



THE UNIVERSITY *of* EDINBURGH
School of Mathematics

Mathematics Outreach Projects

Sharing our passion for learning with local communities

DR FRANCESCA IEZZI- EDWARD SOLOMON- RUBY DAVID-JEKYLL



Why these projects?

- ▶ Contribute to the University civic mission
- ▶ Help to build ties with local communities
- ▶ Provide students with experiential learning
- ▶ Increase students' transferable skills

Projects in Mathematics Outreach

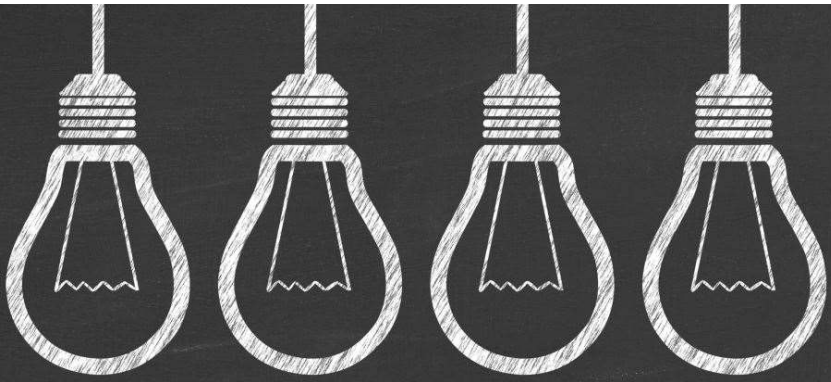
- ▶ Aimed at 4th or 5th year students
- ▶ Students develop activities for schools or communities
- ▶ Worth 20 or 40 credits
- ▶ Students are in charge of all aspects
- ▶ 7 projects since 2020

Examples of activities conducted by the students

- ▶ School workshops
- ▶ Numeracy classes for disadvantaged adults
- ▶ Mathematical activities in local pubs or shopping centers



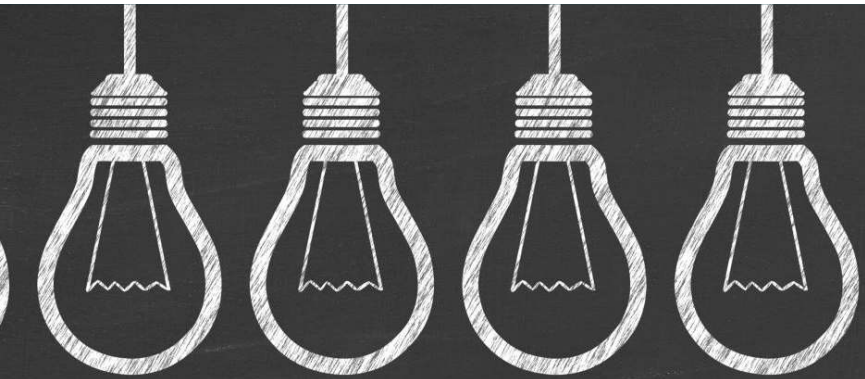
Students' feedback



Why they chose these projects

- ▶ Develop skills
- ▶ Gain practical experience
- ▶ Inspiring young people to study maths
- ▶ Give back to the community
- ▶ Desire to “make a difference”





What students got

- ▶ Confidence
- ▶ Communication skills
- ▶ Organisation skills- project management-flexibility
- ▶ Time management
- ▶ Creativity
- ▶ Fun and enjoyment



Students feedback

I really enjoyed the project and am glad I chose it! I feel like I got skills and knowledge out of it that is unique to all of the other maths courses I've studied throughout my degree.

It gave me practical experience in applying the knowledge from my degree and was unique. It was also just really enjoyable.

The project allowed me to improve my communication to an appropriate professional level.

I'm not really a creative person and the project involved a lot more creative planning than I thought - I surprised myself because I really enjoyed this part.

I feel like having completed this project I would feel more confident in organising and running projects during my career

This was my favourite course in my final year:)

Challenges for the students

- ▶ Report writing
- ▶ Team work
- ▶ Admin- organisation
- ▶ The “open-endedness” of the project



My own Challenges

- ▶ Guidance
- ▶ Marking
- ▶ Timings



Over to the
students

Four mathematicians walk into a pub, then into a community centre, then into a shopping centre, and then into a school

- ▶ Met with Francesca once a week
- ▶ We tried to tackle Maths Anxiety
- ▶ We ran workshops in a pub, a community centre, a shopping centre and a school
- ▶ We collated questionnaires and collated data





What I learnt

- ▶ The importance of visiting communities before hand and observe how they work
- ▶ Communicating with different levels of mathematical literacy



Maths-Puzz- Ling

- ▶ Looking to increase pupils' enthusiasm towards maths
- ▶ Hands on project
- ▶ Learnt a variety of skills, with help from the community
- ▶ Overall positive feedback from the community



Future plans

- ▶ Full final year course on Mathematical Outreach

Thank you

You can contact me at:
Francesca.iezzi@ed.ac.uk

Further information on our outreach work at:
<https://www.maths.ed.ac.uk/school-of-mathematics/outreach>