

Northumbria Research Link

Citation: Strachan, Rebecca, Stonehouse, Jane, Dele-Ajayi, Opeyemi, Poolan, Tim, Bell, Richard, Blakelock, Linda, Logan, Steve and Emembolu, Ito (2019) Changing Culture and Challenging Stereotypes: Lets Build Bridges and Diversify! In: Advance HE STEM Teaching and Learning Conference 2019: Delivering Next Generation Higher Education in STEM, 30-31 January 2019, Birmingham.

URL: <https://www.advance-he.ac.uk/programmes-events/con...> <<https://www.advance-he.ac.uk/programmes-events/conferences/STEMConf19>>

This version was downloaded from Northumbria Research Link: <http://nrl.northumbria.ac.uk/id/eprint/38882/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

Changing Culture & Challenging Stereotypes: Lets Build Bridges & Diversify!

Professor Rebecca Strachan¹, Jane Stonehouse¹, Opeyemi Dele-Ajayi¹,
Tim Poolan², Richard Bell³, Linda Blakelock², Steve Logan³, Itoro Emembolu¹

¹ Northumbria University, ² Gateshead College, ³ Derby College



**Northumbria
University**
NEWCASTLE



**GATESHEAD
COLLEGE**



Office for
Students



**BUILDING ROUTES
INTO DEGREES WITH
GREATER EQUALITY**

BRIDGE

**A Collaboration between
Gateshead College, Northumbria University and Derby College
to investigate the low levels of diversity
in professional construction degree programmes**

BRIDGE



**Northumbria
University**
NEWCASTLE



**GATESHEAD
COLLEGE**



Office for
Students



The Team & Contact Details

Northumbria University

Professor Rebecca Strachan

Email: rebecca.strachan@northumbria.ac.uk, Tel: 0191 227 4460

Colleagues: Jane Stonehouse, Opeyemi Dele-Ajayi

Gateshead College:

Tim Poolan (Lead)

Email: tim.poolan@gateshead.ac.uk

Colleagues: Steve Logan, Linda Blakelock

Derby College

Richard Bell (Lead)

Project website: www.bridgeresearch.net



Northumbria
University
NEWCASTLE



The problem:

Diversity in the construction industry

UK construction sector adds £138 billion (9%) to the UK economy (ONS, 2017)

But faces a skills shortage particularly around graduate level roles (CITB, 2018)

A key challenge: one of the least diverse sectors in the UK

- Among employees only 4% are BAME (compared to a national population of 12%)
- The proportion of women in the construction sector has dropped from 19% to 13%.



Why is diversity important?

Apart from the urgent need to fill the skills gap

Diverse workforces are key to innovation:

- ✓ *Gender diverse companies are 14% more likely to perform better than non-diverse companies;*
- ✓ *Ethnically diverse companies are 35% more likely to perform better*





BRIDGE is a joint project between Gateshead College, Northumbria University and Derby College funded for two years by the Office for Students (OfS).

It has two key aims:

- Investigate and gain a deep understanding of the factors affecting the lack of diversity among students enrolling on professional built environment programmes
- Develop and evaluate a set of interventions to address the barriers to participation and improve the diversity of graduate recruitment and career uptake in this sector by females, those from disadvantaged backgrounds, ethnic minority groups and people with disabilities



