

Constraints on the teacher using computer technology

There are several constraints operated on the teacher using computer technology. Below is a list of points that must be accounted for when organising ICT-assisted learning, along with recommended texts for further reading:

- class sizes must be small (Benton Foundation 2001);
- teacher competence, expertise and preparedness to change (Moseley *et al.* 1999);
- teachers are needed to mediate ICT (Higgins 2001);
- teachers will be continually and actively assessing students' understanding of the meaning that they have derived from the activities and how they can choose the directions for development (Higgins 2001: 169);
- increased, rich and unambiguous feedback to students, concerning progress, is essential (Herron 1996);
- teachers must recognise that the task is to engage students cognitively, not as a classroom control device (Davis *et al.* 1997);
- the learning objectives must be clear (Scardamalia and Bereiter 1994);
- the pedagogical use of ICT must match the learning objectives of the lesson (Higgins 2001: 168);
- the focus of the technology use must not be too diffuse (Higgins 2001);
- 'ground rules' for collaboration between students must be set, e.g. listening with respect, responding to challenges with reasons, encouraging partners to give their views and trying to reach agreement (Higgins 2001);
- the potential of multi-sensory ICT must be used to enhance learning (Paivio 1986);
- cooperative learning must be extended (Underwood and Brown 1997);
- opportunities must be provided for prolonged ICT contact (Grabe and Grabe 2001);
- teachers must be vigilant to balance the exploration of software with the possible student frustration if it is too complex (Cox 1997);
- teachers must set appropriate tasks for students to maximise the benefits of ICT usage (Cox 1997);
- teachers must recognise that different degrees of support will be required for different kinds of software and application, and for students with different degrees of confidence and expertise in using ICT (Cox 1997);
- everyone must accept that computers will break down and fail (Somekh and Davies 1991).

References

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