

Evaluation brief for Shattering Stereotypes

Aims:

This pilot project will determine the best role Physics Outreach Officers can play in tackling and improving the Gender Stereotyping problem in schools.

Context:

The SEPnet Outreach programme aims to communicate the message "Anyone can do Physics" to schools across the region with a particular focus on KS3 students. This message is particularly targeted at those students who enjoy Physics and could go on the study and enjoy the subject, but are currently being dissuaded by external factors such as their school or parents.

The SEPnet Outreach programme has been running successfully for eight years and is formed of twelve partner universities. During the restructure of the Outreach programme last year, both Outreach Officers and the SEPnet Collaboration Board (formed by the SEPnet partner Heads of Departments) prioritised tackling the gender imbalance found in Physics.

In the last few years research by the Institute of Physics (IOP) has shown that the lack of girls taking physics at A-Level is part of a wider problem; gender stereotyping in schools. The report *Closing Doors*¹ concluded that schools which had low numbers of girls doing physics also had a small number of boys doing subjects which were stereotypically seen as girl subjects. Following this the IOP ran the *Opening Doors* project which generated a best practice guide for schools² looking to tackle gender stereotyping.

From the point of view of the SEPnet partners the lack of diversity in Physics is a problem they want to tackle as potential undergraduate Physics students are being put-off from studying the subject. Projects aiming to increase the diversity of students taking A-Level physics are then seen as growing the pool of potential physics undergraduates.

In the past the SEPnet Outreach team has not directly addressed the diversity problem in Physics. However the SEPnet Diversity lead (Prof Averil MacDonald) alongside WISE has developed *People Like Me*³, a new workshop tackling how STEM careers are presented to KS3 students, specifically targeting girls.

This project will determine how best a Physics-specific Outreach Officer can challenge the wider problem of school gender stereotyping using existing resources and based on the Opening Doors report.

¹ <u>http://www.iop.org/education/teacher/support/girls_physics/closing-doors/page_62076.html</u>

² <u>http://www.iop.org/education/teacher/support/girls_physics/opening-doors/page_63803.html</u>

³ <u>https://www.wisecampaign.org.uk/about-us/wise-projects/people-like-me</u>



Objectives

Objectives for Pilot Project upto 2017

- Deliver a year-long programme of activities to six schools in the South East in the 2016/17 academic year. Each of the three Outreach Officers (OO) will work with two school. The schools will be local to each of the Officer's Universities.
- Develop metrics to measure how gender-stereotyping culture can be measured in schools.
- Kickstart a discussion in each of our schools on how they are gendering different subjects and therefore influencing subject choice.
- Produce a best practice report for Physics specific Outreach Officers wishing to tackle Gender Stereotyping in Schools.

Overall Objectives for Project (Beyond 2017)

- Show less gender-biased subject choices made at GCSE for Year 9's in schools in 2017 / 2018.
- Show a decrease in gender stereotyping behaviour in our pilot schools including teacher's behaviour, school environment and aspirations of students.

Project Team:

Dominic Galliano, Director of Outreach, Project Manager (PM) Pearl John, Southampton, Consultant and Teacher Support David Farmer, RHUL, Outreach Officer Jen Gupta, Portsmouth, Outreach Officer Heather Campbell, Surrey, Outreach Officer

The Plan

The current project plan, outlining the programme of activities, can be found here.

Second Year

Throughout the second term of delivery, (*February / March 2017*) we will decide on whether there will be a second pilot year and if so the scope of the second year.

The Evaluation

The Project Team is looking for an evaluator to join us throughout the project, helping us set our baselines through to the legacy of the pilot project. We are looking for an evaluator who will give a supportive, critical view and help evolve the project to reach its aim.

There will be thee stages to the evaluation:

1. Establishing Baseline. (upto July 2016)

Develop metrics. This can be based on observations, interviews and subject choice of students for GCSE and A-Levels. School visits to establish baseline. Interview Headteacher and current Year 7 students who will take part in project next year.



Observations of environment.

- Observations and Data Collection. (August 2016 to July 2017)
 Observe and collect feedback throughout delivering of programme of activities.
 Observe each officer once and each activity once.
- *3. Summative Evaluation & Reflection. (August 2017 to December 2017)* Give advice and frameworks for use in potential second year of project.

Timeline

- Week starting 3 May 2016 Initial meeting with Project Manager.
- Friday 20 May 2016 Deadline for Evaluation plan to PM and finalise on metric.
- End of May to Mid July 2016 Visits to pilot schools to measure baseline.
- September 2016 to December 2016 Visits to schools for activity (2) Introductory Workshop.
- February 2017 Consult on potential second year of project.
- January 2017 to March 2017 Visits to schools for activity (3) Careers Evening.
- April 2017 to June 2017 Visits to schools for activity (4) Gender Stereotyping Extended Project.
- July 2017 Final interviews at pilot schools.
- August October 2017 Work on initial draft of report.
- November 2017 Deliver final report.

Practicalities

The schools will be made aware that an external evaluator will be working on the project and will have access to the staff and students taking part in the project. We ask evaluators and their staff to have DBS certificates.

Report

The final report should include:

- Findings from the pilot project.
- Details on the metrics and toolkits used to measure gender stereotyping across a school's culture.
- Recommendations for improvements targeted at SEPnet for continuing the project.



- Recommendations for independent Physics Outreach Officers who may want to run the project.
- Recommendations for scaling the project up to more schools.

Project Requirements

You will be required to:

- Liaise throughout the project with the Project Team and provide monthly updates to the Project Manager.
- Work in a flexible, imaginative and responsive way.
- Deliver work to a high standard, particularly in relation to attention to detail, drafting, project management, communication and consultation.
- Demonstrate an understanding of the issues relating to the gender serotypes in schools, especially with regard to STEM subjects.

Budget & Deadline

SEPnet Outreach will accept proposals up to £7,000 which should include any travel expenses and VAT if applicable. The £7,000 will be profiled across the three stages of the project as follows:

Stage 1 - £1,500 Stage 2 - £4,000 Stage 3 - £1,500

Any underspend from a previous stage could be carried forward in your proposal. Any proposed budgets above this amount should be justified within the proposal.

Deadline for proposals is Wednesday 13 April 2016.

Contact

Please contact Dominic Galliano on 0207 882 5063 / 07702 363 731 or <u>d.galliano@qmul.ac.uk</u> if you would like any further information.