**Northumbria
University**
NEWCASTLE



**GATESHEAD
COLLEGE**

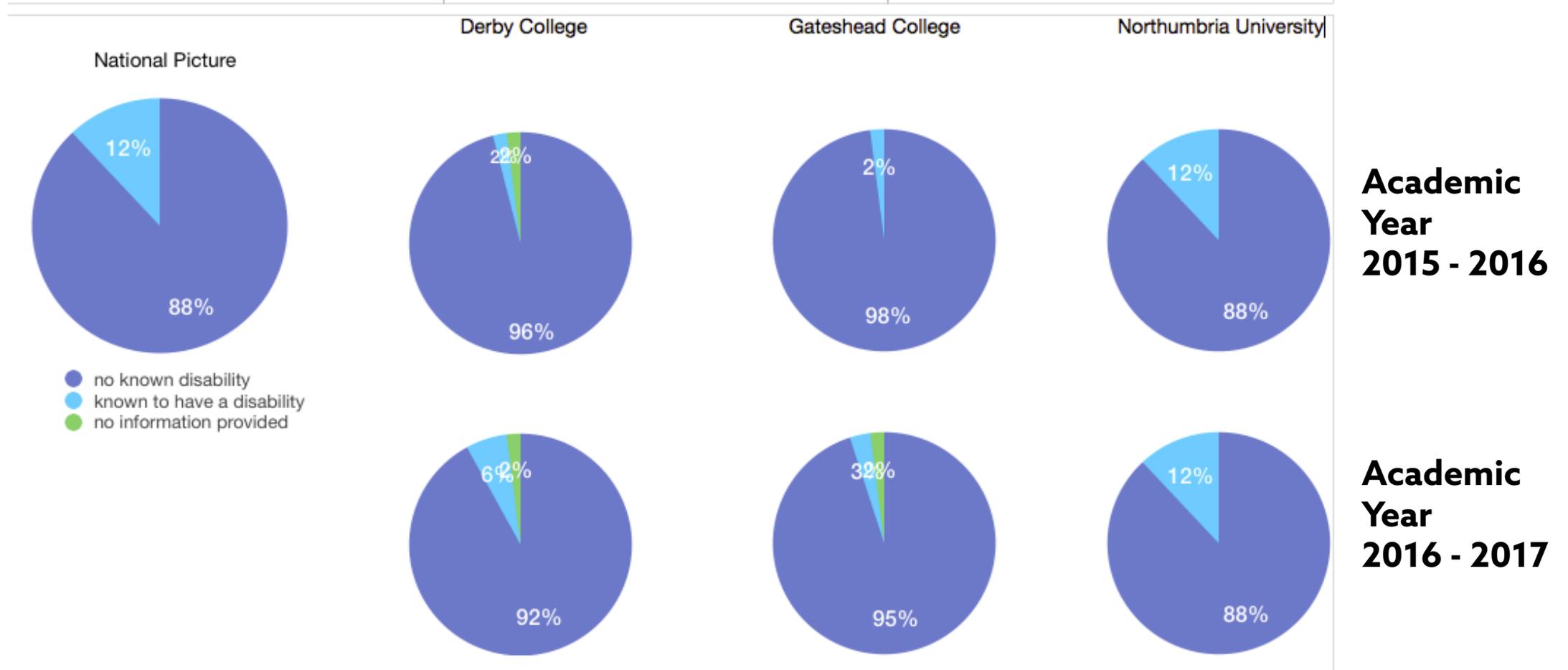


Funded by

**Office for
Students**



HESA vs ILR: disability



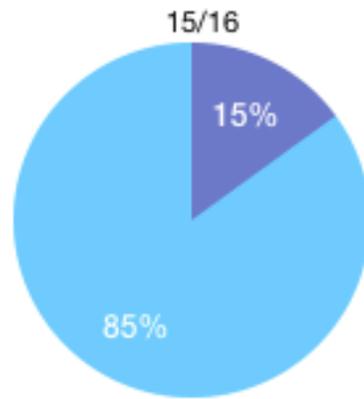
HESA vs ILR: gender

National Picture

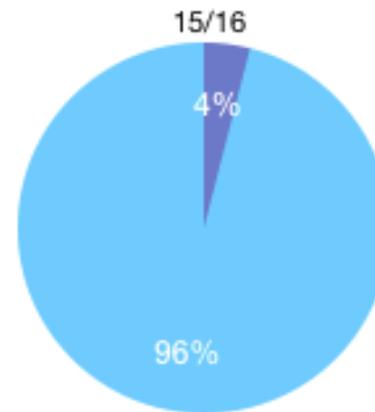
2015-2016
1,288,680 F, 991670 M
480 others

