Theory of Change: STEM Foundation Year

Inputs

Activities and resources required

Resources

- Budget –
  - WP cash Scholarships.
  - Access to Exeter bursary.
- Diverse teaching staff.
- PhD students delivering sessions.
- Project management.
- Student recruitment i.e. work with schools and colleges.

Activities

- Teaching and learning activities
- Project work (group work).
- Pathway choice and integration with chosen department.
- Invited speakers/seminars.
- Academic competitions between institutes to showcase students work.
- Community activities.
- X2 Mentoring (academic and peer).
- Personal Tutoring.
- Opportunities to contribute towards decision making e.g. committee representation.

Outputs

Key deliverables

- Increase in academic knowledge and skills. Emphasis on mathematics.
- Diverse assessment methods.
- Access to role models (internal and external to University).
- Develop social networks with students, academics and university community.
- Informed decision making re: future study and career opportunities, and flexibility to decide.
- Familiarisation with campus, facilities, support services, functionality of university.

Outcomes

Early – midterm results

- Pass year 0 and progression to STEM UG programmes.
- Preparedness for UG study. e.g. Transferable skills and knowledge
- Integration with University community.
- Sense of belonging.
- Social capital.
- Academic capital.
- confidence in academic ability
- Diverse teaching and learning assessments.
- Resilience to cope with demands of Higher Education.

Impact

Long term results

- Continuation with UG course (retention).
- Successful UG STEM students (degree attainment).
- Diversifying STEM student intake. i.e. more students from WP backgrounds.
- Positive student experience.

Assumptions (related to individuals who take up the activity)

- Students will be motivated and keen to engage.
- Students would not have accessed a top institution without the foundation programme.
- Students have a high potential but are disadvantaged in some way.

Assumptions (related to early changes in attitude or behaviour by activity)

- Students will gain confidence in their mathematical ability.
- Mathematical ability with specific skills for the degree are developed.
- Students will develop a sense of belonging and friendships with those on the programme.

Assumptions (related to benefits and possible unintended consequences)

- Literature shows that increasing sense of belonging and confidence in ability to succeed at university could increase the chances of a successful transition and continuation.