EDU463500

Bridging the BIM Skills Gap Through an International Industry Focused Competition

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Learning Objectives

- Learn about the WorldSkills organization
- Learn about BIM/Revit as a skill competition at WorldSkills
- Find out how what’s required to enter the competition
- Find out the skills that are tested in the competition
- Find out about the competition held in Kazan Russia in 2019

Description

“At the heart of the WorldSkills movement lies the organization and effective promotion of skills competitions at the international, regional, national, and subnational levels. Competitions provide the opportunity to promote skills, showcase skills standards and careers, demonstrate benchmarks of excellence in teaching and learning”.

The first-ever "BIM in Construction" competition for WorldSkills was held at the national level in Ireland, hosted by the Technological University Dublin in June 2018. This competition was designed to draw out the students knowledge, understanding, and ability to construct an intelligent model to be used by a multidisciplinary team for building design, tender, construction, and operation.

The competitors worked to industry standards and used the BIM 360 cloud server to host their models. This competition had a set of 11 assessed deliverables to test their skills both in graphic modelling and information creation and coordination. Further national competitions were held in the United Kingdom, where the original framework was developed to test other core skills. Based
on the success of these national competitions, the World Skills organization included a BIM (Building Information Modeling) competition in the Future Skills portfolio in Kazan, Russia, in 2019. This presentation will outline the development of the competition, report on the experience of the national competitions, and cover the amazing experience of the winners of the first World Skills BIM competition in Kazan.

The presentation will show how third-level educational institutions can tailor their BIM education programs within their domain-specific courses so they can enter and be competitive in the national heats of World Skills BIM competition, and in turn respond to industry needs while improving students’ employment prospects.

**Speaker(s)**

**Malachy Mathews MCIAT, MSc, Competition Skill Manager**

Malachy Mathews is a Chartered Architectural Technologist and Senior Lecturer in the School of Architecture at Technological University Dublin. Having had a 35 year career that straddled both the design and construction industry’s, he brings these unique insights into his teaching. Malachy is a BIM leader and takes an active role in BIM education in the College of Engineering and Built Environment in TU Dublin. He is the Competition Skills Manager for BIM at the WorldSkills 2021 in Shanghai.

**Gordon Chisholm MCIAT, MRIAI, Deputy Chief Expert WS 2021**

Gordon Chisholm, Registered Architect, Chartered Architectural Technologist, Certified Passive House Designer and WorldSkills Deputy Chief Expert (BIM). He has over 30 years’ architectural experience including a leading role over the last 15 years teaching & research within the Dept. of Architecture. He is a principal member of the team that are integrating BIM within the wider School of Engineering at Waterford Institute of Technology. Key to this is, the ongoing industry-academia links fostered via The BIM Collective Research Group Est. 2013, who have developed BIM related projects with over 100 companies.

**Michael McGuire Worldskills UK Training Manager**

Michael is a lecturer with New College Lanarkshire in Scotland. His main responsibilities lie in the development and teaching of Computer Aided Architectural Design and Technology courses. Michael was recently appointed as the Training Manager for the WorldSkills UK BIM team training to compete in Shanghai 2021.

**Links for Information**

- [https://worldskills.org/get-involved/](https://worldskills.org/get-involved/)
- [https://worldskills.org/members/](https://worldskills.org/members/)