

# Fountainneers

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## Abstract

With current debates about what a 21<sup>st</sup> century education should look like and £45 billion earmarked for the UK Building Schools for the Future programme, Fountainneers aims to demonstrate that children and teachers have enormous scope to influence the reconfiguration of their buildings and outdoor spaces – and particularly to use the environment to model new learning habits and more adventurous, curious mindsets.

The Fountainneers project has three equally important aspects. First is the design process in which we work with all pupils and teachers (220 in total) to ensure that everybody has an input in the final brief. Second is the fountain itself and the control system, where it is important that it is flexible and varied enough that it can be used for many things and easily be reprogrammed. The third aspect is the ongoing integration of the fountain in and outside lessons and the management of its use that is led and owned by the pupils.

Keywords: fountain, 21<sup>st</sup> century skills, co-design, programming.

## 1 Introduction

Futurelab<sup>1</sup> is a research and development (R&D) lab based in Bristol, UK. The lab was set up to bring together policy makers, the creative and software industries and educational practitioners to critically explore the future of digital learning environments within school and informal settings over the next five to ten years. A not-for-profit organisation, Futurelab is committed to sharing the lessons learnt from our research and development in order to inform positive change to educational policy and practice. Once or twice a year Futurelab runs a “Call for Ideas” (CfI) in which it invites people to send in ideas for prototype projects that demonstrate novel use of technology for learning.

The Fountainneers project came to Futurelab from Sean McDougall of Stakeholder Design<sup>2</sup>, through the 2006 CfI programme which focussed on ‘Re-imagining Learning Spaces’. The project is a collaboration between Futurelab, Stakeholder Design and Luckwell Primary school<sup>3</sup> (Bristol, UK).

## 2 Overview of the Project

The aim of the Fountainneers project is to build a programmable interactive fountain in the school grounds co-designed with the whole school. The pupils will own the fountain and organize its programming, use, management and maintenance. Over time the fountain will become part of every day school life and a powerful resource. Children will increasingly direct their own learning and continue to invent ever more creative ways of using it.

The Fountainneers project has three equally important aspects. The first is the design process in which we follow a new approach to participatory design, using an exploratory process developed by Stakeholder Design. We are working with all teachers and all pupils (220 in total) to ensure that everyone has a voice, and that disparate ideas are able to be effectively combined and distilled into a workable and coherent fountain design brief. In this phase the pupils are deciding what the fountain might look like and they have to work out ways of coming to a decision for the brief.

The second aspect is the development of the fountain itself and of its control system. It is vital that the fountain has a variety of inputs and outputs so that it is flexible, able to be used for many things and reprogrammed in multiple ways. For instance, it may be programmed to respond to people’s speed and movement or to represent the opinions of pupils.

The third aspect is the ongoing integration of the fountain in and outside of lessons. The management of its use is to be supported by teachers, but ultimately owned and led by the pupils. The development of these new ways of working together will be a key part of the design process.

Through the design and decision making processes pupils (and staff) are not only learning about designing fountains, they are also learning how to work in teams, how to research and investigate, how to prototype and test things out. They are setting their own problems and then working together to solve them. They are increasingly beginning to direct their own learning. Fountainneers is giving us an opportunity to try out a different educational approach for real, to enable teachers time and space to try new ways supporting their pupils learning. It is a chance to involve young children in decision making and to demonstrate that they are much more capable than might be expected of primary age pupils.

At the time of writing we are in the early stages of the process, however, the plan is to have the fountain installed in the school by late summer 2007. The pupils are very enthusiastic about the fountain and it is slowly becoming part of everyday life. It is encouraging to see that already things are changing for the pupils and they are beginning to take initiative for their own learning and share knowledge with each other to do things the teachers haven’t mastered yet.

## 3 Conclusion

For Futurelab the Fountainneers project is providing a focus to try out new ways of doing things – new approaches to creating educational experiences for learners (within a mainstream school) and an opportunity to show that outside spaces and natural environments entwined with new interactive technologies – and the co-design of them - have the potential to model new learning habits and create more adventurous, curious mindsets...

<sup>1</sup> Futurelab: [www.futurelab.org.uk](http://www.futurelab.org.uk)

<sup>2</sup> Stakeholder Design: [www.stakeholderdesign.com](http://www.stakeholderdesign.com)

<sup>3</sup> Luckwell Primary school: [www.luckwell.bristol.sch.uk](http://www.luckwell.bristol.sch.uk)