



**partnerships for schools**  
building schools for the future

This case study describes the innovative approach to testing design carried out as part of Middlesbrough's BSF scheme.

It looks at the creation of a virtual school in Second Life, and the benefits for students and teachers in advance of moving into their brand new school in September 2010.

### Key project information

**School:** Acklam Grange School  
**Specialism:** Maths and Computing  
**No. of students:** 1,410  
**Age range:** 11-16  
**School opening:** September 2010  
**Local authority:** Middlesbrough  
**BSF Wave:** Wave 2

## Building a 'virtual school': Middlesbrough's experience of using Second Life

### Project description

Middlesbrough is a Wave 2 BSF local authority with a £100m BSF programme which will see eight new build schools. Plans include an innovative scheme to co-locate a mainstream and SEN school; a new build pupil referral unit; a single site for the borough's Roman Catholic school; renewed SEN schools specialising in education of students with Autism and behavioural, emotional and social difficulties; Acklam Base, a new build 1,350 place school for two recently amalgamated community schools, and the first school in the programme, Acklam Grange School, a specialist college of mathematics and computing, which is the first scheme to commence construction under BSF in the Tees Valley.

The first schools will open in September 2010 and all eight Middlesbrough BSF schools will be open by September 2012.

### Innovative engagement

In common with other BSF teams across the country, Middlesbrough has been looking for innovative ways to:

1. get students and staff to take ownership of the transformation in happening to their school;
2. allow teachers, but also students and parents, to get a feel for their new environment and to explore new ways of teaching and learning before moving into the actual building.

School representatives have been closely involved in developing the schemes and staff at Acklam Grange School have kept students informed and included throughout the process to date. One of the steps taken – and which is currently in use – is the creation of the new school within Second Life, a virtual world which allows its users to interact with each other through avatars (digital 3D characters).

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## The benefits of Second Life

Acklam Grange School and Middlesbrough City Learning Centre (MCLC) have worked in partnership to develop a project using 3D virtual schools. A replica of the new Acklam Grange School design has been created in the virtual world to engage stakeholders with the new school building a year before the actual building is complete and occupied.

The MCLC team created the building in Second Life within three months using PDF files from the architects. The shell of the building was completed within the first month followed by texturing and furnishing.



The virtual school builders use high quality textures including shadowing and light beams to make a realistic representation of the learning spaces and furniture has been created to scale to place in the rooms. To make the experience even more immersive the CLC use an iMAX system with 3D glasses for viewing the virtual environment.

Acklam Grange School now has a fully functioning model of their new building and have started to put it to use in a number of ways including planning for room usage and furniture and equipment layout. Meetings can also be held within the virtual environment. The building is also being used to look at CCTV camera placement, design and fabric of the building and to vision cast with the rest of the school staff.

All Year 7 pupils have experienced a virtual tour of the building to begin the transition process and familiarise themselves with the layout of the new school. Pupils have used an avatar as a model when considering potential new uniform design.

Some pupils, aged 13+, have already ventured into the teen version of Second Life. They have spent time on private fully locked down islands, where the new school has been replicated, and have been very excited about working in this game-like environment, engaging with creative learning projects and getting to know their new school building ahead of time.

## Future plans

Plans for the project are as follows:

- To have all pupils familiar with the new building before transition into the new school in September 2010.
- Collaboration working between school staff on all the new build projects in Middlesbrough (three other Middlesbrough schools are currently being built in the virtual world).
- MCLC is also looking into the uses of the environment as a non-linear part of the Virtual Learning Environment (VLE) used by the participating schools.
- MCLC have scaled up the project to be able to offer out this service to schools and authorities throughout the UK.



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## **Acklam Grange Head teacher, John Bate said:**

"This project offers us the opportunity not only to plan in fine detail every aspect of our new school and experience - it is as though it already exists - but also to use the environment to allow pupils, parents and other stakeholders to know and have a real feel for the new school in a unique and very exciting way.

"Staff are already exploring their learning areas to plan the impact and learning opportunities.

"We are already considering a virtual school play, by pupil avatars, in a virtual drama studio, in a new school that is not even built yet. By the time we open, our pupils should certainly not get lost."

## **Middlesbrough City Learning Centre Manager, Andy Fisher said:**

"These are the environments that young people of today regularly inhabit. We are now able to combine real and fantasy worlds allowing pupils to express their creativity and imagination and allow us all to benefit from their obvious learning potential. "

"For the first time staff involved in BSF projects have the ability to get a realistic visualisation of their school, spot potential pitfalls and identify possible obstacles to learning in true three-dimensional space. This has definitely taken us a step forward in our ability to visualise our vision for the future of learning in Middlesbrough."

## **Key contact**

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## **Further information**

More information about Middlesbrough BSF can be found at: [www.middlesbrough.gov.uk/bsf](http://www.middlesbrough.gov.uk/bsf).

A short film about the launch of the Second Life project is available on YouTube:  
[www.youtube.com/watch?v=SCI\\_P5UaUNM](http://www.youtube.com/watch?v=SCI_P5UaUNM)