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Access to High Profile Jobs: Closing the Gap

Ljiljana Marjanovic-Halburd

Farukh Farukh

Anna Strzelecka

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Presentation outline

- Royal Academy of Engineering Diversity Impact Programme – *Ljiljana*
- Our Project: Access to High Profile Jobs: Closing the Gap - *Ljiljana*
- Engineering Science Learning Centre (ESLC) - *Anna*
- EDI and employability training and support - *Farukh*
- Student Perspective by the ESLC Lead and intern on this project - *Tom*
- Question time by Audience

Royal Academy of Engineering Diversity Impact Programme

- Aims to inspire change in university engineering departments so that ***all*** students succeed and continue to enhance the profession.
- Funding of up to £100,000 for new projects in engineering
- Funding for applicants committed to transformative change
  - co-creation and co-delivery of projects,
  - community of practice,
  - transform higher education/career transition for minoritised groups.

Diversity Impact Programme awardees

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- DMU Access Participation Plan **APP**: identified **access to highly paid jobs** – 1st priority
- 2nd and 3rd priorities: **closing the existing progression** and **attainment gaps** between BAME and white students as well as disadvantaged and mature students.
- This project is **the first activity within DMU** directly addressing the central **APP** question on 'How does it help our students?'
    - **Succeeding in HE**
    - **Progressing from HE**

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Access to High Profile Jobs: Closing the Gap Cont..

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- DMU's new strategy is related to Empowering People through:
  - **Delivering an engaged experience for all students;**
  - **Championing diversity of our students and staff.**
- Our project: two main work streams building students' academic and professional confidence & fostering fulfilment through peer learning of co-created activities.
- ESD: most students and staff are BAME; 50% of students are the first generation.
- Training and coaching: long-term championing of diversity principles and confidence in challenging the status quo and driving changes from the top down and bottom up.

Access to High Profile Jobs: Closing the Gap Cont..

Engineering Science Learning Centre (ESLC)

- Created by the students for the students.
- Close the existing knowledge and skills gap between the students.
- Boost students' confidence and prepare them for the future employment.

Engagement Opportunities

- Industrial Liaison Committee

Training Opportunities

- Mentoring by the academic staff
- Mentoring and training by the EqualEngineers (EE)
- Peer Mentoring

Engineering Science Learning Centre ESLC

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- Created by students, for students and run by students: peer to peer learning.
- The main target group are level 4 students that have the weakest progression point.
- ESLC will help to close the existing as well as the perceived academic and transferable skills gap between the students from minoritizes groups and their peers.
- ESLC will provide a more structured support outside of the core teaching hours.
- ESLC aims to empower our students.

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Engineering Science Learning Centre: Co-Creation workshops Cont..

