to expose processes in reading and to model text marking and highlighting to comment on the writer's use of vocabulary, grammatical and literary features. In individual work, pupils can similarly use the mouse to identify literary features. A key aspect of such teaching and modelling is explicit discussion about how the different elements of multimodal texts work together to make meaning.

7. Engage with and respond to texts

- Read independently for purpose, pleasure and learning
- Respond imaginatively, relating what is read to experience and context
- Evaluate writers' purposes and viewpoints, and the overall effect of the text on the reader

Reading on the computer is now part of children's regular independent reading experience. Once again it is important to stress that pleasure in re-reading is very often gained from books, but the range of types of books has increased enormously as a result of digital production techniques so that multimodal texts are likely to be part of everyone's pleasurable independent reading. Imaginative response may include making computer-based texts to present reading preferences to the rest of the class, or video recordings of 'book panels' rather like those seen on television. Computer-aided 'bookmarking' facilities can help build personal libraries and develop justifying choices and preferences

DVD and video texts are increasingly being seen as part of the reading repertoire and offer good opportunities for evaluating purposes and viewpoints. Discussion of the ways that film texts are put together, for example decisions made by the director about camera angles, where to use a close-up, middle- or long-distance shot can greatly aid the process of evaluating the effect of a text on the reader or viewer and offer a focus for sharing impressions of the overall effects on a text on the reader. DVDs can be easily paused and re-viewed to analyse how directors (and so writers) construct narratives. Discussions like these, based on film, transfer very readily to discussions about authors' intentions and points of view and give pupils a frame for discussing response to books.

Write a wide range of texts on paper and on screen

8. Create and shape texts

- Write independently and creatively for purpose, pleasure and learning
- Use and adapt a range of forms, suited to different purposes and readers
- Make stylistic choices, including vocabulary, literary features and viewpoint/voice
- Use structural and presentational features for meaning and impact

While pen and paper will not disappear, on-screen writing is now an essential part of the writing curriculum. Indeed, there may be more writing – and more different kinds of writing – in the future. The composing, editing and revising process has expanded to include PowerPoint™ presentations as well as writing. A key advantage of digitally produced texts is that pupils can more easily see themselves as authors, with the responsibility to proofread and craft their writing. Whiteboard technology, presentational software, cordless keyboards and mouse technology make it possible for the processes of writing to be more collaborative and easily managed in the classroom. The different applications offered via the computer also mean that individual pupils can manipulate, use and adapt a range of forms for their own purposes with a greater sense of the potential readership of their writing. Word banks can be easily stored – either as part of whole class work or individually – to support stylistic choices. Completed work is more likely to include image, digitally produced and imported from the internet, and variations in font, colour and design as part of composing effective texts.

9. Text structure and organisation

- Organise ideas into coherent structures including layout, sections, paragraphs
- Write cohesive paragraphs linking sentences within and between them

Reorganising texts on screen, moving sections, sentences and paragraphs, is becoming an everyday part of classroom writing experience. The editing and revising process can be supported by IWB technology so that shared and supported writing can not only be explicitly modelled but drafts stored and returned to as part of scaffolding the writing process. Planning and sequencing narrative and non-narrative can be even more effectively learned through IWB software which allows for quick and easy changes in structure. Presentational software requires planning sections of texts for separate screens and practice in explaining presentations provides oral rehearsal of cohesive links between sections of text.

The use of small, handheld digital video cameras to create short film narratives enhances understanding about narrative structure, setting and characterisation. Adding sound means understanding how to create atmosphere or use dialogue to move a story forward. Similarly, photograph and film editing software will support narrative structuring.

10. Sentence structure and punctuation

- Write accurate sentences, varied for meaning and effect, using knowledge of grammar
- Use a range of punctuation correctly to support meaning and emphasis

11. Word structure and spelling

- Use knowledge of word structure (phonemic and morphological) to extend vocabulary and spell accurately
- Use a range of strategies to secure spelling accuracy

Increased visibility through IWBs and presentational technology allied with the ease of changing print through word processing packages, or the use of Clicker™ -type software in the early years, all lead toward a greater focus on sentence and word choices in creating texts. Spell checkers, grammar checkers and other editing tools aid drafting and mean that accuracy can be part of group editing sessions using whiteboard displays of work. Web-based dictionaries and thesauruses give greater access to extending vocabulary and providing visual reinforcement of accurate spelling and these can be consolidated by the creation of computer files of personal word banks and dictionaries.

12. Presentation

- Develop a clear and fluent joined handwriting style
- Use keyboard skills and ICT tools confidently

Keyboarding and touch typing will need to be balanced with the development of fluent handwriting as there will continue to be forms of communication for which handwriting is more appropriate. There are also aesthetic and intellectual gains associated with handwriting. It may be that the use of the mouse or the ability to use drop-down menus on IWBs will equally contribute to presentational skills in communication.

In considering the role of digital technology in supporting and developing confident and accurate literacy, it is important to remember that ICT should be deployed for specific purposes. While speaking and listening, reading and writing can be supported and extended through the use of digital technology, there will also be occasions where more traditional forms of literacy are better suited to the job in hand. What is critical, however, is the role of the teacher in making explicit links between different modes. When reading, composing and discussing multimodal texts, pupils need to be clear about what words, images, sound effects or spoken words, gesture and movement contribute to meaning. They also need to know how to put texts together using the different applications of digital technology. Finally, they need to be helped to make discriminating judgements about when and how to draw on digital or more traditional forms of texts for communication and understanding.