

Student Training in Active Research (STAR)

Final Report

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Aims of the Project

The Student Training in Active Research (STAR) initiative aims to be mutually beneficial for both teaching and research.

First, it aims to provide an educational experience to undergraduate students, by exposing them to the process of conducting cutting-edge research under the supervision of members of academic staff. Students work on a one-to-one basis with a member of staff, assisting them with a research project. They are involved in many aspects of the research process including the development of the research question and materials, the collection and analyses of the data and the write-up of the results. The School of Psychology already invests a great deal in teaching research methods to students in the classroom. The STAR scheme compliments this training by providing a novel hands-on approach to teaching research methods in a real world context. It gives students the opportunity to apply techniques that they have already learnt or to learn new techniques. As well as working in a real life context, students have the chance to work on one-to-one basis with staff members, something which is relatively rare in most of the curriculum. Overall, the scheme aims to provide students with skills that they can bring to their final year project, as well as to postgraduate study and their future careers.

Second, the scheme aims to enhance research in the school. It increases the amount of research that is conducted and hence has the potential to increase research output in the form of papers. The scheme may be particularly supportive for new staff who have yet to obtain research funding. It can also provide an opportunity to pilot research which could form the basis for future grant proposals. Building a core group of postgraduate students may one of the cornerstones of a great

research school and the scheme can help to identify potential postgraduate students who may eventually take up PhD positions in the school.

Finally, the scheme provides a relatively unique opportunity to students relative to undergraduate programmes at other universities and in the future could serve as a recruitment incentive.

Project Team

The scheme was co-founded Dr. Clare Walsh and Dr. Simone Schnall. We were responsible for initiating the scheme, setting up the procedures for student applications to the scheme, managing the funds and evaluating the progress of the project. The scheme is now currently administered by two other members of staff: Dr. Kirsten Abbot-Smith (Research Apprentice Strand) and Dr. Ed Symes (Research Placement Year Strand).

The project also depends on the input of many members of staff. All research-active members of staff of the School of Psychology are invited to participate on a voluntary basis. Those who are interested in supervising a research apprentice advertise their research interests to students taking part in the scheme. Already 23 (72%) of staff have taken part in the scheme in the first two years and almost all staff (96%) expressed a desire to take part in the near future.

Methods Used & Number of Students Involved

The STAR initiative has supported *two* types of research apprenticeship:

- 1) First, the full-time Research Placement Scheme is open to all students and offers them the opportunity to engage in a year of full-time research in the School of Psychology between their second and final years. Over the past two years, the STAR initiative has funded one Full-time Research Placement Student per year, (average cost for a single student was £4000; covering placement student fees, a small stipend and basic research running costs). These students are given the annual Research Placement Award. In addition, the framework encouraged a further eight students to take unfunded research placement positions here in the School of Psychology (3 in 2007-8 and 5 in 2008-9).

2) Second, the part-time Research Apprenticeship Scheme has also been hugely successful. It has enabled approximately 50 Part-time Research Placement Students, per year, to engage in part-time research alongside the regular curriculum (with the average cost for a single student of £50). Over the past 2 years the funding provided by TQEF has been used to cover a variety of running research costs, such as participant payment, CRB checks (for those apprentices wishing to work with children or other sensitive populations) and poster production costs for students presenting at the annual staff conference. The precise involvement varies depending on the nature of the research and is determined by the staff member supervising the student. Initially the scheme was offered to Stage 2 students only. However, following its success and some demand from Stage 1 students, the scheme has been extended to these students also.

Students wishing to take part complete an application form that outlines their motivation for participating in the scheme, any skills or relevant experience, their previous grades and a description of the project they will undertake. These details are used as criteria for allocating research funds but all students are invited to take part on an unfunded basis provided that they have the support of a member of staff. After participating, students are asked to complete an evaluation questionnaire assessing their experience.

Outcome of the Project

A mark of the success of the STAR initiative can be seen in the tremendous popularity and interest in the scheme among both students and staff. Furthermore, it was commended by the British Psychological Society during their accreditation review in 2008.