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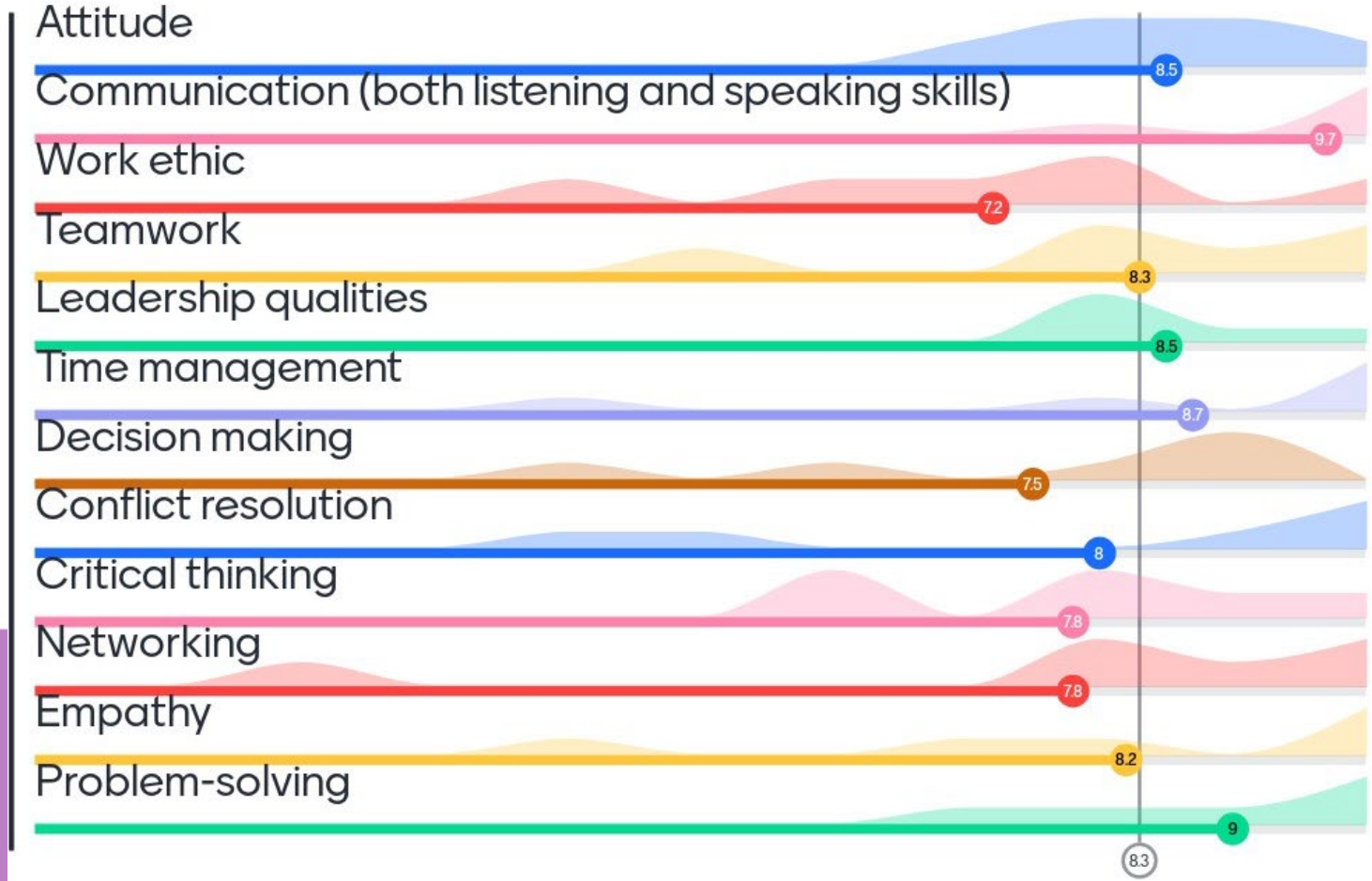
Which skills are the most relevant to you when applying/looking for jobs?



1st year:

