

TasSTAR Peer Tutor Program Final Report to the Ian Potter Foundation for 2004

Introduction and background

TasSTAR is modeled on the highly successful STAR (Science/Technology Awareness Raising) peer tutoring program of Murdoch University, where university science students – as trained peer tutors – help in local schools on a regular and sustained basis. As the name implies, the aims of STAR are to foster an interest in science and technology and to encourage young people to seek careers in this area.

Following the example and the ideals of the STAR program, and with the support of the Ian Potter Foundation, the University of Tasmania's School of Agricultural Science (through its science education program) initiated TasSTAR in early 2004. The program is in place on all three UTAS campuses – Cradle Coast (Burnie), Launceston and Hobart – with ten university students in pre-tertiary science classes at Hellyer College (Burnie), Newstead College (Launceston) and in Hobart College. Our peer tutors are students from the Schools of Agricultural Science, Aquaculture and Computing.

A preliminary report to the Foundation in June 2004 gave an overview of the first phase of the TasSTAR program (first semester 2004), focusing mostly on initial project development and the recruitment and training process. The June report also documented our initial communication activities and preliminary project evaluation.

Following the success of this first phase of TasSTAR and encouraged by initial discussions with the Foundation, a further proposal to expand TasSTAR through 2005 and beyond was submitted in November 2004. The success of this application has since confirmed financial support from the Dean of Faculty of Science, Engineering and Technology, and from local banking institution Bass & Equitable. Our expanded program will allow us to achieve ongoing sustainability and in particular will enable us to:

- Generate greater momentum to raise awareness of the TasSTAR concept more broadly within the University and the Tasmanian secondary and college education sector;
- Promote the value of science and further education to a larger number of school and college students, by delivering the program within additional interested senior secondary schools and colleges throughout Tasmania;
- Give a larger number of University students the opportunity to benefit from this unique volunteer program, which will create a stronger peer tutor cohort/network for existing and future University students and;
- Expand the number of University Schools involved in TasSTAR, which will ensure the sustainability of the program within the University of Tasmania.

This final report provides a brief project overview of 2004, outlining how TasSTAR has addressed the original objectives, as submitted in our original application. The report also

provides an update of recent TasSTAR activities (July to November 2004), and includes a summary of the results from our final evaluation conducted in September and October 2004.

Project overview

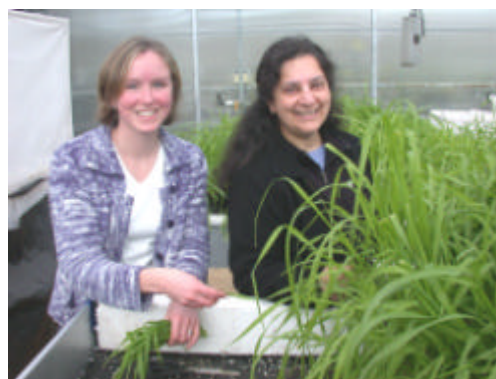
Since its inception in early 2004, we have successfully implemented TasSTAR on all three UTAS campuses, with ten university students volunteering in pre-tertiary science classes at Hellyer College (Burnie), Newstead College (Launceston) and in Hobart College. Our peer tutors are students from the School of Agricultural Science, as well as from the Schools of Aquaculture and Computing. These numbers are above our initial expectations (for students and for UTAS Schools involved)¹.

The project has successfully addressed a number of its objectives, including the primary goal of customising the original STAR model to satisfy the requirements of our regional setting (Objective 1, original Application). By fostering peer-level relationships with the college students, our TasSTAR tutors are helping to build genuine interest in science and technology. Through their enthusiasm and commitment to their classes, these positive role models are clearly helping to encourage young people to seek further education and careers in this area (Objective 4). In effect they are helping to bridge the gap between school and university, regardless of discipline (Objective 7). At the same time, our tutors are learning the value of volunteerism in helping them develop important personal and workplace skills as well as providing experience (Objectives 6 & 8).

