RAISING SCHOOL STANDARDS

Good ICT resources may help to raise standards, but it looks as though traditional school books help even more.

The debate about better educational standards continues with evidence from two recent research reports. The British Educational Communication and Technology Agency (Becta) reported1 to the DfEE in January 2001. The report utilised data from OFSTED concerning the relationship between the ICT resources of 800 primary schools in England and the academic achievement of pupils within those schools.

Schools with good Information and Communications Technology (ICT) resources tended to have better achievement at Key Stage 2 than schools with unsatisfactory ICT resources, and this improved attainment was seen over more than one year. This result was repeated when schools were benchmarked with schools of a similar type. Similar results were also found with schools who had the same quality of management. Schools that supported a subject with ICT tended to have better achievement than schools that did not make such use. The report "Primary Schools of the Future - Achieving Today", identified 'schools of the future' and showed they had, on average, reached, in 1999, the targets for all schools to achieve by 2002: 81% in English (target 90%), and 79% in maths (target 75%).

The great majority (83%) of head teachers in 'high ICT' schools reported that ICT had a positive impact on the attainment of Key Stage 1 pupils. 86% of head teachers in 'high ICT' schools also believed that ICT had been an important factor in raising standards in the past two years. Head teachers also identified ICT as having an impact on those factors which research outside the area of ICT identifies as having a direct impact on learning: motivation 98%; subject knowledge 96%; teaching 93%; pupils' effectiveness 90%; school effectiveness 89%; home-school relations 77%.

The report published today, also identified it with the same factors as the head teachers. They reported similar results apart from pupils' effectiveness 79% (90%) and home-school relations 52% (77% - Headteachers results in parentheses).

The Becta report was launched by the then Learning and Technology Minister Michael Wills on 16th January 2001 in a press notice, "The weight of evidence now clearly shows that ICT in the classroom, backed up by a report published today, sends a clear message that ICT raises standards.

The Publishers Association responded and summarised a report the Educational Publishers Council (EPC) had commissioned from 'Statistics for Education' Researcher Roger Watson carried out a number of studies for EPC and described a report produced in 2000 under the title "The Relationship between School Book Spending and School Results." This study found a positive relationship between the amounts schools spend on books and their results as measured by Key Stage 2 and 4, SATs and GCSE/GNVQ. Following Becta's research Roger Watson carried out further analyses on the EPC data using the same statistical analysis using the Spearman Rank correlation following the Becta model. The results show that the correlation between book spending and school achievement, as measured by the SATs scores, is positive at 0.12. This is a stronger positive relationship than that between ICT provision and school attainment as calculated by Becta, which was 0.07.

The Publishers Association press release, 21st May 2001, "School standards more likely to be raised by books than by ICT," also quotes from the report by Roger Watson: "A new study has found that the relationship between children's success in official GCSE tests and spending on books is nearly twice as strong as the one between success and ICT resources...good ICT resources may help to raise standards, but it looks as though traditional school books help even more." The press release concluded that there was a clear and positive relationship between the amount spent on books and schools' Key Stage 2 success.

The debate was featured on BBC Radio 4 and put out on their website following the EPC press release, 21st May 2001. "Books best for tests", described the Becta and EPS debate. The BBC added the amount spent per year on school books had fallen by 12% per pupil and, on average, primary schools now spend £250 per pupil on computers each year and £19 per pupil on books.

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The British Educational Communications and Technology Agency (Becta) is the Government's lead agency for the National Grid for Learning.

Helen Bader
The National Grid for Learning

The NGFL is a vital part of the Government's commitment to the creation of a connected learning society.

The National Grid for Learning (NGFL) is a Government initiative which is both an architecture of educationally valuable content on the Internet (the NGFL portal) and a programme for the delivery of ICT infrastructure, support and training.

The NGFL is a vital part of the Government's commitment to the creation of a connected learning society. It is intended to increase access to learning content and resources for everyone in all sectors of education, formal and informal.

The NGFL is managed and developed by the British Educational Communications and Technology Agency (Becta), the Government's lead agency for ICT in education.

Background

The NGFL was first launched in early 1998 by the Secretary of State for Education, David Blunkett, at the British Educational Technology and Training show (BETT), following the publication of the Government's consultation document 'Connecting the Learning Society' in October 1997.

The prototype of the portal focused on content for use in schools and was aimed primarily at teachers, but the launch of the full framework of the NGFL in November 1998 by Prime Minister Tony Blair established it as an educational resource for everyone. Since then the range of content has grown significantly to include materials for students, parents, governors, lifelong learners and the whole educational sector.