Low empathy, high work ethic

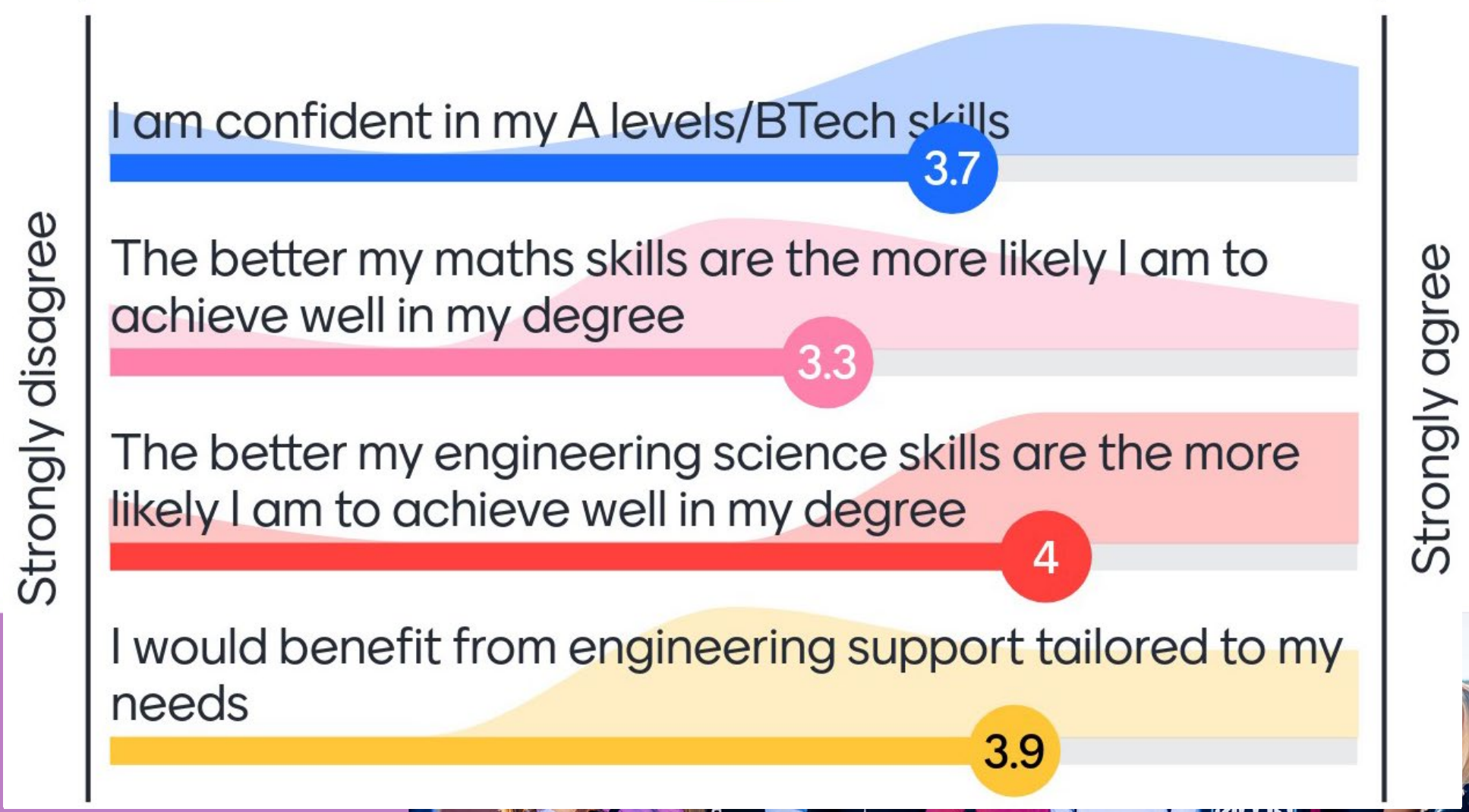
2nd year:

Low attitude, high problem-solving

3rd year:

Low communication, high work ethic

Engineering Science Learning Centre: Co-Creation workshops Cont..



Engineering Science Learning Centre: Co-Creation workshops Cont..

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What is the best way for you (or other students) to support our project?

Being able to teach is a useful ability to have. Even if I work in my course's industry I find it really important to pass the knowledge to young engineers. I will definitely help younger students or students who are not up to date with all the studi

Helping other students in lower years. I really looked out for this when I started. someone to brief me on how the course or module is .Yes I will love to be trained to help others

Introduce the students to the company at least for short time to see the atmosphere and practical side if research

Teaching other students a year below so as to enhance your understanding of what you learnt.

More engineers that can tell us what the industry is about and what they would require from us

If I had time I'd help year 1 students and advise them on what to do and give them knowledge I learnt from year 2 and 3 and give helpful tips/advice. However, this all depends which time as 3rd year can be difficult at times.

I have always found that helping others allows me to clarify my own knowledge at the same time.