2017-2018
1,333,650 F 1,007,730
M
1710 others

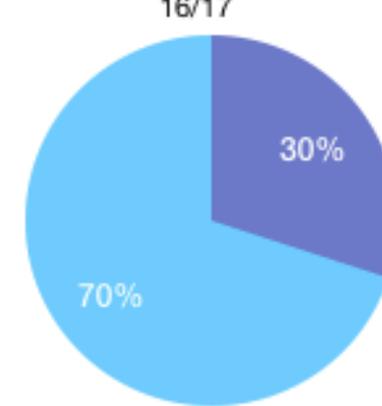
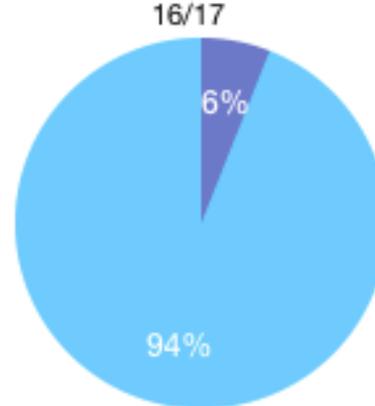
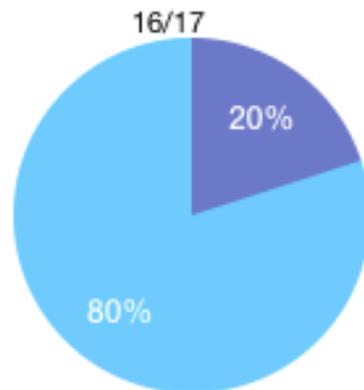
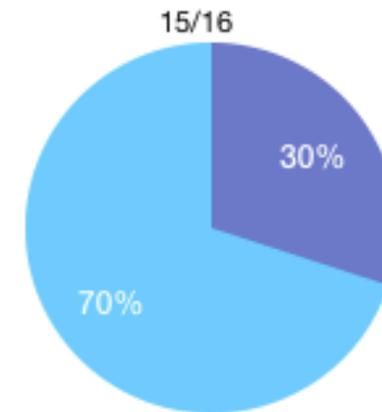
Derby College



