

BBC Home Sport Radio TV Weather Languages

UK version International version | About the versions Low graphics | Ad

BBC NEWS

WATCH One-Minute World News

News services  
Your news when you want it

## News Front Page



Africa  
Americas  
Asia-Pacific  
Europe  
Middle East  
South Asia  
UK

England  
Northern Ireland  
Scotland  
Wales  
UK Politics

## Education

Magazine

Business

Health

Science/Nature

Technology

Entertainment

Also in the news

Video and Audio

Have Your Say

In Pictures

Country Profiles

Special Reports

## RELATED BBC SITES

SPORT

WEATHER

ON THIS DAY

EDITORS' BLOG

Last Updated: Friday, 26 October 2007, 16:28 GMT 17:28 UK

E-mail this to a friend

Printable version

## Daily computer game boosts maths

Playing a daily computer game has helped a class of primary school children improve their maths and concentration, a study says.



The game was played every morning before lessons started

The children played the game every day for 10 weeks with "dramatic" results.

A class from the Dundee school took part in the project to show how computer games can enhance and build on classroom learning.

It is now hoped the resource can be used more widely across schools in the Scottish city.

The 30 children from St Columba's primary school - all aged nine and 10 played Dr Kawashima's More Brain Training game on a Nintendo DS console every morning before lessons for about 15 minutes.

The "game" is a collection of mini-games, such as number challenges, reading tests, problem-solving exercises and memory puzzles designed to exercise the brain by increasing blood flow to the pre-frontal cortex.

Progress was compared to a school where 30 same-age pupils from a similar socio-economic background used a method called Brain Gym - a series of body exercises designed to increase brain activity and enhance learning - for three or four days a week over the 10-week assessment, and a control group which had no access to either Brain Gym or the DS game.

**“ A targeted and managed use of such a game can help to enhance pupil numeracy skills and classroom behaviour ”**

Derek Robertson, Learning and Teaching Scotland

All three groups were given a maths test at the start of the project and the same one again at the end.

All groups had better scores after 10 weeks but the biggest

## SEE ALSO

Pupils get lessons in  
29 Mar 07 | Educat

Training for 'PlaySta  
27 Nov 06 | Health

Brain games aim to  
24 Apr 06 | Techno

Mini-computers 'bri  
10 Jan 07 | Educat

## RELATED INTERNET

Learning and Teach  
Dundee City Council

The BBC is not respo  
content of external in

## TOP EDUCATION STC

UK schools slip dow  
Finland stays top of  
Minister scraps NI's

News feeds

## MOST POPULAR STO

MOST E-MAILED M

'Kill switch' droppe  
Argentina: Ugly pe  
back

Finland stays top o  
Bush says Iran rer  
Abducted Mexican  
strangled

Most popular now, i

improvement was in the Kawashima group, where the average score went up 10 points from 76/100 to 86/100.

Children who had low scores in the first test did particularly well and one pupil with special needs jumped from 25 to 68/100. No-one dropped below 65/100.

### **Improved behaviour**

The other two groups did not show such across-the-board improvements and their second tests still had a number of children scoring in the 20s, 30s and 40s.

The average time taken to complete the test by the Kawashima group dropped from 17 minutes, 1 second to 13 minutes, 19 seconds.

Derek Robertson, from Learning and Teaching Scotland (LTS), who devised the project, was struck by the "dramatic enhancement" in the Kawashima group's maths ability in such a short period of time.

He said: "The results of this small-scale Dr Kawashima project have shown how a targeted and managed use of such a game can help to enhance pupil numeracy skills and classroom behaviour."

There was also a noticeable impact on behaviour and levels of concentration throughout the school day, with the children becoming more self-confident.

Mr Robertson, a former teacher and university lecturer, said: "It had a real calming effect on children in the class.

"In fact I have never before seen such gains across the board."

Mr Robertson recognises this was a small study, funded by LTS, and not large enough for firm conclusions to be drawn, but he hopes to carry out a similar study on a broader scale, early next year.

He wants to involve a number of local authorities in the scheme with a view to using the game as an educational resource.

A Dundee city council spokesman said: "We are exploring the possibility of extending the scheme."

 [E-mail this to a friend](#)

 [Printable version](#)

Bookmark with:

[Delicious](#) [Digg](#) [reddit](#) [Facebook](#) [StumbleUpon](#) [What's new?](#)

FEATURES, VIEWS, ANALYSIS



**Moscow Diary**

Democracy or the Putin show? Kremlin gets the vote out



**Day in pictures**

Some of the most striking images from around the world



**Ugly ca**

Argentin obsessio in Buen

PRODUCTS & SERVICES



E-mail news



Mobiles



Alerts



News feeds



P

© BBC MMVII

Most Popular Now | 34,871 pages were read in the last minute.

[Help](#) | [Privacy and cookies policy](#) | [News sources](#) | [About the BBC](#) | [Contact us](#)