



## Including pupils with SEND in ICT

### Sound and light issues

- There is effective and quiet ventilation in the computer room.
- Computer monitors are positioned to reduce glare.
- Interactive whiteboards are non-reflective to reduce glare.

### Seating

- Check classrooms are not cluttered with ICT equipment.
- Make sure pupils with motor impairments have appropriate assistive technology and software to support them and enough space to use it.
- There should be adequate space at computer desks for pupils to work off-screen, collaboratively and on paper.
- Seating should allow all pupils in the class to communicate, respond and interact with each other and the teacher in discussions.
- Avoid the need for copying lots of information. For example, notes on interactive whiteboards can be printed off for all pupils.

### Resources

- Consider using a wireless keyboard and mouse to facilitate teacher-pupil interaction with minimal disruption.
- Is there one dedicated computer for assistive technology/specialist software, or can pupils with SEN and/or disabilities move between the resources?
- Provide assistive resources, such as templates or diagrams, to support pupils' input.

### Low-arousal areas

- Pupils on the autistic spectrum may become deeply involved in working in isolation on a computer. They will benefit from clear preparation and support when returning to a group.

### Health and safety

- Check the room in terms of health and safety, eg in relation to wires and cables. Make sure anti-repetitive strain injury (RSI) measures and practices are in place.
- Make sure all pupils have appropriate breaks in tasks such as data entry.

- Pupils are protected from, and taught how to deal with, abusive behaviour such as cyber-bullying – helping to maintain their psychological well-being.
- ICT offers a wide range of possibilities for responses, many of them visual. Ensure that the audio channel is also offered.  
A sound recording linked to a simple presentation can be highly effective.

### **Multi-sensory approaches**

- Choose resources and tasks that support alternative ways of communicating, eg presentations that use relevant digital video- or audio-editing software.

### **ICT**

Consider access to, and coordination of, ICT resources to enable pupils to complete tasks successfully. For example:

- using symbol-processing software or a picture communicator for pupils with speech and language communication needs
- " using head switches, touch screens, or an alternative mouse or keyboard for pupils with reduced motor skills, or
- " adjusting the screen resolution, or using a bigger screen, for pupils with a visual impairment.

### **Planning support**

- Make sure additional adults are trained so they are comfortable with any software and hardware being used and understand how it can support independent learning.

### **Developing responsibility**

- Use collaborative tools like blogs, wikis and podcasts to enable pupils to make a positive contribution.

### **Teachers' communication**

- ICT skills are demonstrated clearly and progressively.

### **Pupils' communication**

- Exploit the possibilities of encouraging talk in front of a computer screen between pupils who are nervous about face-to-face discussion and eye contact.
- Presentations to the group that involve ICT resources can raise prestige and improve social communication by having a role outside the classroom, eg for presentations to parents or the induction of younger pupils into a new year group.

### **Understanding the aims of the lesson**

- Build up a chart (using a wallchart or other space) to show each lesson's focus and how successive lessons or topics link together to develop an area of work in ICT. This could include symbols, images or objects to make it more accessible.

### **Pupils know where they are in relation to learning aims**

- Revisiting a mind map of the same area of learning, say after three weeks of studying an ICT topic, can be a good way of assessing – through the added 'branches' of the map – how pupils' understanding of concepts is developing. This approach can be particularly valuable for pupils for whom oral and written communication present a barrier, as pictures and symbols can be included.

### **Understanding assessment criteria**

- Pupils know what level they are working at – through displays, use of assessment systems, display of objectives and levels.

### **Relevant and motivating tasks**

- Programs such as Karzouche: Social Communication allow pupils with an autistic spectrum disorder (and others with communication and interaction difficulties) to 'walk their way' through scenarios involving social communication in everyday situations. The package contains tools with which adults can create appropriate scenarios.

### **Reducing reliance on memory**

- Display pupils' work, assessment criteria for tasks, or projects and posters to encourage pupils' understanding or trigger their memory.
- Demonstrate software in short, achievable steps for pupils who, for example, may have a poor concentration span or poor motor skills.
- Reduce the possibility of frustration at not being able to use programs to achieve an objective by having 'how-to' posters on the wall.

### **Consolidating learning**

- Leave enough time to consolidate pupils' learning away from the computer screen.

### **Independent study/homework**

- Pupils' independence can be supported by an appropriate form of e-portfolio, depending on their preferred mode of communication.