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Gender, ICT & schools: a UK Policy Perspective

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Overview

ICT in schools policy: the last decade

The current technology landscape

Existing gender-related policy on ICT in schools

Examples of recent ICT policy initiatives with a gender dimension

Key research evidence

Future directions
ICT in Schools policy: the last decade


- infrastructure investment
  (improving computer:pupil ratios; internet connectivity)
- ICT training
- digital resource development
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2002-2006: ICT in Schools Programme
- embedding ICT (pedagogy, ICT leadership/whole school improvement)
- infrastructure investment (broadband connectivity, interactive whiteboards)
- digital resources – market model (e-learning credits)
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2006 onwards
- Less ring-fenced funding
- Priorities – maintaining/developing digital infrastructure; broadband in schools; personalising learning; integrated learning and management systems
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Harnessing Technology strategy
• Covers all phases of education plus children’s services
• National strategy to build an e-confident education system that supports the government’s high-level strategic reforms for education – including narrowing the attainment gap
How is ICT used in schools?

- Computers – average 1 computer per 5.7 primary, 3.2 secondary pupils
- Interactive whiteboards
- Broadband internet access
- Digital content
- Learning platforms

![Bar chart showing % using in half or more lessons for computer packages, internet-based resources, display technologies, and subject-specific software for primary and secondary teachers.]
Existing education policy on ICT and gender

- Relative absence of policy focused directly on ICT and gender in schools

- **Computer Clubs for Girls (CC4G)**
  
  Employer-driven initiative in response to gender imbalance in ICT industry
  
  Out-of-school club involving e-learning and offline learning projects
  
  In use in over 3100 schools – over 100,000 pupils
  
  Positive feedback from participants but long-term impact not yet known
Why this absence of gender-related policy on ICT?

• Policy makers not presented with clear evidence that gender issues around technology need to be addressed directly at level of national education policy

• In initial teacher training and ongoing professional development, teachers are made aware of gender issues around ICT and the importance of inclusive practices

• Gender issues have informed ICT policy development

• Implicit gender dimension – potential of technology to improve boys’ educational performance, in context of general attainment gap between boys and girls
Recent ICT policy initiatives with an implicit gender dimension

Interactive whiteboards

£50m direct funding to increase provision and use of IWBs

The technology facilitates:

• greater interactivity in the classroom

• multi-modal teaching (integrating text, audio, visuals etc) – catering for a wider range of learning preferences

• more dynamic lessons and a faster pace of teaching
Recent ICT policy initiatives with an implicit gender dimension

Personalising learning

Broad education policy agenda – creating a system that responds and adapts to the needs of learners

Technology as integral part of this – expanding learner choice over subject, pace, place and mode of learning

Creating opportunities for learners to have a wider range of learning experiences and to be more in control of their learning, should benefit boys without disadvantaging girls
Recent ICT policy initiatives and agendas with an implicit gender dimension

Home Access

Funding schools and local authorities to provide disadvantaged learners with access to computer technology and online learning resources and services

Emerging policy on technology in the home learning environment capitalises on the fact that boys are often enthusiastic users of ICT out of school

Policy acknowledges educational risks around ICT use at home are greater for boys than girls (e.g. excessive computer games playing – negative impact on achievement)

School should work actively to shape and guide the use of ICT for learning at home (e.g. making resources and support available remotely via the learning platform)
Recent ICT policy initiatives with an implicit gender dimension

Computer games-based learning

Government-funded research and development projects investigating the potential of using computer games in educational settings

**LTScotland Consolarium** – working with teachers to explore how existing & new games technologies can be used effectively to motivate learners and support their subject understanding

Why games have educational potential - immersive / multi-media / involve problem-solving, learning through experimenting / instant feedback / competitive element / part of young people’s culture

Computer games traditionally associated with boys but patterns are changing
Key research evidence: is ICT an effective means of supporting boys learning?

**Self-efficacy:** Boys are more likely than girls to classify themselves as confident ICT users, though *actual* levels of competence vary less than personal attitudes.

**Attitudes to ICT:** boys are more enthusiastic than girls for greater use of ICT in their lessons, and are more likely to say that ICT use improves their learning.

**Motivation:** ICT can motivate and engage both boys and girls, though in different ways and to varying extents:
- Boys gain more in certain cases but girls are not disadvantaged.
- Boys are more motivated by higher levels of ICT access and use of short, competitive activities – shift towards persistent patterns of working.
- Teachers perceive that ICT has a greater motivational effect on boys than girls – though it’s high for both.
- Girls may show less enthusiasm/interest as they grow older.
**Key research evidence: does ICT have more effect on attainment for boys or girls?**

Limited evidence available suggests that difference in impact between the genders is not great

- **ImpaCT2 (2003):** study noted some gender differences but in line with subject-related expectations

- **Becta schools survey (2007):** most teachers felt ICT had a positive impact on pupil learning – and did not distinguish notably between boys and girls

Some differences according to particular technologies used:

- **Interactive whiteboards:** some evidence that use has more effect on boys’ improvement, though teachers don’t perceive it disadvantages girls

- **Handheld devices:** boys benefit from their use to a slightly greater extent
Future directions – policy and technology

Important policy developing on technology in the home learning environment:

• Promoting effective and safe use of technology at home by parents and their families

• Technology as the medium for engaging parents in their children’s learning and supporting their parenting role – particularly fathers
Future directions – policy and technology

Technology developments that will inform broader policy development processes – and which could have important gender dimensions:

• Mobile/handheld technologies
• Technology-based remote learning
• Web 2.0 for learning
Contact…

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