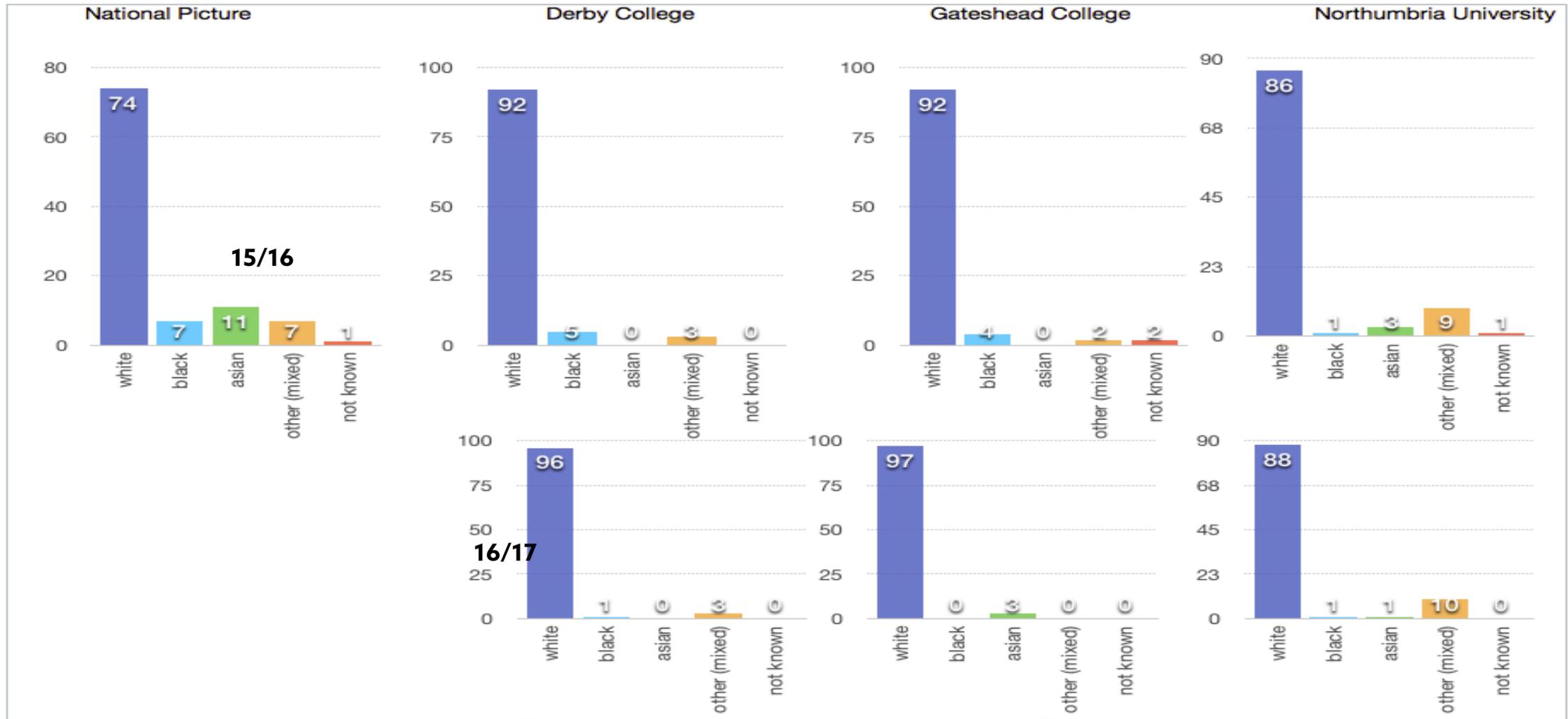
Gateshead College



Northumbria University



HESA vs ILR: ethnicity



Findings from the Literature & Interviews with Staff, Students and Employers

Generic, Gender and BAME Specific Barriers

Image: poor reputation, 'blue-collar', harmful to the environment, corrupt. Words often used to describe the industry include dangerous, physically demanding, dirty, non-professional, tedious.

Culture: long hours, competitive and adversarial engrained culture, "Masculine model" - females are supposed to 'get' it and adapt to this culture.

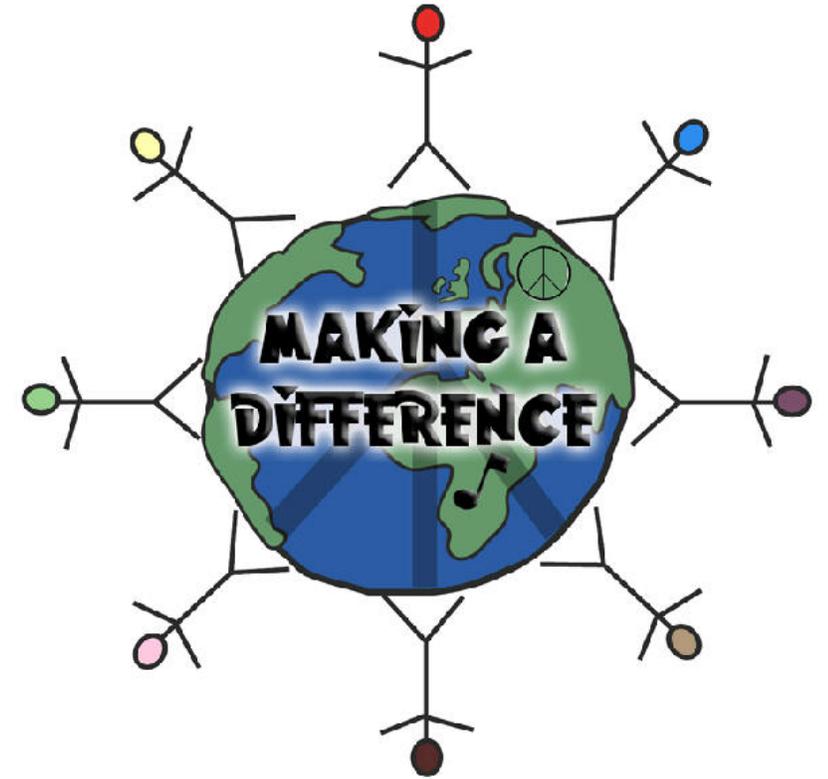
Career Knowledge: Many parents, teachers and children believe construction sector jobs are limited to **bricklaying, joinery, and decorating**. Jobs are often filled by word of mouth.