The portal was given a major update and redesign in January 2001 and relaunched at the BETT show. Currently the site has over 5,000 pages of hosted content, 500,000 pages of indexed content and receives more than 2 million hits per week. This represents a 65% increase in the number of weekly hits on the portal over the last two years.

NGFL Portal

Anyone with a connection to the Internet can access the educational materials and resources available via the NGFL. The portal is a network of websites that provide content to support learning, teaching, training and administration in schools, colleges, universities, libraries, the workplace and the home.

All the sites linked from the portal must go through a registration and approval process which includes meeting a set of quality criteria (the NGFL 'Ground Rules'), so that users can be confident that any website carrying the NGFL logo has pledged to maintain high standards.

These criteria include providing access to educational, learning or administrative resources, technical accessibility, acting as a showcase of quality and innovative teaching or learning resources and facilitating non-institutional, lifelong learning.

The NGFL Content team at Becta is responsible for developing the content on the NGFL and is continuously working to identify existing online resources and linking with content providers to draw in suitable sites.
What's on the NGfL?

The content on the NGfL portal is currently organised into the following sections:

- Schools
- Further Education
- Higher Education
- Lifelong Learning
- Career Development
- Libraries & Archives
- Museums & Galleries
- Community Study Groups
- International Networks
- Government & Agencies
- Media
- E-Commerce
- Jobs

Each area contains a directory of links to specific websites of interest, either directly or through one of the cultural institutions.

A teacher searching for lesson plans on a particular subject can access the Virtual Teacher Centre (VTC) through the Schools area of the NGfL. The VTC provides a focus for information and materials for teachers, including subject resources, curriculum information, schemes of work and teaching frameworks, support for professional development, education policy guidance, school management, special educational needs, and online discussion groups.

The VTC's search engine delivers relevant content based on the user's needs, which can be specified by subject, age and area of interest.

Regional Learning Directories

As well as browsing the NGfL, by sector, users can access resources targeted at a local level through the Learning Directories, reached via the map on the portal home page.

Content on these pages includes news and events of interest to the local learning community as well as online content appropriate to the region. For example, a parent in Leicester can find a list of primary schools in the city through the Leicester Integrated Online Network (LION), which is one of the links in the East Midlands Learning Directory.

Updated fortnightly, the What's New pages highligth educational news of interest to the broad learning community and also contain separate feature areas for Parents & Guardians, Teachers & Lecturers, Children & Young People and Lifelong Learners.

Each of these sections focuses on new NGfL content relevant to the particular user group, together with news and events.

Monitoring content

GridWatch is a safety-checking mechanism for the NGfL and has been set up to monitor approved content on the portal to ensure that it is both safe and appropriate for users.

Sample lists of websites are checked for unsuitable material (anything which is illegal, undesirable, inaccurate, misleading, out-of-date, contravenes copyright regulations or breaches the requirements of the NGfL 'Ground Rules').

GridWatch enables action to be taken to correct any problems discovered or the link to be removed from the NGfL, depending on the gravity of the situation. Users are encouraged to assist GridWatch by reporting any unsuitable content they see on the portal.

The future

The NGfL Content team plans to expand its advisory role and work closely with content providers to ensure their online resources are appropriate to user needs.

Above all, the team will continue to foster the development of educational resources on the portal to improve its scope, quality and accessibility for the learning community and maintain its status as a leading source of educational content on the Internet.

Useful websites:

- http://www.ngfl.gov.uk/
- National Grid for Learning
- http://www.becta.org.uk/
- British Educational Communications and Technology Agency
- http://www.blee.org.uk/gridchallenge/index.htm

The basic statistics show us that:
- the most likely users of computer games are younger males (74%), only a minority of females report using these games (30%).
- the most likely users of a computer for homework are older males (30%).
- the most likely users of the Internet are older males (50% at home in the last month).
- un supervised young pupils are more likely to be supervised in their use of the Internet (15% of Year 8 users are often unsupervised). These different uses are of course associated with each other: if you don't have a computer, you can't use it for anything.
- Are users different to non-users? We looked at different aspects of these young people's lifestyles:
  - Family background: newspaper readership, car ownership
  - Personality: self-esteem, health locus of control
  - Substance use: smoking, alcohol, and illegal drugs
  - Leisure: meeting friends, exercise, enjoyment of physical activities, spending money, wearing cycle helmet when cycling
  - Relationships: loneliness, fear of bullying, confidence with opposite sex, dating

Aspects of lifestyle

We found computer uses were linked in different ways to aspects of lifestyle. One of the

Couch potatoes? Not us!

Computer use is by no means associated exclusively with inactivity, shyness and unsociability but with a more affluent family background.

Results from the Health-Related Behaviour Questionnaire provide an insight into the use of computers by approximately 30,000 young people.

David Regis

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