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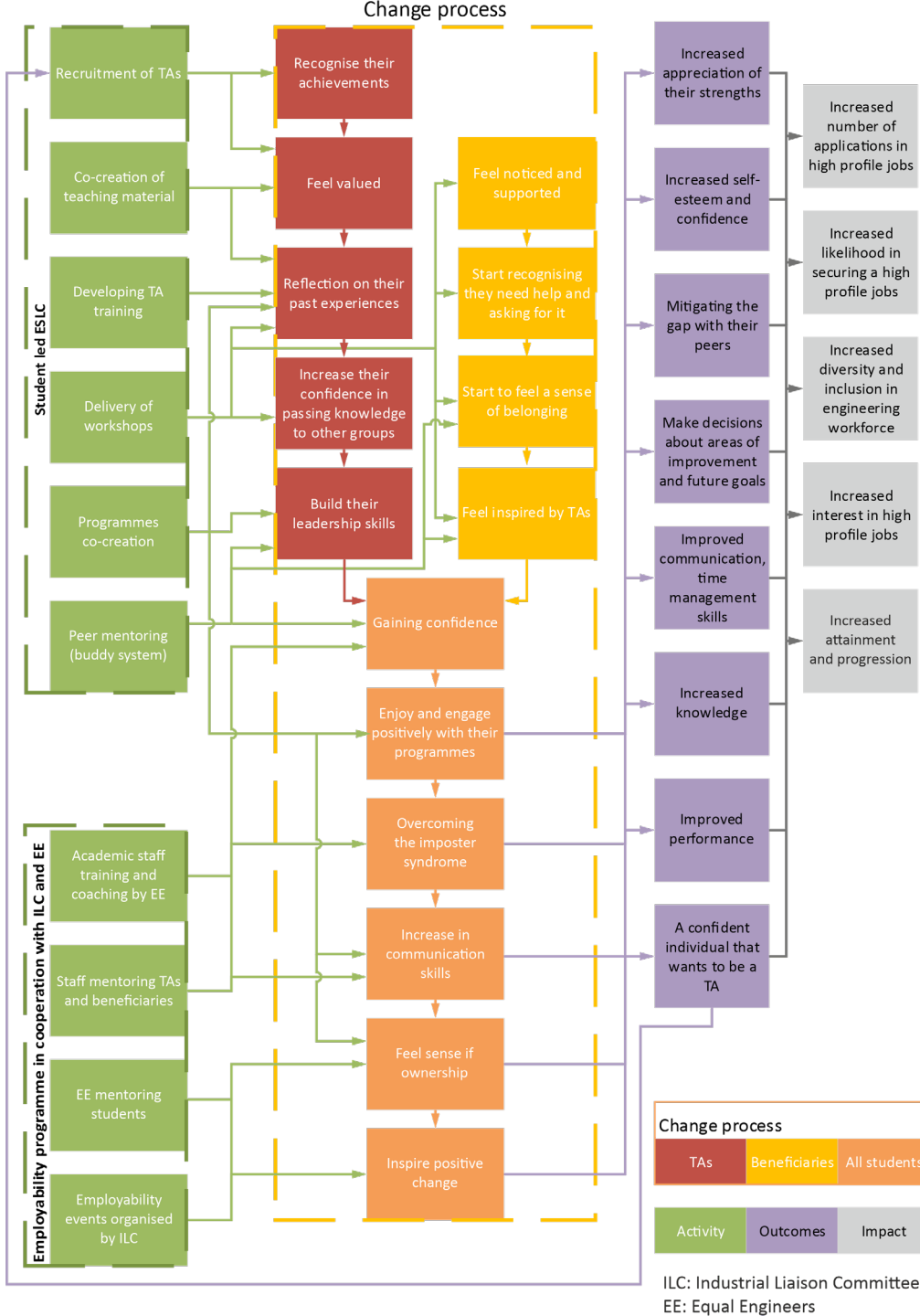
Engineering Science Learn Theory of change

- Allows us to think through our aims and ideas, scrutinise and articulate them.
- It encourages us to reflect on our aims and plans, to discuss them with others and to make them explicit.
- The output describes how we believe our activities will lead to the outcomes and impacts we want to achieve.



