CASE STUDY: Gilbert-Ash - Minecraft Project at Belfast Harbour

Gilbert-Ash, Belfast Harbour and STEM Aware launched a schools' challenge to design and build a version of the new Marriott Hotel in Belfast using the globally popular Minecraft game.

Gilbert-Ash was appointed to build the new £25m hotel project, which forms part of Belfast Harbour's City Quays development. Working with seven Belfast schools, the initiative was aimed at raising awareness among school children aged 12-18 of the wide range of exciting careers open to them within the construction industry. It will also demonstrate how new technologies that the students are familiar with are being incorporated into a work environment.

Gilbert-Ash allocated an engineer and technician for 1-2 weeks to translate the building design into the Minecraft code. One of the engineers from site participated in the STEM training for pupils and teachers, delivering training to each of the schools, resolving any issues that arose and organising site visits by the pupils and teachers.

The pilot school's project gave students a hands on experience of the design and build process. The schools were tasked with delivering their completed design by incorporating their own creative input in line with the theme of 'sustainability'.

Stem Aware delivered a series of Minecraft workshops with each of the schools over a four month period. During each of the workshops, Stem Aware helped the schools develop their designs and then build them using Minecraft.

Each school opted for their own unique take on sustainability focusing on areas such as renewable energy, transportation systems, the use of sustainable products and materials within the fabric of the building, biodiversity and resource efficiency. The initiative produced ideas for the client to consider around the theme of sustainability, including the use of kinetic walkways to produce electricity from pedestrian footfall to power lighting in the area.

Once complete, Belfast Harbour hosted an event so the schools could present their Minecraft hotel to a range of stakeholders including the project team. The new AC Hotel by Marriott Belfast has recently been handed over and there are plans to welcome the students that took part in the initiative to come back and see the finished building.

Launching the challenge at Belfast Harbour's Office, Maria Bradley, HR & Quality Manager at Gilbert-Ash, said:

> *"We came up with this project because we wanted to do something different which would encourage the next generation to consider a career in the construction industry. It has been great to partner with Belfast Harbour and STEM Aware to make it all come to life and we think that giving the students the opportunity to see the site at the beginning of the programme will give them an insight into what our roles actually involve. We introduced the theme of sustainability to get the students thinking about various solutions that could be incorporated on a hotel build which would make the building more efficient to operate, having less impact on resources and the environment."*

Jenni Barkley, Communications & Corporate Responsibility Manager at Belfast Harbour, said:

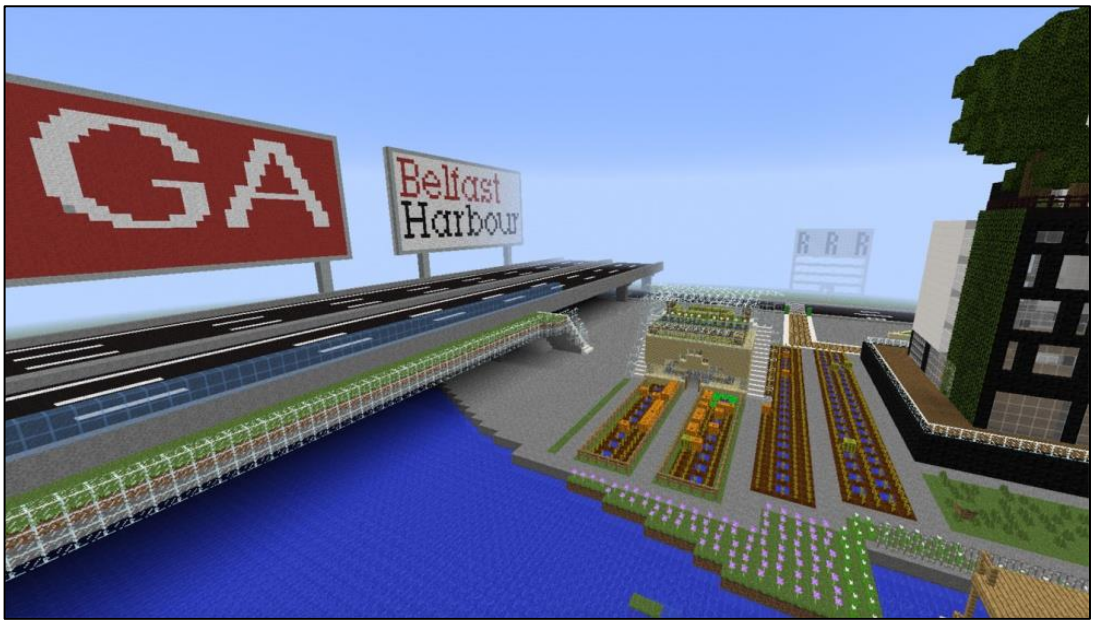
> *"This challenge provided inspiration to school pupils and allowed them to discover their own passion for the construction industry. Working in partnership with Gilbert-Ash on this innovative project was really exciting and we were so impressed with the designs the young people came up with."*

Rachel McDermott, Education & Programme Coordinator at STEM Aware, said:

> *"This project gave schools from across the city the experience of being on a construction site and watching a development come to life but also the challenge of delivering their own design. We wanted to be involved in this partnership because we understand the value of providing a blended education into the STEM careers that are on offer in Northern Ireland."*

This example of community engagement was deemed innovative by the Considerate Constructors Scheme Monitor, who said:

> *"It is a clear demonstration of image enhancement for the industry in competing for entrants from the school base and also for performance enhancement in attracting ideas from bright young people."*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