

UNESCO UNITWIN in Humanitarian Engineering

Dr Lizzie Miles & Dr Anh Tran, Coventry University
RA Eng Visiting Professors Conference 26/9/2017



United Nations
Educational, Scientific and
Cultural Organization



UNITWIN Network
in Humanitarian
Engineering

Our accolades

- **Ranked No.12 UK University**
Guardian University Guide 2018
- **University of the Year 2015**
Times Higher Education (THE) Awards
- **Modern University of the Year 2014, 2015, 2016**
The Times and Sunday Times Good University Guide
- **Queen's Award for Enterprise**
International Trade 2015



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• UNITWIN Network
• in Humanitarian
• Engineering

**Ranked 12th
UK University**
Guardian University Guide 2018

**4th for Student Experience
and Teaching Quality**
The Times and Sunday Times Good University Guide 2017

**Queen's Award
for Enterprise**
International Trade 2015

Our accolades

- Top 4 for Student Experience and Teaching Quality

The Times and Sunday Times Good University Guide 2017

- 95% of graduates employed or in further study

DLHE survey 2014/15 – six months after graduating

- Based in a city ranked top 40 worldwide, top 5 UK

QS Best Student Cities 2017

- 91% of students satisfied with their course

Q22, overall satisfaction, National Student Survey (NSS) 2016



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History of Humanitarian Engineering at Coventry University - Global Challenges for Graduates



- Working for / with global organisations
- Global Poverty
- Climate Change
- Energy consumption / generation
- Sustainability
- Natural Disasters
- Complex Emergencies
- Disaster preparedness/prevention/recovery
- Supporting and assisting communities that are struggling (Local, National and International)



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Coventry University's definition of Humanitarian Engineering

Using engineering and computing in culturally sensitive and sustainable ways to address social issues in communities that are unable to cope themselves. This can be on a local, national or international level and does not necessarily have to follow a disaster or crisis



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- RAEng
 - Visiting Professor
 - 2 Visiting Teaching Fellows
 - Outreach Ingenious Grant
- Jo Da Silva – Honorary Degree
- Curriculum Map
- International links
 - Malta – undergraduate project
 - New Zealand – policy change
 - Tanzania – social enterprise
- Staff recruitment



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UNESCO UNITWIN

- Policy Change
- Academic modules (undergraduate/MSc)
- Virtual community
- A HE Conference
- Academic Exchange
- Outreach



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The Humanitarian Journey

| Year | Opportunities |
|----------------------|--|
| 1 st Year | Focus on global issues in an international arena. Learning about culture, sustainability, appropriate technology, appropriate engineering. Biomimicry Assistive Technologies |
| 2 nd Year | Modules focusing on Corporate Social Responsibility |
| 3 rd Year | Development of the Humanitarian Professional Engineer (Register of Engineers for Disaster Relief RedR) Humanitarian Social Entrepreneurship |
| Options | Final year projects, Course work, International placements, volunteering (UK and overseas), student societies, guest lecturers |
| Masters | MSc Global Humanitarian Engineering MSc Disaster Management and Emergency Planning |

Humanitarian Graduates are

Global Graduates that make a World of Difference
Drivers for Change

Passionate and Compassionate
Students to be proud of

Our Humanitarian Curriculum is Award Winning

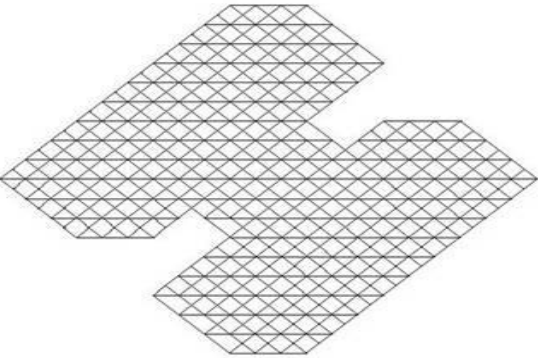


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Humanitarian Engineering and Computing Partners



The Happold Trust



engineers without borders uk



ROYAL ACADEMY OF ENGINEERING

redruk

people and skills for disaster relief

 **WaterAid**

architecture for **humanity** LONDON

ENGINEERS
AGAINST
POVERTY

The Future

- Academic development – CPD for graduate engineers
- Social Enterprise
- Category 2 UNESCO International Centre in Humanitarian Engineering
- Research Profile
- Expand the Network
 - Spain
 - Italy
 - Columbia
 - Australia
 - USA
 - Japan



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Practice what we preach!!!





Engineering Education & Research

Engineering Education Research

- RAEng funded research project
- UK & Ireland Engineering Education Research Network

“Are engineering educators fit for purpose?”