The success of TasSTAR is reflected in the positive feedback received throughout the year as documented in our Preliminary Report, June 2004. The high level of enthusiasm among our peer tutors and the ongoing support from college and UTAS staff involved, builds a strong case for a successful continuation of TasSTAR through 2005 and beyond.



Hobart tutor Penny McMahon 'on location' at a Blackmans Bay rocky foreshore, with Hobart College biology students



Burnie tutor Lydia Turner with Hellyer College biology teacher Perviz Marker, alongside Lydia's prairie grass trial

¹ Our initial aim was to begin the program with five students from the one UTAS School.

Recent TasSTAR activities – July to November 2004

In addition to their weekly class visits, our peer tutors also helped organise a suite of visits to UTAS, to give their students an inside view of the three campuses and of their particular science at work. The following article highlights a visit to Launceston’s Aquaculture Centre.

**Baby seahorses, green algae and hungry fish:
Newstead College students visit Launceston's Aquaculture Centre**

In October, groups of Newstead College chemistry and environmental science students were taken on a special tour of the Aquaculture Centre at the University of Tasmania’s Newnham campus, organised by our three Launceston TasSTAR peer tutors.

Shafiya Naeem, Cameron I’Anson and Ryan Hagen (3rd year Aquaculture students) have been weekly guests in Newstead science classes this year, as TasSTAR peer tutors. They organised the recent visits to the Aquaculture Centre to return the favour and give students an inside view of the University and their particular science at work.

The students were shown a range of teaching and training areas as well as aquaculture research projects, including the seahorse breeding program, algae production and demand feeding

experiments for trout and salmon. They also viewed the trout and salmon rearing tanks and the AGD (Amoebic Gill Disease) health trials. TasSTAR Link Lecturer Dr John Purser was on-hand to give students an idea of the range of career options available within the aquaculture industry.

Newstead teachers John McQuestin and Ron Morris report that their students really had their eyes opened to the diversity of careers explained and that throughout the tours they noticed and enjoyed the ‘down to earth’ nature of the Centre. They were very impressed with the TasSTAR peer tutors for organising and conducting the visits.

Thanks to John McQuestin and Ron Morris for giving their students the opportunity to visit the University. Thanks also to Shafiya, Cameron and Ryan for their leadership in initiating these visits, and also Dr John Purser for his support and for his obvious student-centred approach.



Newstead College chemistry students on tour with tutors Shafiya Naeem and Cameron I’Anson, accompanied by teacher John McQuestin and lecturer Dr John Purser



Newstead College environmental science students and teacher Ron Morris visit the fish rearing tanks with tutor Ryan Hagen



Maintaining the TasSTAR profile

The profile of TasSTAR within UTAS, the participating colleges and the wider community was maintained throughout the year via a number of printed articles and various media coverage of TasSTAR activities. Examples of these are provided as attachments to this report.

A web page <<http://www.utas.edu.au/nwc/tasstar>> was developed in early 2004 to provide an outlet for general program information and to further promote TasSTAR throughout the community. During semester two we expanded the web page to include a photo gallery, peer tutor profiles and we also used our web page to conduct our online evaluation.

The profile of TasSTAR was further developed through attendance at the Murdoch University Peer Tutoring Symposium in Fremantle in September/October 2004. The symposium brought together practitioners, advocates and those interested in peer tutoring with the aim of improving practice and developing strategies for the ongoing sustainability of peer tutoring.

Evaluating TasSTAR 2004

As the first program of its kind for UTAS, evaluation has been an important and ongoing component of our TasSTAR activities. In addition to structured avenues for gathering feedback (e.g. visits, surveys) we have encouraged informal and regular feedback in all communication, as part of providing support to the teachers and tutors involved.

In September/October 2004 we conducted our final evaluation using an online form for school students, teachers and peer tutors. The online format proved an efficient method of gathering feedback. The following points are a summary of the feedback provided.