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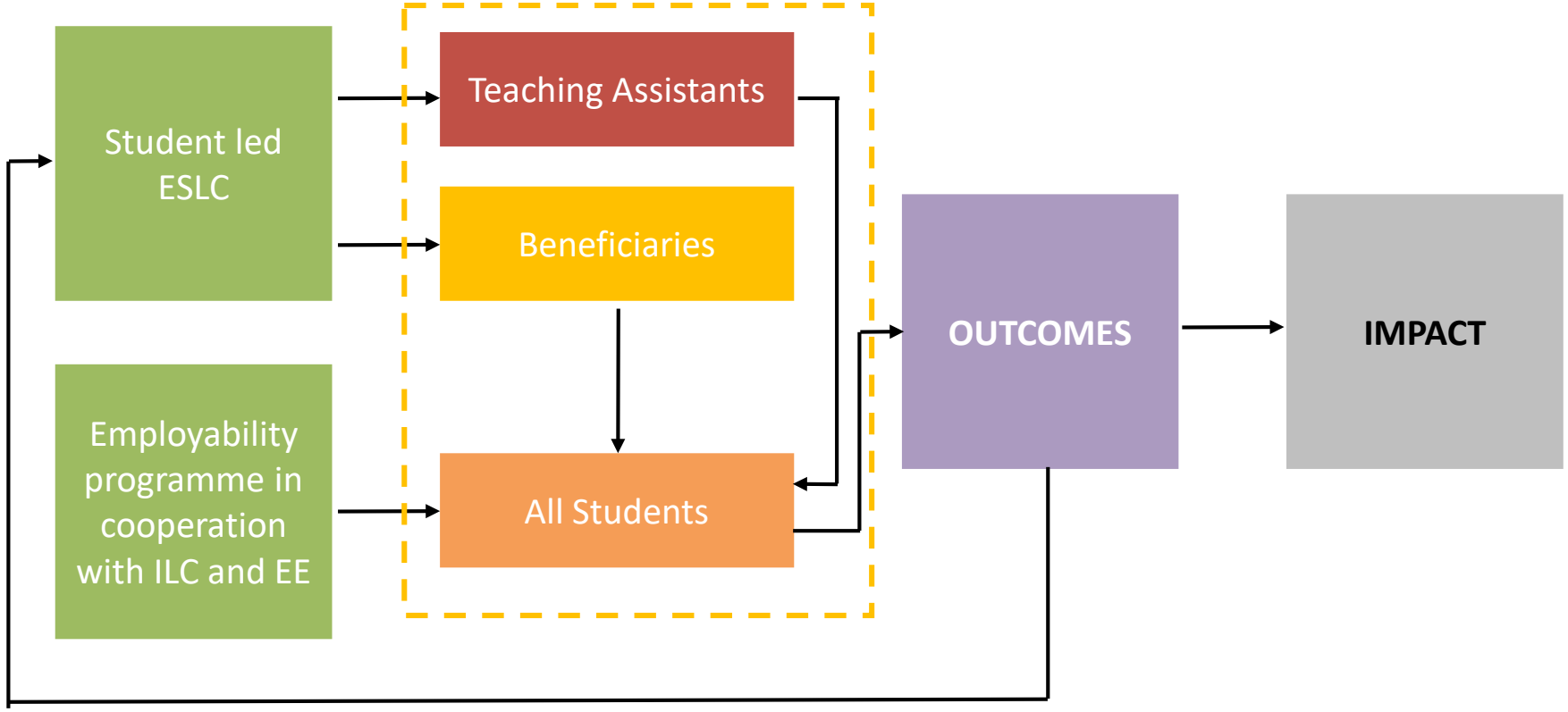
Engineering Science Learning Centre: Theory of change – the process



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Engineering Science Learning Centre: Theory of change – the process, Cont

Recognise their achievements → Feel valued → … → Build their leadership skills

Feel noticed and supported → Start recognising they need help and asking for it → … → Feel inspired by TAs

→ Gaining confidence → … → Inspire positive change

OUTCOMES

Increased appreciation of their strengths
Increased self-esteem and confidence
Improved performance (…)
A confident individual that wants to be a TA

IMPACT

Increased number of applications in high profile jobs
Increased likelihood in securing high profile jobs
Increased diversity and inclusion in engineering workforce (…)

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EDI and employability training

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- You are a stranger in strange land
- Underrepresented groups do not have a long history of belonging
  - Especially at higher level of achievements
- The more educational and professional skills acquired, the less confident they seem to feel

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EDI and employability training

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Funding focus - transform higher education and career transition outcomes for people from underrepresented groups

DMU Priority - Equality for all' is our equality, diversity and inclusion strategy which we have organised into two broad themes: Developing our Culture and Enabling Equity and Fairness for all.

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EDI and employability training

