



**WESTERN SYDNEY  
UNIVERSITY**



Centre for  
Smart Modern Construction

## **c4SMC INTER-UNIVERSITY ACADEMIC ROUND TABLE**

14th November 2018

# Implications for Construction Skill Profiles

**Willy Sher**

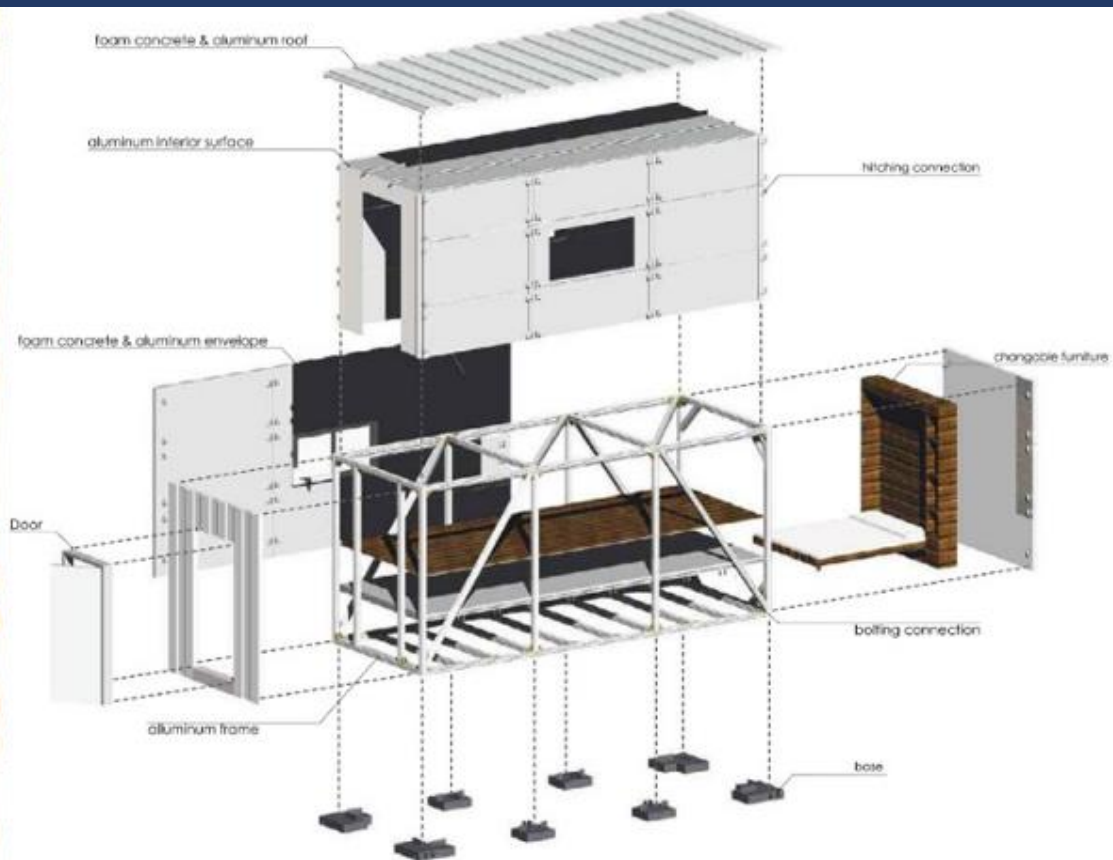
School of Architecture and Built Environment

# Skills

- Education?
- Workplace?

# Education (Uni)

- Current teaching mode
- Recorded lectures
- Essay mills
- Flipped classroom, block teaching
- What is uni' education?
- Uni education vs reality
- Work integrated learning (WIL)



This was a teaching exercise (for students, academics and practitioners) about how to translate drawings into buildings.

...needed to develop design and construction drawings, but also **more detailed drawings** (including production drawings).

These needed to be more comprehensive than traditional construction drawings because they needed to support **production, prefabrication, assembly** and **transportation**.

The architects became aware of how manufacturing and construction impacted on their designs.

...they found it **hard to identify the costs** involved because they lacked the necessary cost engineering knowledge.

