



*Creating a learning environment that values multiple perspectives, in the face of climate related design challenges*

Wendy Colvin and Fabia Jeddere-Fisher  
University of the West of England  
(UWE) Bristol

# University of the West of England, Bristol (UWE), UK.

- ♦ A former polytechnic university with strong connections with the vocational industries in the South West.
- ♦ Long history of multidisciplinary architecture and engineering programmes.



Consider a built environment project you have worked on, what disciplines did you need?

To cope with these design challenges, what skills do you need your team to have?

*Designing for a changing climate:  
Uncertainty  
Balance  
Perspective*

*Resilience  
Active Listening  
Meaningful dialogue  
Managing emotive conversations*

# Our case studies

## Collaborative Practice

- ♦ 280+ students
- ♦ Undergraduate Programmes
- ♦ Architecture, Real Estate, Building Services Engineering, Construction, Surveying and more.

## Professionalism for Engineers

- ♦ 400+ students
- ♦ Undergraduate Programmes
- ♦ Mechanical, Electrical, Civil, Aerospace, Robotics.

## Sustainability in the Built Environment

- ♦ 140+ students
- ♦ Postgraduate Programmes
- ♦ Urban Planning, Real Estate, BIM, Construction, Surveying and more.



# Our Learning Environment

*“Visiting speakers presented different viewpoints on collaboration which I believe affected the way that I performed within my group. Two lectures introduced me to new ways of thinking, which I had previously not considered. I find within the construction industry it is very easy to only consider how aspects of a project will affect your discipline when we should think of the bigger picture to collaborate effectively .”*



Fabia Jeddere-Fisher and Wendy Colvin, UWE Bristol.

## Sustainability in the Built Environment

- ♦ Flipped Classroom / Distance Learner
- ♦ Day-release across five full days
- ♦ Classroom debate and Peer-to-peer learning
- ♦ Mix of academic speakers across themes

## Collaborative Practice

- ♦ Thematic weekly structure
- ♦ Weekly lectures & Speakers from industry
- ♦ Workshops reinforcing weekly theme
- ♦ Interdisciplinary, inclusion, confidence

# Real-world scenarios

## Sustainability in the Built Environment

- ♦ Student-led selection for their own site location, anywhere in the world.
- ♦ Brownfield site for a sustainable development.
- ♦ Students self-directed research into local policy and environmental context.

*"The realistic nature of the case study presented the group with numerous obstacles that had to be overcome."*

## Collaborative Practice

- ♦ Anonymised, real-world projects
- ♦ Five, of different types, scales, complexity
- ♦ Retrofit – Heritage – New/build – High/rise
- ♦ Used throughout semester

## Project examples

- ♦ Georgian Mansion Hotel with Restaurant
- ♦ Retail 'Village'
- ♦ Dementia Care Facility
- ♦ Estate Regen Mix/use & High/rise
- ♦ New University Technical College

# Career Preparedness

*“I think that collaborative practice has given me taste of how I will be interacting with other professionals in the work-place soon. I have valued the module and what it has taught me. I feel it has given me confidence in my own role and made me realise what kind of role I would like to have when I graduate from university.”*



## Professionalism for Engineers

- Professional Chartership Standards (UK SPEC) used to carry out a skills gap analysis with self-reflection.

## Collaborative Practice

- Engaging professional behaviour
- Interdisciplinary collaboration
- Critical & reflective thinking skills
- Personal assessment – themes & career

# Presenting and Role Playing

## Collaborative Practice

- ◆ Address negative experience group work
- ◆ Engagement – Configuration – Peer review
- ◆ Mix-discipline groups, 6-8 students/ group
- ◆ Presentation – Scenario – Role play

## Professionalism for Engineers

- ◆ Engaging with real stakeholders and clients.
- ◆ Site visit, risk assessment, and meeting stakeholders
- ◆ Presentation to client and stakeholders to gather feedback on designs.

*“In retrospect I value the experience because it opened my mind to the powerful effect of collaboration, the opportunities of taking insights from a variety of different views to conclusively become more knowledgeable about my role as an architect.”*

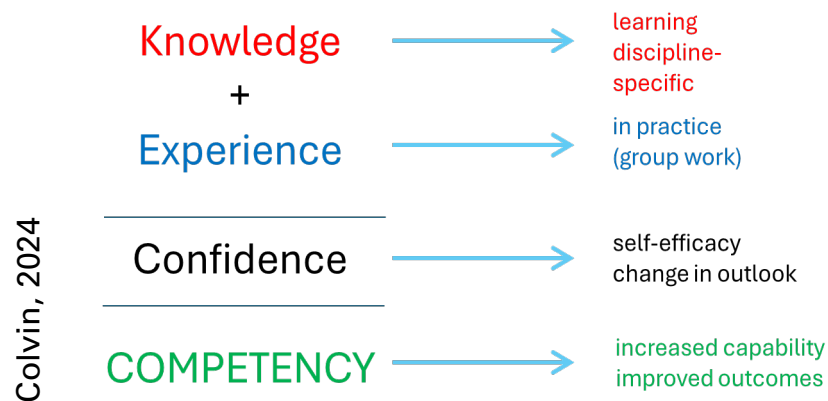




# Reflective Writing

*"I have thoroughly enjoyed this subject as it has taught the importance of collaboration, which is really important to me as a construction manager. Referring back to my weekly logs has allowed me to input information about the group. Being able to reflect on the subject within first person has allowed me to evaluate my decisions."*

## Value of Reflective Practice



## Professionalism for Engineers

- ♦ Reflection portfolio of their skills development against UKSPEC and UNSDGs
- ♦ Marking criteria rewarding self-awareness of own skills and critical reflection.

## Collaborative Practice

- ♦ Reflective practice – Reflective cycles
- ♦ Academic learning & Collaborative working
- ♦ Weekly Reflective Logs
- ♦ Build portfolio to final assessment

“The challenges along the way such as overcoming “language barriers” and trying to **establish collective goals**, have helped me learn how to collaborate successfully.

I’ve become more **aware of people’s backgrounds** and **feelings** and learnt to **adapt** the group environment in line with these needs.

I have also understood the importance of a clear **group hierarchy** and project structure in completing projects well and on time. “

# *Designing for a changing climate:*

*Uncertainty*

*Balance*

*Perspective*

- ♦ *Resilience*
- ♦ *Active Listening*
- ♦ *Meaningful dialogue*
- ♦ *Managing emotive conversations*

*Thank you for listening*

*Fabia Jeddere-Fisher: [fabia.jeddere-fisher@uwe.ac.uk](mailto:fabia.jeddere-fisher@uwe.ac.uk)*

*Wendy Colvin: [wendy.colvin@uwe.ac.uk](mailto:wendy.colvin@uwe.ac.uk)*