Technology: Lack of awareness of the use of technology in the sector among the general public.



What can we do differently?

- **Image:** How can the industry change the way it works to make it more attractive to people?
- **Culture:** How can stakeholders be made to understand the value that changing the culture could bring, the advantage of diversity and inclusion to business performance and innovation?
- **Career Knowledge:** How should career messages be presented in primary and secondary school? How can we harness the power of "*people like me*"?
- **Technology:** How can industry leverage technology to help it to address issues that can enhance work image and culture?

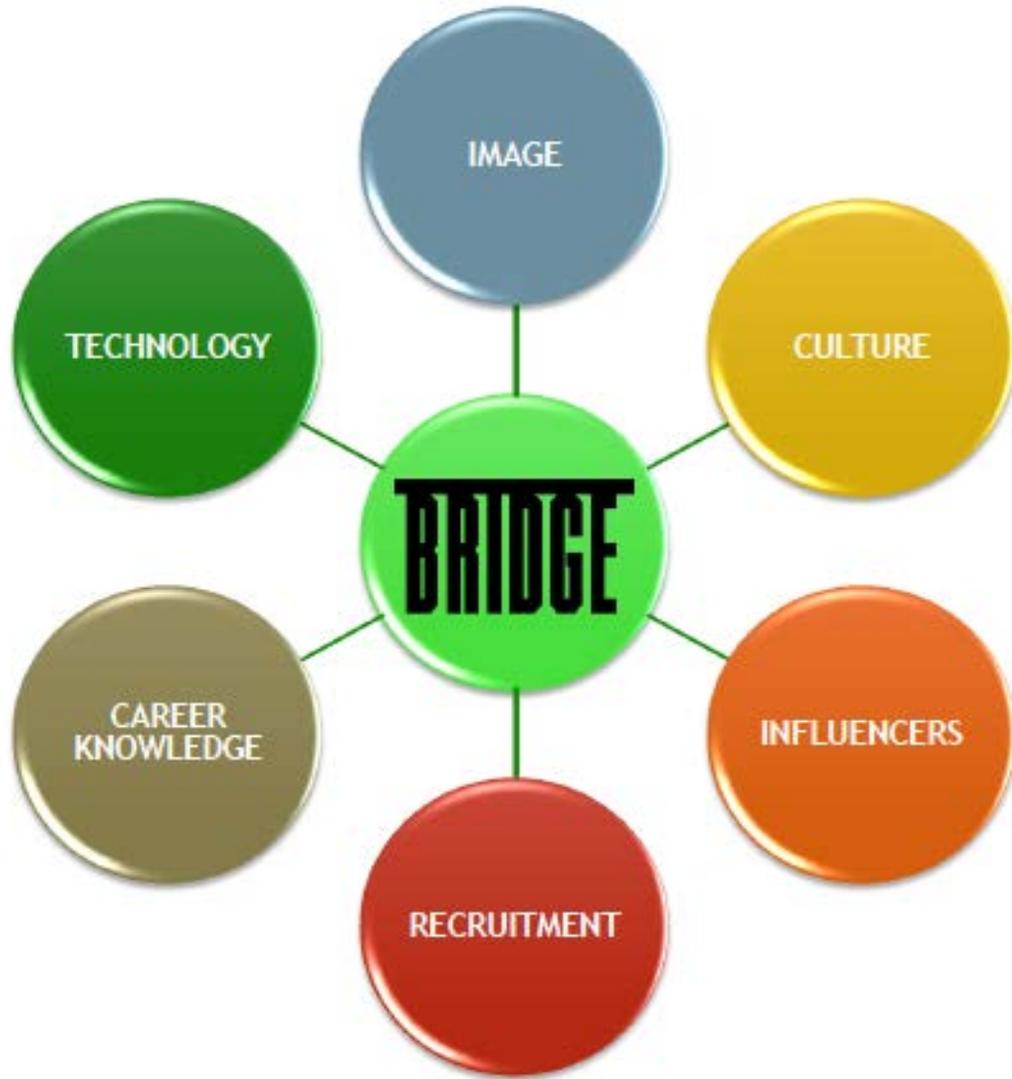


What are we doing?

- ✓ Using a theory of change to underpin our actions
- ✓ Identify need to tackle public perception of the sector as 'dirty', 'dangerous' and 'difficult'.
- ✓ Challenge stereotype views of young people and their key stakeholders (teachers/parents & carers)
- ✓ Challenge ourselves and industry to ensure we are inclusive



Project Intervention Themes



Our interventions, activities and resources are designed around seven themes aiming to:

- ✓ positively change young people's perception of the sector;
- ✓ provide a diversity toolkit to support recruitment and promotion activities;
- ✓ challenge the stereotypes and unconscious bias within the sector through training and awareness raising.

Example One: Student Recruitment

Background: planBEE is an innovative employer led programme at Gateshead College

Issue: Lack of diversity among planBEE students

Approach:

- *Worked with the planBEE team to change their advertising (images/wording) to be gender neutral and inclusive*
- *Worked with employers to change the recruitment/interview process. Panels had a better gender/BAME balance and were 'trained' in equality and diversity including unconscious bias.*

Outcome: An increase in first year female students from 8% (2016) to 27% (2017).



Example Two: Interventions with Young People



Background and Issue: To tackle the stereotypical views held by young people of the construction sector

