

Team: **Pan-university team**

Protected characteristic: **All**

Advancing equality of opportunity/Fostering good relations

Key area/example of where progress has been made with regard to equality and diversity:

Recent policy and legislation have aimed to enable, encourage and increase participation of underrepresented groups in higher education.

Following a successful 'expression of interest', the University was selected to work alongside the Equality Challenge Unit (ECU) on a 2 year project which supports higher education institutions to increase the participation of underrepresented equality groups within the student body. Work on the project began in December 2015 to:

- consider how to address the gender imbalance in Engineering
- develop a method of approach that could be used to address underrepresentation of any protected characteristic in any subject area.

Action we have taken to progress this key area:

- Analysed core student data for pan-university Engineering courses.
- Analysed widening participation data in relation to females and engineering.
- Carried out a scoping exercise to determine current activity in place/has taken place across the partnership to address female underrepresentation in Engineering.
- Researched the potential barriers for females entering Engineering
- Considered the areas we could influence

Measures we are using to monitor our progress:

Evidence base showing research carried out.

Feedback from engineering lecturers and UHI STEM team (see further STEM Team Case Study)

Progress of project

Evidence of progress that has been made:

Initial project team widened to include engineering staff and members of UHI STEM Team

Research base of evidence developed ie

- findings from data analysis

- potential barriers/ key influencers
- potential initiatives to address underrepresentation

Initiative identified to begin to address gender imbalance in Engineering ie STEM¹ Strategy

Ongoing development of 'method of approach' which could be used potentially to address underrepresentation of any protected characteristic in any subject area.

Challenges identified in progressing this key area:

The underrepresentation of females in engineering is a historical gender imbalance that will be difficult to shift.

Key influencers eg parents will be difficult to address.

Many initiatives have been in place before, sector wide, and have made no difference in addressing this 'stubborn inequality'.

Further action we intend to take:

Develop a university STEM Strategy (see draft plan below)

Develop a 'method of approach' that could be used to address underrepresentation of any protected characteristic in any subject area.

The project will be taken forward through the University Gender Action Plan.

ECU Attracting Diversity Project

Developing a University of the Highlands and Island STEM Strategy that tackles gender inequality.

The strategy will be developed and led by:

- UHI STEM Team
- Engineering departments
- Learning and teaching lab

Project aim

The University of the Highlands and Islands have identified that less than 10% of students studying engineering across the UHI partnership are female. Research has also shown that the number of female applicants applying to study engineering courses is also lower than the Scottish average. Therefore, the university has highlighted a greater need to attract girls to study engineering.

¹ Science, Technology, Engineering, Maths

This could be achieved in a number of ways. Changes to course curriculum and improving the quality of gender neutral marketing have been discussed as possible ways to attract and retain female applicants. However, this study will focus on female school pupils at all ages to inspire and develop their interest in engineering.

The STEM strategy will aim to:

- Spark an early interest in engineering in primary school children.
- Improve the transition from primary through to option choices, in a bid to tackle female pupils from becoming disengaged in early secondary school.
- Work with school groups to normalise female engineers to both male and female pupils in a bid to shift stereotypical thinking.
- Work with parents to try to shift stereotypical thinking.
- Look to improve confidence in primary school teachers and advocate the delivery engineering activities in class.
- Achieve a greater awareness of pathways from school to higher or further education and then onto employment.

The STEM Strategy aims to achieve this by:

- Running inspiring engineering based activities with primary school pupils.
- Continue pilot study of running split gender sessions confidence building sessions.
- Work with STEM Ambassadors (of both sexes) from industry to normalise female engineers.
- Work with University students within the Engineering courses to promote the engineering pathway to school pupils and parents.
- Work with the PGDE groups to improve confidence of engineering delivery.

If the STEM strategy is successful in improving the number of female engineering applicants a similar strategy could be developed for other subjects.