

The Herald Society

Tuesday July 3, 2007

HEALTH • EDUCATION • SOCIAL WORK • LOCAL GOVERNMENT • THE VOLUNTARY SECTOR



THE FLIGHT FANTASTIC

How schools are cracking the Da Vinci code

Veni, vidi, Da Vinci

A pioneering hands-on project that draws inspiration from the multi-skilled artist and takes teaching out of the classroom has won widespread praise. By **Leanna MacLarty**

THE name of the artist, scientist and pioneer Leonardo Da Vinci is known by secondary school students across the country, who learn about the advancements in the fields of art and science for which he was responsible.

In particular he is remembered not just for his artwork but for the inventions he dreamed up centuries ahead of his time.

Now, two Scottish primary schools have completed a pilot for a new method of teaching, which draws inspiration from Da Vinci's ability to unite the polar extremes of science and art.

The Leonardo Effect project, which originated in Northern Ireland, is being trialled by primary schools across the rest of the UK. Crookfur and Carolside primary schools in East Renfrewshire were chosen to take part and pupils were encouraged to take a more active role in their learning experience.

Flight – one of Da Vinci's fascinations – was adopted as the first topic for the pupils to tackle using this new method. The eight-week course was broken down into four parts: observation and information gathering, development of ideas, creation and extension.

Helping the children to become more

hands-on in their approach to learning, two primary five teachers at Crookfur Primary, Jem Anderson and Nancy Neil, took their class on trips to examine flying animals in their natural environments.

The first trip was to the RSPB visitor centre in Lochwinnoch, where they watched and took pictures of the birds.

Both teachers emphasise the importance of the trips as the first element in the programme. "The first-hand experiences inspire the need to know and the want to learn," says Neil.

Other trips included a visit to Amazonia – an indoor "rainforest" in Motherwell, and a visit to an aircraft hangar to see planes up close.

When the children weren't out experiencing wildlife and witnessing technology for themselves, experts came in to the classroom.

Artist Tom McKendrick helped them create designs for their own flying machines, while students from the University of Strathclyde's design and technology department helped them to develop their ideas.

The highlight, by far, for the children was the chance to touch and hold live owls when a handler visited the school.

During time spent in the classroom, the

children were combining elements of science and art to learn more. In one class, they watched a video about migrating ospreys – the science bit – and then spent some time drawing pictures of what they had seen, developing their knowledge of how the wings and feathers worked – the art bit.

As Da Vinci would doubtless have encouraged, all of the time spent gather-

ing information culminated in invention. The children, working together in groups, built their own flying creatures based on the knowledge they had gained about what and why things fly.

With the children's imaginations in overdrive, the creatures that were produced combined technical know-how with bright and colourful designs. Just some of the many creatures brought to life with cardboard, pipe cleaners and glue include a Cloud Dragon, Sky Rider and Cosmo Co-Co Pops.

The groupwork created a few problems as children competed to have their ideas heard, which meant progress was slow. This was solved by giving each member of the group an individual role to concentrate on.

The children quickly learned how to work together and both Neil and Anderson say that their skills in team working and co-operation and also working to a deadline were greatly improved by the tasks.

The achievements of the Leonardo Effect initiative have not gone unnoticed. Crookfur's HMIE report, published last week, picked up on the benefits to the children of "leading their own learning through this stimulating context".

Crookfur, like all Scottish schools, is preparing for the introduction of a Curriculum for Excellence and the school's headteacher, Fiona Loudon, feels that the project has given her pupils a head start.

She welcomed an opportunity for both teachers and pupils to take more responsibility for what was being learned and

HIGHER CALLING: Ayman Kha, Daanyal Afzal, Lindsay Yates, Eilidh Gordon, Joyce Ling and John McLaren apply their hands-on experiences, including seeing planes and birds up close, to their flying machines project.

Picture: Colin Mearns

THEY LEARNED MORE IN A WEEK THAN WE MIGHT HAVE EXPECTED IN A TERM AND IN A DEEPER WAY BECAUSE THEY WEREN'T JUST REGURGITATING THE FACTS

feels more confident now about the impending changes. "The old curriculum had become quite rigid and did not allow teachers the opportunity for their own creativity," she says.

Both Anderson and Neil admit that the teaching project was a massive undertaking.

Part of their commitment was to keep a diary of their progress. In hers, Anderson wrote that parts of the course were "time consuming and hard to manage" but she still praised the benefits felt by both teachers and the children.

"It blew my expectations out of the water," says Anderson. "It was particularly rewarding because some children, who find areas of the curriculum difficult, were producing material we might not expect."

"The kids had learned more in a week than they may have in a whole term's worth," adds Loudon. "They learned in a much deeper way because they learned themselves and weren't just regurgitating facts."

The work of the two schools taking part in the project were brought together in a display at the Glasgow Science Centre, giving parents and visitors a chance to see the creations of the "Little Leonardos".

Next year, Loudon hopes to take the project even further and the teachers are already discussing new possibilities to develop the approach for other subjects, including using similar teaching methods for drama and animation.

The children are certainly convinced. Asked whether they want to continue the project next year, they responded with a big, resounding "yes".