We have developed evaluation questionnaires for both staff and students to continuously monitor different aspects of the initiative in detail and to introduce improvements. Here we outline a summary of some of the main results. Further details may be obtained from the authors.

Benefits to Students

We obtained ratings from staff and students of seven potential benefits of the scheme to students. These ratings were made on a 7 point scale from 1 = not at all

beneficial to 7 = extremely beneficial. As Table 1 shows, both students and staff perceived the benefits to students of taking part in the scheme to be high. Both groups gave ratings of 5 or more on all measures. In addition to this, the recipient of our first Full-time Funded Research Apprentice has now been accepted for a PhD position at the University of Bristol which will draw on the research techniques that she acquired during her apprenticeship year.

Table 1: Staff and students' perceptions of benefits to students

	Staff	Student
Working one-to-one with a member of staff	6.4	6.4
Learning more about the process of research	6.5	6.4
Preparation for Stage 3 Project	6.6	6.1
Preparation for postgraduate study	5.3	5.7
Opportunity to receive a good reference	6.2	5.9
Improved employment prospects	5.2	5.7
Opportunity to see if they would like to pursue research as a career	6.4	6.4

Note: Ratings are based on a scale from one to seven where 1 = not at all beneficial and 7 = extremely beneficial

Learning Outcomes

We also obtained measures of the perceived learning outcomes for both students. Again the ratings were made on a seven point scale from 1 = not at all and 7 = very much. As Table 2 shows, the learning outcomes were judged to be high by both staff and students. The ratings were particularly high for learning about the research process and research methods. Clearly this is important as these are transferable skills that they can bring to different areas and careers.

Table 2: Staff and student perceptions of students' learning outcomes

	Staff	Student
Specialised knowledge of your research area	5.7	5.7
Understanding of psychology in general	5.1	5.0
Understanding of the research process	6.3	6.2
Understanding of research methods	6.3	5.8

Note: Ratings are based on a scale from one to seven where 1 = not at all and 7 = very much

Overall Impression of the Scheme

Finally we obtained ratings on a seven point scale of staff and students overall experience of taking part in the scheme. As shown in Table 3, these were extremely high for both staff (mean = 6.6) and students (mean = 6.4). Furthermore, students overwhelmingly agreed that they would recommend the scheme to a friend (mean = 6.8) and staff said that they would take part again (mean = 6.8). The outcome suggests that the overall impression of the scheme is judged to be very high by both groups.

Table 3: Staff and student overall impression of the scheme

	Staff	Student
Overall experience*	6.6	6.4
Willingness to recommend to a friend**		6.8
Willingness to take part again**	6.8	

* Ratings are based on a scale from one to seven where 1 = extremely positive and 7 = extremely negative

** Ratings are based on a scale from one to seven where 1 = definitely no and 7 = definitely yes

Improvements

Finally, we continuously asked staff and students for suggestions about possible improvements to the scheme and we have made amendments accordingly. To date, these improvements include awarding students with a certificate of participation (a copy of which is placed on their student file), encouraging students to take part in the annual School of Psychology conference and the expansion of the scheme to Stage 1 students. We plan to continue to use these evaluations to further enhance the scheme.

Dissemination & Continuation

Initial findings of the STAR initiative were presented at the VC's Teaching and Learning Conference in 2008. Furthermore, to showcase the work that students are performing, they are encouraged to actively participate in the annual School of Psychology conference and to participate in the TQEF funded online journal 'The Plymouth Student Scientist'. Based on our results so far, the scheme has also been used as a model to establish a similar scheme at the School of Psychology at the University of Kent.

We are currently in the process of applying for follow-up funding to sustain the scheme in the future. The scheme is now well-established within the school and as noted earlier has recently been expanded to Stage 1 students. Therefore the scheme can continue, albeit on a lower scale, during any periods where funding falls short. The STAR scheme is now established for the long term as a key part of the student experience in the School of Psychology.