

## COMMUNITY BENEFITS

### CASE STUDY:

## INDUSTRY KNOWLEDGE

hub West Scotland and contractor BAM worked in partnership with Barrhead High School to deliver various educational engagement activities providing pupils with real life learning experiences in relation to the construction industry.

The project team brought state of the art Building Information Technology (BIM) to the classroom in an interactive workshop with S3 Graphic Communication pupils. BIM is an intelligent 3D model-based drawing tool that gives architects, engineers and construction professionals the ability to coordinate their designs avoiding clashes and providing 3D visualisations of the building and internal spaces.

The workshop focused on an introduction to BIM, the BIM process and an overview of design and what can be achieved in the modern world of designing buildings.

Ross Honeyman, Assistant Design Manager and David Murray, Assistant BIM Manager for BAM explained how the traditional method of 2D drawings has been replaced by technology that can create 3D, 4D, 5D and even 6D digital models. They explained the career

opportunities and the purpose of their role in the pre-construction stage, to ensure the design is appropriately coordinated prior to placing orders with subcontractors.

The pupils learned about the different types of software involved in the BIM process and why I-Pads are essential on site, as this allows site teams access to the current coordinated drawings to help them to understand the design and how the component parts are integrated and assembled.

The benefits of BIM were outlined; including why up front collaboration leads to greater cost efficiency, avoiding abortive design work; clear understanding of buildability which ensures quality on site and a digital model which allows clients to effectively manage their building and future maintenance regimes.

The purpose of the workshop was to increase awareness of the varied careers available in the construction industry. It was a great success and well received with good participation and interaction from the pupils.

*"It was an excellent session with these 3rd year students, who are already actively involved in developing 3D modelling as part of their curricular activities. We received good interaction and we were able to demonstrate the working practices we employ at BAM to deliver on our project BIM requirements. Hopefully we have now inspired some of them to pursue this line of construction as a potential career option!"*

**Ross Honeyman,**  
**Assistant Design Manager, BAM**

