

### “Experiential learning: Real-world scenarios at the Simulation Centre”

**Practitioner:** Janet Campbell, Lecturer in Civil Engineering, Faculty of Engineering, Environment and Computing, [ab4537@coventry.ac.uk](mailto:ab4537@coventry.ac.uk)

**Course:** Various

**Student Level:** Various



#### LINKS TO EDUCATION STRATEGY PILLARS

- Intercultural and international engagement
- Creativity and enterprise
- Embedded employability

#### AIMS

Students on many courses need to develop **practical skills** for **environments** that they cannot easily or safely gain access to. Places such as building sites (for Construction Engineering students), refugee camps (Geography), or major events where crowd control may be required, such as music festivals (Disaster Management), are all ordinarily off limits to students. However, they still need to be able to develop competencies to work effectively within them.

This is where the **Simulation Centre** comes in. A purpose-built facility designed to enable **experiential learning**, it allows students to be immersed in real-time, dynamic scenarios, developed in collaboration with course teams and industry partners.



#### 1) Students watch an on-screen simulation.

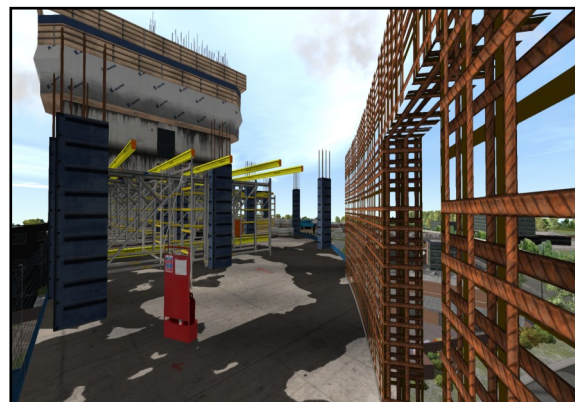
In this example we focus on a simulation involving a **building site** designed for **Construction Engineering** students, but scenarios can be developed to support a range of environments and learning outcomes.

#### ACTIONS

The building site simulation was developed in partnership with construction engineering company **Galliford Try**. Students were kitted out in hard hats and high visibility jackets, and entered a physical space which was set out to include offices just like those used on **actual**

**construction sites**. Via the Sim Centre’s big screen, they were able to move around a virtual building site, a **mirror image** of the real-life site based at Paradise Street (right next to the Sim Centre building).

Having been carefully briefed by Janet, students were set a variety of **practical challenges** to develop their **situational awareness** and **leadership skills**. Students needed to make use of the assets they were provided with in the offices (e.g. documents, phone numbers, landline) as well as responding to unexpected interventions from **actors**. For example, one challenge involved responding to an irate local who claimed that their car had been crashed into by one of the construction site vehicles. **How would students deal with** the emotional visitor? Would they take their details? Would they go and see the damage for themselves? Who would they call for support?



#### 2) A still from the on-screen simulation.

Following the practical activities, **students reflected** on what they had learned– both on the day, during debrief sessions (which included contributions from the actors on how the students interacted with them) and in their follow-up assignment. Importantly, students are **assessed on how effectively** they reflect on their interactions in the Sim Centre, rather than how well they did during the practical activities. They are filmed during their time in the Centre so that they can **obtain video clips** to assist them with their reflections.

#### IMPACT

- The Sim Centre allows students to **“fail safely”** in a simulated environment, rather than in real-world situations.

*Continued on Page 2...*

### *"Fail safely": Real world experiences at the Simulation Centre*

**Practitioner:** Janet Campbell, Lecturer in Civil Engineering, Faculty of Engineering, Environment and Computing, [ab4537@coventry.ac.uk](mailto:ab4537@coventry.ac.uk)

**Course:** Various

**Student Level:** Various



#### IMPACT (continued)

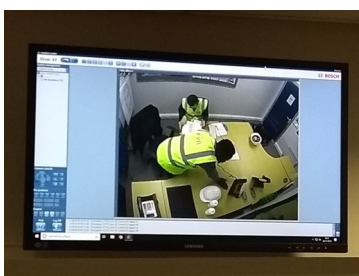
- Clients have reported that as a result of participating in simulations, students have **improved skills** such as communication, team work, problem solving, and making presentations, and are better prepared for dealing with actual scenarios.
- Students are able to draw upon their experiences in job **interviews**, just as they would do with traditional work experience, to give examples of how they have acted in different situations.
- Subject of an article in [Construction Manager Magazine](#), February 2019.



3) The construction site offices within the Sim Centre.

#### Feedback from clients:

- "An amazing, realistic, well thought-out and useful facility"
- "An effective tool to test and train in a variety of different situations, in a safe environment. A brilliant situational awareness and feedback tool".
- "A safe environment where you can try different behaviours and receive constructive feedback".



4) A student makes a call from one of the site offices. Staff can see students at work on the task via monitors.



5) Left: Actors feed back to students on the scenario they have just participated in.

6) Right: Staff take calls from students during the exercise.

#### Feedback from students:

- "The Sim Centre was useful. Actually applied leadership/communication skills in a real life scenario."
- "Going to the Sim Centre was a great experience. I wish we did more hands on activities like that."

**Photo credits:** Images 2, 3: Sim Centre.

Images 1, 4, 5, 6: Annie Bryan.

To find out more about the Sim Centre, please contact Janet directly: [ab4537@coventry.ac.uk](mailto:ab4537@coventry.ac.uk).