- Survey and interviews
- UK, USA, Australia **looking for more partners**



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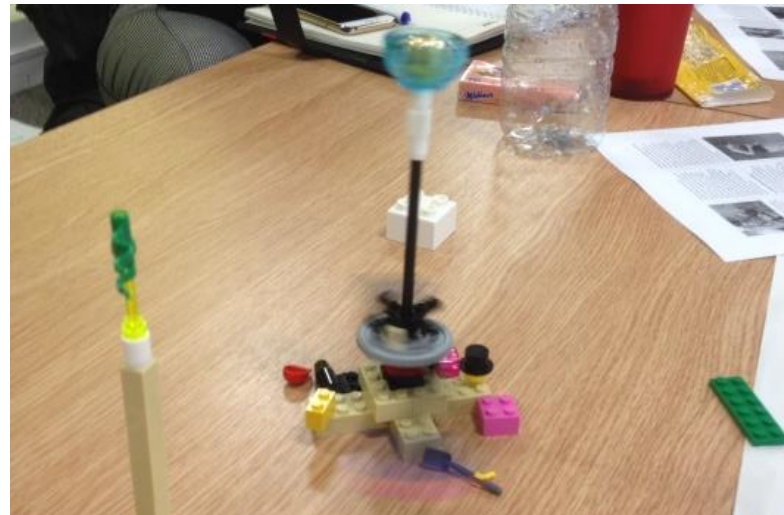
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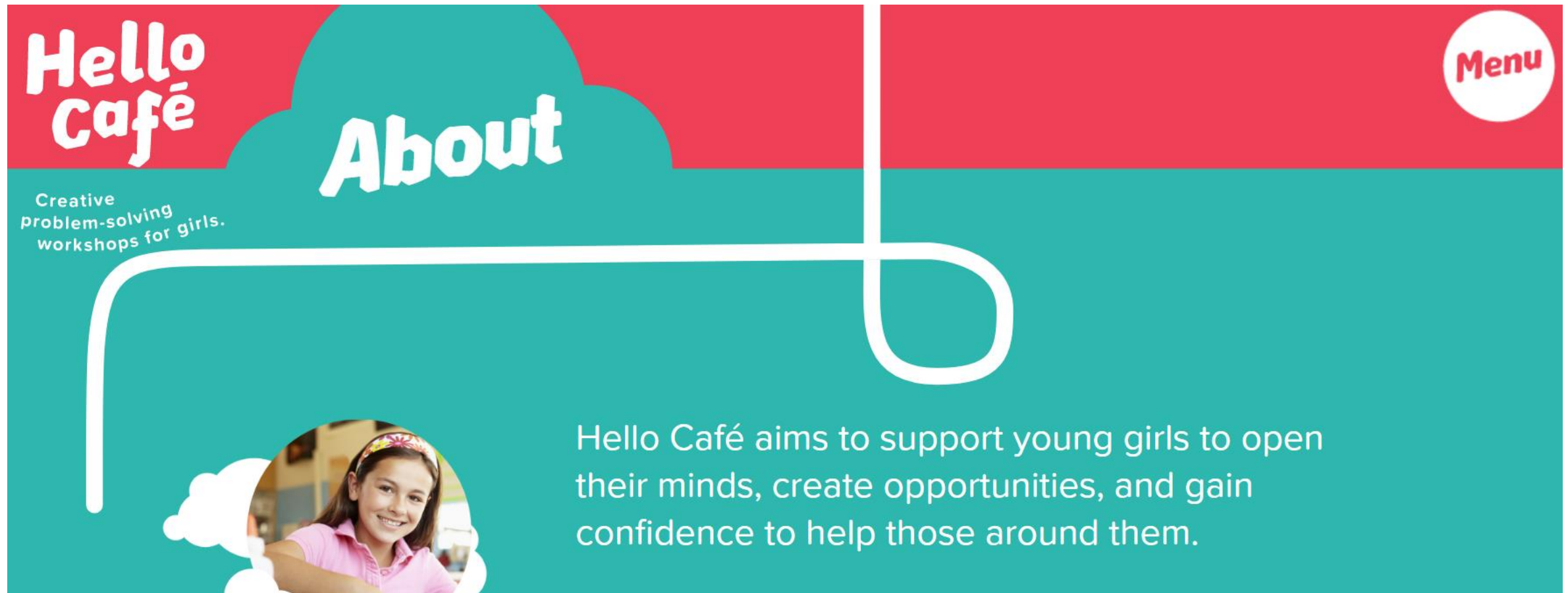
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LEGO for Creativity and Reflection in Humanitarian Engineering



Outreach for Girls: Hello Café, NZ

www.hellocafe.co.nz



The banner features a red top section with the 'Hello Café' logo on the left and a 'Menu' button on the right. Below this is a teal section with the word 'About' in a large white font. A white line graphic starts from the bottom of 'About', goes down, then right, then loops back up and right. On the left side of the teal section, the text 'Creative Problem-solving workshops for girls.' is written in white. In the bottom left of the teal section, there is a circular photo of a young girl in a pink shirt smiling. To the right of the photo, the text 'Hello Café aims to support young girls to open their minds, create opportunities, and gain confidence to help those around them.' is written in white.

Building Capacity & Exchange: Participatory Research



£1.2M Renewable Energy Research: Rwanda, Nepal, Brazil

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Thank you. Any questions?

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