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Attracting Diverse Talent to the Engineering Professions of 2030: EU Research Project

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Attracting Diverse Talent to the Engineering Professions of 2030

Una Beagon
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TU Dublin

Engineering Education: Future skills, standards and mobility

Engineers Ireland, 30th October 2019
Introduction to Project

Project Aims

Activity 1 work

Results to date

Q1. Sustainable Development
Q2. Awareness of SDGs
Q3. Skills and competencies required

Next Steps
Attracting diverse Talent to the Engineering Professions of 2030

Project Partners:
Attracting diverse Talent to the Engineering Professions of 2030

- Aligning values of people with the skills needed in the engineering profession
- Creating a learning environment which is attractive to all
- Encouraging a diverse student body to study engineering
- Looking to the Future and the SDGs
Specific Activities

**Activity 1**
Future Role of Engineers in society and the skills and competencies required to achieve the SDGs

**Activity 2**
Investigate values and motivations of young people from diverse backgrounds and identify overlap with future role of Engineers

**Activity 3**
Develop a new innovative learning and teaching activity to attract diverse students linked to skills needs and student values.
Activity 1 details

Future Role of Engineers in society and the skills and competencies required to achieve the SDGs

Task 1: Literature Review

Task 2: Focus Groups

<table>
<thead>
<tr>
<th></th>
<th>Academics</th>
<th>Students</th>
<th>Employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>9</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>France</td>
<td>7</td>
<td>9</td>
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<tr>
<td>Denmark</td>
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<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Finland</td>
<td>8</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>
Activity 1 – Focus Groups
Q1. Words associated with Sustainable Development
Q1. Words associated with Sustainable Development

Ireland:
- Recycling
- Consumption
- Environment
- Education

France:
- Circular
- Consumption
- Energy
- Education

Denmark:
- Transport
- Energy
- Environment
- Climate

Finland:
- Renewable
- Recycling
- Environment
- Economy
Q2. No of mentions for each SDG by participant group

- **SDG 1**
- **SDG 2**
- **SDG 3**
- **SDG 4**
- **SDG 5**
- **SDG 6**
- **SDG 7**
- **SDG 8**
- **SDG 9**
- **SDG 10**
- **SDG 11**
- **SDG 12**
- **SDG 13**
- **SDG 14**
- **SDG 15**
- **SDG 16**
- **SDG 17**

- **Students**
- **Academics**
- **Employers**
Q2b. To what extent are SDGs covered in engineering programmes

Students  Academics
Q3: What are the skills and competencies required to achieve SDGs
Next Steps

**Activity 1**
Future Role of Engineers in society and the skills and competencies required to achieve the SDGs

**Activity 2**
Investigate values and motivations of young people from diverse backgrounds and identify overlap with future role of Engineers

**Activity 3**
Develop a new innovative learning and teaching activity to attract diverse students linked to skills needs and student values.
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