Approach: Designed different interventions for young people:

- ✓ Professional Construction Workshop held at the University as part of Newcastle Construction Week
- ✓ School Assemblies and workshops
- ✓ Pop Up Shops

All have a focus on professional careers, use of technology and practical application

Outcome: For example, following the professional construction workshop:

- ✓ Increase in positive words used by young people to describe the construction sector
- ✓ Reversed some of the stereotypes e.g. describing industry as 'safe' not 'dangerous.'
- ✓ Increase in number of professional jobs stated by young people (45% (pre) vs 72% (post)).
- ✓ Increase in variety of jobs including technology based ones



Northumbria
University
NEWCASTLE



GATESHEAD
COLLEGE



Funded by

Office for
Students



Example Three: Challenging our Unconscious bias



Background and Issue: To ensure the sector (industry and education) are inclusive and welcoming

Approach:

1. Delivered unconscious bias and Fairness, Inclusion and Respect (FIR) training to industry and the college/university staff
2. Investigated the images/wording used in our marketing and educational materials for our degree apprenticeship programme

Outcomes:

- Some people did not perceive there was an issue – unwilling to engage in training
- Images in marketing/educational material need revising – number and centrality e.g. images of BAME in sweat shops
- Need better balance of resources/educational material with respect to gender and BAME



**Northumbria
University**
NEWCASTLE



**GATESHEAD
COLLEGE**



Funded by

**Office for
Students**



The Future

- ✓ Revision of teaching and marketing materials and learning environment to be inclusive
- ✓ Working with WISE on People Like Me Set of Resources around Construction and the Built Environment
- ✓ Seeking follow up funding to support changes in the industry, particularly along the supply chain
- ✓ Survey of 200 women civil engineers, still being analysed with follow up for men and an action plan

Thanks for listening
Any questions?



Northumbria
University
NEWCASTLE



GATESHEAD
COLLEGE



Funded by

Office for
Students