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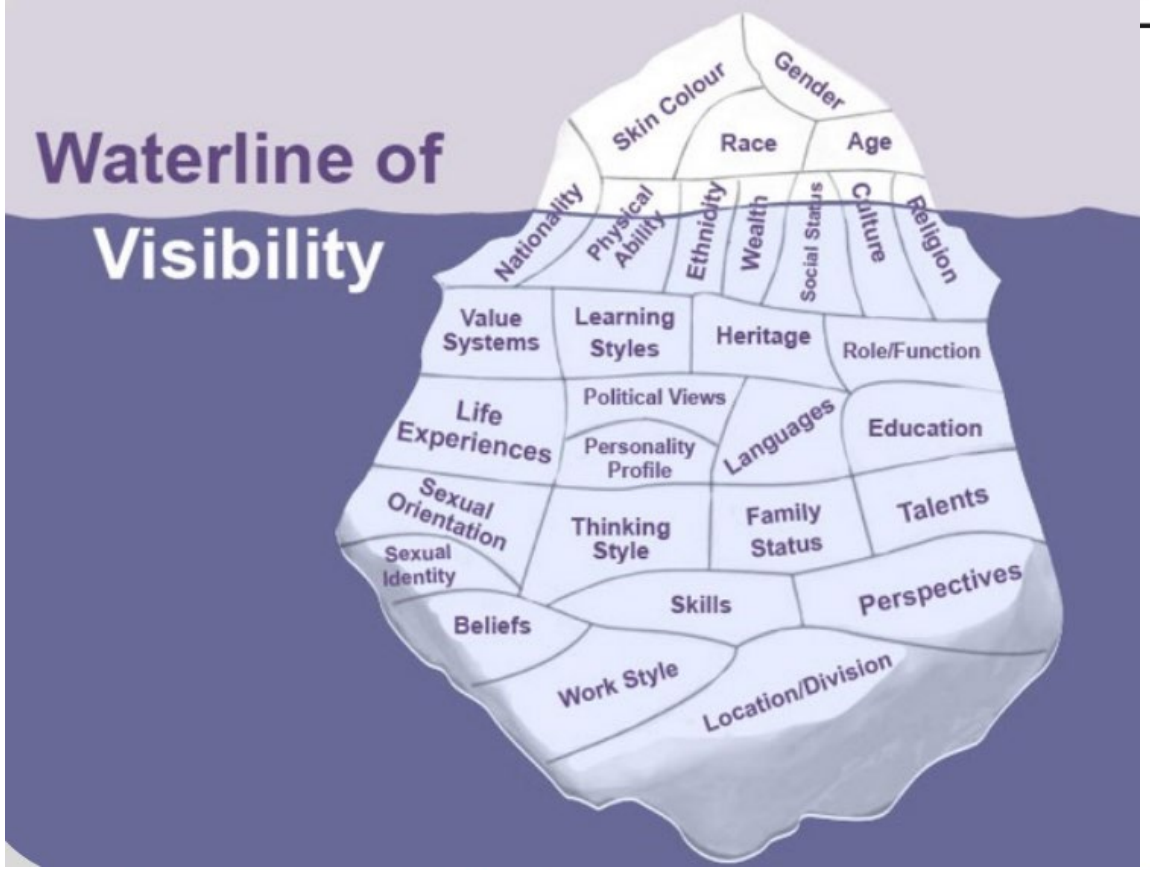
- Training for project team
- Training for the staff
- Training for the Teaching assistants



EqualEngineers

Students' perspective of ESLC

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Why are we doing this?

- **Balance the level of previous education**
- **Simplification of work for ease of understanding**
- Allows older **students** to **share their experience and understanding**
- **Create a space for students to confidently ask questions**
- **Help develop students to achieve high level placements and jobs**

Support → **Confidence** → **Development** → **Opportunities**

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Students' perspective of ESLC

Mechanical/Energy	Aeronautical	Electrical	Mechatronics
Engineering Mathematics 1	Engineering Mathematics 1	Engineering Mathematics 1	Engineering Mathematics 1
Engineering Mathematics 2	Engineering Mathematics 2	Engineering Mathematics 2	Engineering Mathematics 2
CAE and Programming	CAE and Programming	Electronics CAE and Programming Fundamentals	Mechatronics CAE and Programming Fundamentals
Electrical and Electronic Principles 1	Aircraft Design Principles	Electrical and Electronic Principles 1	Electrical and Electronic Principles 1
Mechanical Principles - Statics	Mechanical Principles - Statics	Electrical and Electronic Principles 2	Mechanical Principles - Statics
Mechanical Principles - Dynamics	Mechanical Principles - Dynamics	Communication Systems	Mechanical Principles - Dynamics
Thermofluids	Thermofluids	Electronic Circuits and Systems	Electronic Circuits and Systems
Design and Manufacture	Mechanics of Flight	Design and Manufacture	Design and Manufacture

Additional Support

- Report Writing & Logbooks
- Teamwork & Management
- Microsoft Skills

What we intend to provide

- Simplified revision/lecture notes
- Practical & Theoretical Sessions
- Recordings, Quizes & Worked Examples

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Thank you for your attention

Any questions?

You can find us on BB: Engineering Science Learning Centre – community shell

Soon: our.dmu website

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