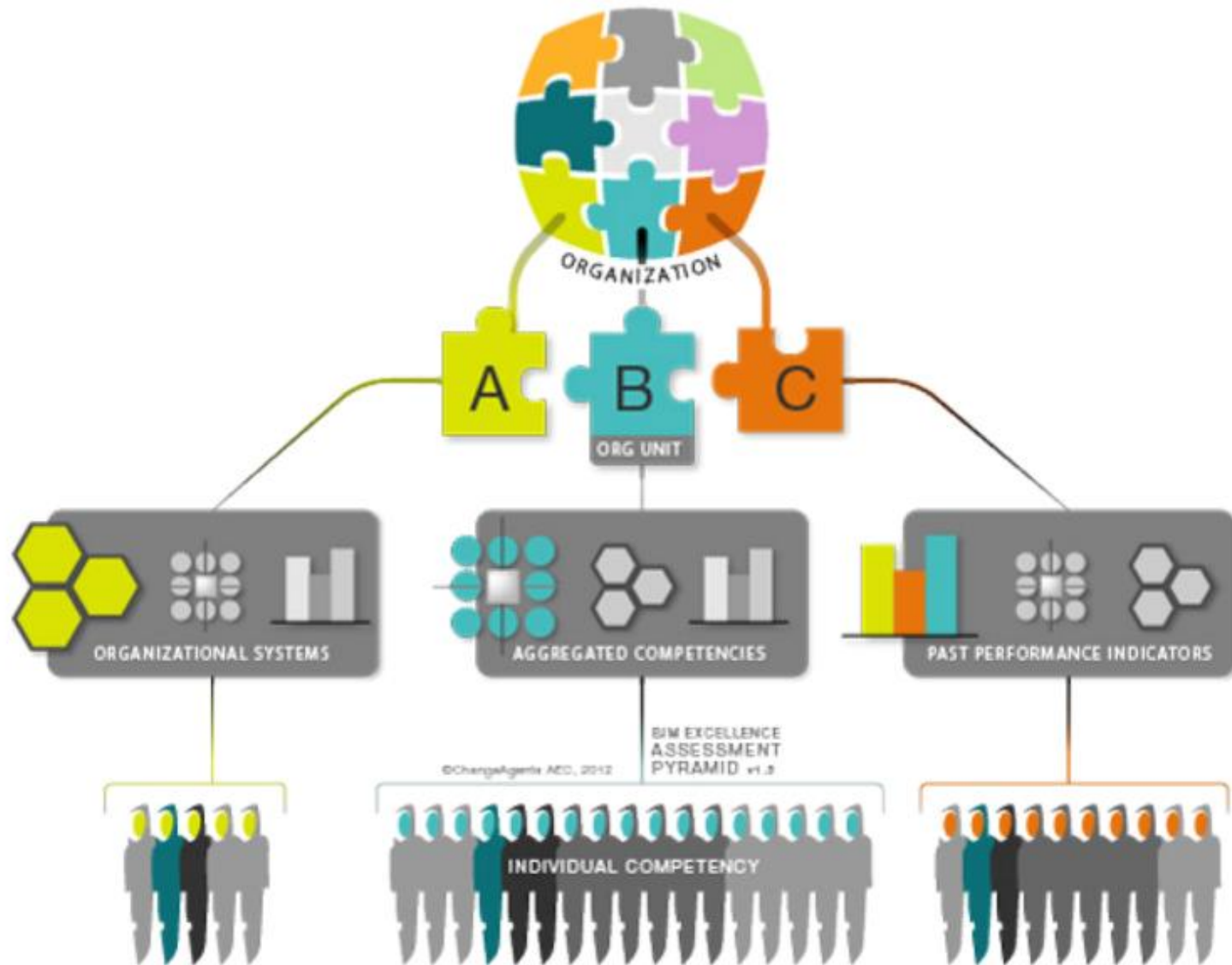
In many cases, what was drawn **could not be fabricated or assembled**.

Participants became aware that some issues **could not be represented on drawings** and were easy to overlook.

...participants were not aware of the need to incorporate **manufacturing tolerances** to ensure that components could be accurately assembled.

# Workplace

- What skills are required? (Buddhini Ginigaddara)
- Construction professional institutes?
- Lessons from BIM implementation
- BIMExcellence



# Workplace

- What skills are required? (Buddhini Ginigaddara)
- Construction professional institutes?
- Lessons from BIM implementation
- BIMExcellence
- Maturity
- Professional development



# Interacting with Others: Making a Case

- I can prepare an argument to others in pursuit of a specific goal.
- I can present an **effective argument** in pursuit of a specified goal, that addresses the objectives of other parties and which takes account of resources and other **support requirements**.
- I can present an effective case in pursuit of a specified goal that **recognises and addresses the needs** of providers. I can **reach agreements** that are acceptable to all parties involved.
- I can present a case that recognises and addresses the needs of all parties involved in discussion. I can reach agreements that are acceptable to all parties, and can build positive relationships that will facilitate the negotiation process in the future. I can evaluate the effectiveness of my **negotiation style** and the processes involved. I can maintain a focus on achieving results that are acceptable to my organisation.

**Acquire, organise and present information.**

Acquiring information

SAVE

Note that all skill statements are hierarchical. Students claiming competency at Level B must be competent at Level A; students claiming competency at Level C must be competent at Levels A and B; students claiming competency at Level D must be competent at Levels A, B, and C.

**\* required****Indicate your competence in this skill :- \***

- |                                  |          |   |
|----------------------------------|----------|---|
| <input type="radio"/>            | <b>A</b> | I can appreciate the need for, and the value of, gathering, managing, and using information.                          |
| <input type="radio"/>            | <b>B</b> | I can collect information from a variety of sources <sup>1</sup> using techniques <sup>2</sup> I am familiar with.    |
| <input checked="" type="radio"/> | <b>C</b> | I can demonstrate competence with a range of information sources and information management techniques <sup>3</sup> . |
| <input type="radio"/>            | <b>D</b> | I can evaluate and select information from the most appropriate sources.  |

**What evidence do you have to support your claim of competence ? \*****Where is this evidence located ?**