



PTAS Project Report (for REGULAR PROJECT GRANTS)

Project Title: Developing a tutoring network in Informatics for young people in schools in deprived areas.

Project type (delete as appropriate) :

B Innovation Project (introduction and evaluation of an educational innovation, usually taking a practical approach)

Principal Investigator : Fiona McNeill

Schools/department : School of Informatics

Team members (including Schools and Departments) : Kasia Kokowski

For further details, please contact:

Project teams must submit a report within 4 months of the conclusion of their project.

Copies of dissemination material (eg journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count). The brief report will be published on the IAD web pages.

Report (maximum 1500 words)

The key objective of the project was to develop and implement a network of students within Informatics who would tutor young people in schools in disadvantaged areas studying CS at Nat 5, Higher and Advanced Higher.

We had significant challenges due to Covid, specifically:

- The switch to managing PVG checks online was not smooth, and our students had to wait several months for their PVG checks to be completed, rather than 2-6 weeks, which was the normal timescale pre-Covid. This meant that many of our students did not have PVG checks within the timeframe of the project.
- The staggered return to face-to-face schooling in the Lent term created huge amounts of work for schools and meant that they were unable to engage with new initiatives that term.
- The lack of exams during the usual exam diet meant that there was no demand for tutoring after Easter, when the above two issues had been finally resolved.

We therefore spent the year developing the foundations of the project for future years, rather than initiating the actual tutoring as intended.

During the year, we:

- Signed up around 20 Informatics students (from UG1 – PhD) as tutors in the scheme, and employed one main coordinator and five local coordinators.
- In collaboration with our tutors and an expert in evaluation of educational initiatives, we developed a theory of change that explores the changes we would like to see in both the



tutored pupils and the tutees. This will be used to evaluate the scheme once tutoring has started.

- Provided training on tutoring and interacting with young people, both from a practical and safeguarding point of view, for all our tutors.
- Developed a local version of the Edinburgh Award for our students to participate in. Those who are participating this year are able to carry the work they did last year over.
- Developed the protocols and procedures for running such an initiative – for example, obtaining ethical consent, developing a code of conduct, creating information for schools, parents and pupils, and so on, which can be found here:
<https://web.inf.ed.ac.uk/infweb/admin/communications/outreach-public-engagement/informatics-schools-tutoring-scheme>
- Developed a strategic connection with the Inverclyde area, led by our main coordinator, who is from Inverclyde. This is an area with high levels of deprivation, which is often overlooked in university outreach. We worked with council members and schools to create an interest in the scheme.
- Our local coordinators, who – due to the issues with tutoring – did not have tutors to coordinate, instead developed promotional materials aimed at young people, parents, schools, potential tutors and other institutions.

We have been able to use the work we did during the PTAS project period as the groundwork for what we intend to be a long-term Informatics initiative. We recruited a new cohort this year, which included many of the cohort from last year, and used the materials and contacts of last year to train them. The PVG issues, whilst not completely resolved, are much better and we now have many PVG-checked students. We currently have four schools that our tutors are working with, one of which is in Inverclyde. This year we are offering maths tuition to CS students in addition to CS tuition, as poor maths skills are often a reason for young people struggling to take their CS further, and some of our tutors are from the School of Mathematics. We have also extended the scheme to Heriot-Watt University and have some trained tutors from there. The School of Informatics is funding a student to take on the coordination role.

Our objectives for this academic year are:

- To get as many of our student tutors into schools as possible; we are anticipating this will be around 20 this year.
- To complete the evaluation of the scheme using the theory of change, and to publish the outcomes in appropriate venues, such as CS Education conferences and journals.
- To present and promote the scheme at the university Learning & Teaching Conference, and hopefully inspire colleagues in other schools to consider starting their own network.
- Get our first group of students through the Edinburgh Award – this year 9 students have gained this.

Once we have completed a session of tutoring and have established relationships with the schools we are working with, we will be in a strong position to continue to build the scheme. We intend to:

- Continue to promote to Informatics students, gaining visibility over time, to maximise the number of our students who will benefit from participation in the scheme and from gaining their Edinburgh Awards.



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- To extend the number of high schools we are working with.
 - To promote to other schools in the university and provide support for them to deliver the scheme in their subjects. This support will consist of sharing the materials we have developed, which will be largely relevant regardless of subject, helping them work with our schools to quickly find pupils to work with, and offering advice on running the scheme. We have already presented in the Learning & Teaching Conference with this in mind.
 - To extend the scheme to other universities. In the first year, we would like to include another two universities, one of which would be St Andrews.

In summary, the challenges of running such a scheme during Covid meant that we were unable to do any actual tutoring during the period of the PTAS funding, but we were able to use the time and resources to build the foundations of the project, and this is beginning to pay off as the scheme grows within the school and beyond.
