

# Case study



## Howell's School, Cardiff

### The Senteo™ interactive response system – Just a craze or an effective learning resource?

Major technological inventions have been heavily adopted in schools over the years. Initially it was the computer, followed by the projector and then the interactive whiteboard. In 2007, four million interactive response systems, or voting systems as they are also known, were sold worldwide – an annual volume growth of 23% (Futuresource Consulting 2008). With no ring fenced Government funding for interactive response systems, Howell's School in Llandaff carefully reviewed whether they are a truly effective learning support tool, or just another technology craze.

Since its foundation in 1859, Howell's School, Cardiff, has been at the forefront of education in Wales. With a distinguished tradition and history, Howell's School has continued to thrive and embrace the challenge of preparing children for life in the 21st century.

Cathy Darnton, ICT Development Manager, Howell's School, shares her experience and views on interactive response systems, whether they are just another fad or if they are here to stay.

Under the directive of Cathy Darnton, Howell's School started trialling Senteo interactive response system from SMART Technologies to answer the question in their minds, 'are they really worth the investment'? Through their trial period Cathy identified several teaching formats which were ideally underpinned by the use of interactive response systems.

#### Challenge

Howell's School has invested in technology to deliver a 21st Century learning environment. However they wanted to ensure that the Senteo interactive response system would really enhance learning.

#### SMART solution

Howell's School invested in a 24 hand set of Senteo interactive response system from SMART Technologies.

#### Result

Howell's found that Senteo supported learning on many levels:

- Supporting learning consolidation
- Delivering Personalised Learning
- Gaining and maintaining attention
- Giving less confident children anonymity.

## Stepping Back in Order to Move Forwards

Their Senteo interactive response system provided the ideal tool to step backwards and review previous learning outcomes before moving forward onto the next stage in the learning pathway. At the same time the learning activities consolidated and improved the knowledge and understanding of the children involved.

## Personalised Learning

Assessment is recognised as the prime benefit of interactive response systems. Howell's began by using the charting facility to measure their assessment results to clearly see any concepts that hadn't been fully understood by the children. Providing a personalised approach to learning is currently the education sector's 'topic of the moment'; however, teachers have been aiming to tailor each child's learning experience for many years. Cathy rationalises: "The Senteo interactive response system has provided our teachers with a fun way of assessing each child's understanding, so we can personalise their learning going forward."

Through their experiences of embedding Senteo into the curriculum, Howell's has noticed how effective the learning resource is in supporting children with very specific learning requirements. Taking children with dyslexia as an example, the questions displayed on the SMART Board™ interactive whiteboard can be highly visual; there is not a need for a huge amount of question text, and the children's responses are narrowed down to the selection of one button.

## Gaining and Maintaining Attention

Senteo has also proved to be effective in the teaching of more complex topics or those perceived to be less interesting. From a response view point, maths-based subjects like ratio analysis benefit from the fractions tool on the handset as it is easy to use.

## Anonymity

Another positive aspect of each child giving their opinion or answer through their Senteo handset is that they are more prepared to make a contribution without the fear of embarrassment. The children mainly work alone, but working in pairs or groups is a definite plus in some situations, like in PSHE where sensitive issues are being discussed - in fact, as Cathy adds: "I can't think of a lesson where it couldn't be used."

Howell's has 24 handsets in the school. In addition to the breadth of classroom functionality, Senteo's ability to integrate with other software resources adds to the ease of use. Whether the need is to import questions from Notebook™ software or export SIMS class plans into Microsoft® Excel®, Senteo software makes complicated tasks a lot simpler.

## 21st Century Learning

In the world that today's children live in, it is vital to enrich their visual experience and to stimulate their learning. The commitment we expect from children should be reflected in our presentation of their learning experience.

Now is the time to take advantage of the way children entertain themselves today, to employ those same media and thinking habits they foster for the betterment of learning outcomes. Because so much of a student's experience is shaped and surrounded by technology, highly visual interactive activities have truly become the new currency of learning.

Cathy summarises: "SMART Technologies' resources are tools which enhance the learning and teaching experience so teachers can improve their lessons. The Senteo system creates a buzzing, exciting classroom. I look forward to ensuring that we continue to educate the children of today to become the active, concerned global citizens of tomorrow."

"I teach business studies to sixth form students using the Senteo system. When we come to a difficult learning objective such as financial concepts, I introduce the topic in a visual way and then ask short, snappy questions in Senteo to generate thoughts, ideas and interest. Out of a 75 minute lesson, I spend the first ten minutes using Senteo just to get them involved. Ultimately Senteo allows us to have fun! The children's comments on Senteo range from 'cool', to 'great fun'. It's certainly something that's different."

**Cathy Darnton,**  
Information Development Manager  
Howell's School

## About SMART

SMART Technologies Inc. is both the industry pioneer and global education market segment leader in easy-to-use interactive whiteboards and other group collaboration tools. The award-winning SMART Board interactive whiteboard is the most widely installed interactive whiteboard in the world.

Many school jurisdictions have standardised on the product, which is used to provide interactive learning opportunities and enhance student achievement in more than 450,000 classrooms spanning every U.S. state, every Canadian province, every Local Authority in the UK and in more than 100 countries worldwide. SMART products also include interactive pen displays, interactive digital signage, wireless slates and software. Using SMART products, groups can access and share the information they need to meet, teach, train and present. SMART's education customers include New York City Board of Education (U.S.), Oxford University (UK), Kobe City Board of Education (Japan), Barrier Public School (Australia), University of Ottawa (Canada), United World College (Singapore), Stephen-Hawking-Schule Neckargemuend (Germany), Florida School for the Deaf and the Blind (U.S.) and Harvard University (U.S.).

SMART is a private company founded in 1987. Employing more than 900 people, SMART is headquartered in Calgary, Alberta, Canada, with assembly facilities in Ottawa, and offices in Bonn, Tokyo, China, New York City and Washington, DC. SMART has been issued and maintains a broad portfolio of patents with numerous U.S., Canadian and other patents pending. In 1992 SMART formed a strategic alliance with Intel® Corporation that resulted in joint product development and marketing efforts, and Intel's equity ownership in the company. SMART products are sold through dealers across North America and distributors worldwide. For more information, visit [www.smarttech.com](http://www.smarttech.com).

## About Steljes

Steljes creates opportunity for partners, customers and end users by pioneering innovative technologies that enable people to interact and communicate more effectively while working and learning.