

Eat-a-Metre at Bristol's i-City Learning Centre

www.eatametre.org

Eat-a-Metre is an ICT based cross curricular project for schools, based on growing a square metre of vegetables. It is run by Bristol's i-City Learning Centre (CLC).

Tags:

Primary, Secondary, Re-engagement/inclusion,
Cross-curricular, Data-handling,
Parental engagement, City Learning Centre

Harnessing technology system outcomes:

Engaged and Empowered Learners Improved
Personalisation Learning Experiences

Sectors:

Mainly Primary, but Early Years to KS4

Innovation

Eat-a-Metre uses the tangible and hands-on activity of growing vegetables to help ground children's understanding and experience of various technologies in a practical situation. Throughout the project children are immersed in using technology to collect, record and produce useful or interesting information regarding their vegetable plots.

Thus Eat-a-Metre embeds the use of technologies to develop children's ICT skills as required by the primary ICT capability curriculum. Although the central emphasis is developing ICT skills, the project has potential for rich learning across the curriculum with particularly strong links with science, numeracy and literacy.

Background

In 2006, Lyn Roberts and Simon Squire from Bristol's i-City Learning Centre created the Eat-a-Metre project to address Bristol's city-wide priorities of promoting data handling and the National Healthy Schools agenda.

The CLC provides interested schools with comprehensive training and the resources needed to set up the project in a school, such as lesson ideas, seeds and plug plants, equipment loan, access to a city-wide database and support from the CLC. In addition, the Eat-a-Metre team works closely with the Primary Strategy Team to ensure that schools are aware of the strong national curriculum links and have the opportunity to incorporate the benefits of the project as part of their school development plan.



Technology

Fundamental to the project is the central use of data loggers, digital cameras, digital microscopes, and computers to create online diaries and allow access to the central web-based database. Beyond this, each school tends to make more extensive use of particular technologies according to the differing cross-curricular aspects being taught.

The CLC equipment-lending scheme ensures that there are sufficient handheld devices available for whole class use. The actual devices used have been carefully selected so that they are accessible to nearly all learners including those with disabilities and younger children, thus they are robust and simple to manipulate. Similarly the database is designed to be both practical and appealing for children of a range of abilities to independently enter and access data.

Children can access both individual and cumulative data entered by participating schools and so, for instance, can compare data for schools in different locations and find averages across the city.

Teaching and learning

The whole Eat-a-Metre programme has been designed to explicitly map onto the national curriculum ICT programmes of study. Although the development of ICT skills is central to the project, the aim is for the technology to be used as a vehicle to allow learning that captures the children's interest and shows explicit links between how the information recorded can inform a tangible activity, in this case growing vegetables.

"ICT capability needs to be at the forefront of our thinking. True capability is developed when children have a clear understanding of the strengths and weaknesses of the ICT and how it can assist them in their learning and communication within a range of contexts." Extract from the Eat-a-Metre website

Schools have also used Eat-a-Metre in a variety of ways beyond its stated ICT and science aims. For example Avon Primary School and Hillcrest Primary School have both formed international partnerships with schools in Uganda that replicated the project using paper copies of the digital materials. Hillcrest has linked Eat-a-Metre to an innovative curricular rich enterprise project where the children, amongst other things, market the produce to parents to raise funds for additional equipment. Further, the produce is used in the school kitchen.

"Every child in school is involved in the project, every class in school has a school garden where vegetables are grown which are used by the school meals service as part of their commitment to providing organic and locally produced food."

Norma Watson, Headteacher Hillcrest Primary School

Impact

In 2008/9, forty six Bristol schools ran Eat-a-Metre, covering nurseries, primary, secondary and special schools. In addition, Eat-a-Metre was used at a pupil behavioural unit and a teenage pregnancy unit.

One major impact has been how the project has given teachers the understanding and confidence to use technologies that may have been previously unfamiliar to them.



"Teachers have seen that how we use technology is very accessible and very all encompassing and that has allowed them to transfer that technology use from our project into other areas, it has therefore broken down barriers."

Lyn Roberts, iCLC manager

Most participating schools have reported how the project has resulted in closer links between home and school. Crucially the project has captured the enthusiasm of a diverse range of children. One Year 3 child considered to be hard to engage simply commented, *"I love gardening day"*.

Challenges

Some schools have had to overcome the physical limitation of their site having no obvious ground suitable for cultivation. These schools have built raised beds in the playground or planted in large freestanding containers.

The CLC found it imperative to get schools to appreciate the fundamental role of the initial staff training, so that firstly staff were aware of the potential of the project both in use of technology and wider learning, and secondly to give staff confidence in using the equipment. It has also been found that the most effective way for the project to run is as a whole school project, where all teachers, teaching assistants and volunteers as well as the children capture the aim and vision of the project.

Wider adoption

The project has national transferability, and has had interest from other authorities who are looking to implement Eat-a-Metre. Although keen to promote its use, currently Bristol does not have sufficient resources to offer support for its adoption elsewhere.

There may be difficulties in some areas in providing the project-boxes, particularly rural areas with no CLCs, but the programme can be run with a relatively inexpensive toolkit already common to many primary and secondary schools. The CLC has funded its side of the project entirely from its internal budget, and many of the Bristol schools used Healthy Schools Funding to invest in Eat-a-Metre.