1. TasSTAR has been very well received by College teachers and students.

All teacher respondents indicated they would like a peer tutor again next year. Students from three classes (one class in each region) participated in the surveys, with the majority of these students (89%) confirming they would like to have a peer tutor help in their class again next year. The comments below capture some of the benefits of TasSTAR:

“Just being able to have someone else in the class who you can ask help from is great, especially when your teacher is helping other students. You were able to gain a different perspective on some topics, helping you to understand them more.” (student)

“That you were able to ask questions without having to feel stupid and that you felt like you could communicate openly with them.” (student)

“He was able to help out with some of the ‘fiddlier pracs’ we do and was able to assist the students who struggled a bit.” (teacher)

“The tutors were another ‘source of information’ in regard to career opportunities.” (teacher)

“Students were able to question the peer tutor about university-related matters.” (teacher)

2. *Students report that their peer tutors also help make science more interesting.*

Most school student respondents agreed they learnt more about science with their peer tutor and many more agreed that the tutors made science activities interesting and easy to understand. 30 per cent of these students agreed with the statement ‘I like science more now, since I had a peer tutor’.

Statement	Students who agree (%)
The TasSTAR tutor made science activities interesting	80
The TasSTAR tutor made science easy to understand	73
I learnt more about science with the TasSTAR tutor	57
I like science more now, since I had a peer tutor	30

3. *Our peer tutors have gained a range of skills and their self-confidence is improved through their involvement in TasSTAR.*

Our survey respondents, including teachers, school students and tutors themselves, reported an observable improvement in tutor confidence. Several TasSTAR tutors noted the following benefits of peer tutoring:

“Being more self-confident in my abilities to adapt and to approach people in different situations.” (tutor)

“Working with groups and coordinating with the teacher in charge enhanced by team working skill.” (tutor)

“I think the program has given my confidence a boost and shown me that teaching may be a potential career choice at a later stage.” (tutor)

“It has increased my experience of working in different and sometimes challenging situations.” (tutor)

In terms of numbers, by June 2004 we had already met or exceeded our end-of-year targets for peer tutors involved (ten; target five), UTAS Schools involved (three; target one), and colleges involved (three; target three). Diversity within the peer tutor group is high, with students from three university disciplines and a range of year levels (from 1st year to PhD) located in the north, northwest and southern regions of Tasmania. There is an even gender mix within the peer tutor group (five female, five male).

We have held preliminary discussions with several other colleges in each region, and these have indicated their interest in joining TasSTAR in 2005. This will enable us to promote the values of science, further education and volunteering to a much larger number of Tasmanian students.

Summary – a TasSTAR finale

In mid-November we held a unique Celebration across all three University campuses – a three-way videoconference brought together TasSTAR peer tutors and UTAS staff, college principals and teachers in Burnie, Launceston and Hobart. Vice-Chancellor Professor Daryl Le Grew officially launched the Celebration with an opening address from Hobart.

The Celebration was a great opportunity to provide participants with feedback from the recent evaluation, which shows TasSTAR has been extremely well received. The Celebration was also an opportunity for tutors and teachers to share experiences with their counterparts in each region. We paid special tribute to the Link Teachers in each college and to the significant input of UTAS staff members from Agriculture, Aquaculture and Computer Science. The highlight of this unique ‘virtual’ gathering was the presentation of certificates to the inaugural TasSTAR peer tutors and to the college principals.

This pilot initiative has clearly demonstrated its potential to raise the aspirations of our young people and to make a real impact in fostering interest in science and technology. TasSTAR has also demonstrated the potential for university students to gain important life skills and experiences through a commitment to volunteering as a TasSTAR peer tutor.

The future of TasSTAR looks extremely bright. The Foundation’s initial seed funding and continued support for expansion through 2005 has meant we have secured the support of local financial institution, Bass & Equitable. It also places us in a sound position to attract ongoing funding through initiatives such as the Department of Education, Science and Technology’s Australian School Innovation in Science, Technology and Mathematics (ASISTM).

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