



# STATIC

The Newsletter of the Science Teachers Association of Tasmania.



MESSAGE FROM THE PRESIDENT MESSAGE FROM THE PRESIDENT CONSTAT 2018 HELD IN BURNIE

TASMANIAN STUDENT LEADS THE WAY NATIONAL SCIENCE WEEK – RESOURCES GET SOCIAL WITH STAT

GOODBYE FROM THIS EDITOR

YOUNG TASSIE SCIENTISTS - FREE SCHOOL INCURSIONS

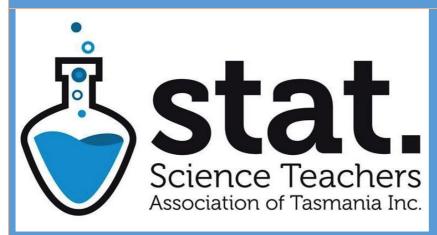
EXPLOSIVE CLOSING FOR CONSTAT

THE JOY OF CHEMISTRY

DR ADELE WILSON HONOURED WITH PRESTIGIOUS WINIFRED CURTIS AWARD APPLICATIONS NOW OPEN FOR A RUTH DIRCKS SCHOLARSHIP TO ATTEND CONASTA 67

THE PRIME MINISTER'S PRIZE FOR EXCELLENCE IN TEACHING OF SCIENCE

June 2018, Volume 2











STAT on social media.

### STAT COUNCIL MEMBERS

President & ASTA Council Representative Rosemary Anderson Curriculum Services Department of Education, Hobart	STATcouncil@gmail.com STAT PO BOX 1112 Sandy Bay TAS 7006
Vice President & ASTA Council Representative Jenny Dudgeon Sustainability Learning Centre, Mt Nelson	Membership Officer Jill Reade Education Faculty, University of Tasmania, Launceston
PL and TSTS Committee Chair John Bardenhagen East Launceston Primary	Treasurer Sonya Matthews Prospect High School, Launceston
Operational Secretary & TSTS Co-ordinator Doug Grubert Launceston Church Grammar	Awards Officer & CONSTAT 2018 Convenor Ann Burke Hellyer College, Burnie
Digital Communications & National Science Week contact Denise Devitt Hobart	University of Tasmania College of Science and Engineering Representative Jeannie-Marie LeRoi University of Tasmania, Hobart
STATIC Editor Bob Fletcher Lambert School, Hobart  editorstatic@gmail.com	General Councillor Associate Professor Sharon Fraser Science Education College of Arts, Law and Education (CALE) University of Tasmania
General Councillor Heather Marshall St Marys District School	General Councillor Amanda Hughes St Marys District School

### **STAT NEEDS YOU!**

New members are particularly welcome and volunteers are needed for STAT council positions - please consider nominating to help keep the association

### **VOLUNTEERS NEEDED TO DEVELOP SKILLS IN:**

- ✓ Minute taking,✓ Email communications,✓ Website,
- ✓ Social media,
- ✓ Newsletter editing,
- $\checkmark$  Assistants to other roles, and
- $\checkmark$  General councillors.

### **CONTENTS**

STAT COUNCIL MEMBERS	2
STAT NEEDS YOU!	2
NATIONAL SCIENCE WEEK – RESOURCES	3
FROM THE PRESIDENT	4
CONSTAT 2018 HOSTED IN BURNIE	5
TASMANIAN STUDENT LEADS THE WAY	10
SURVEY SAYS	11
GET SOCIAL WITH STAT	11
GOODBYE FROM THIS EDITOR	12
YOUNG TASSIE SCIENTISTS - FREE SCHOOL INCURSIONS	12
WEXPLOSIVE CLOSING FOR CONSTAT	13
THE JOY OF CHEMISTRY	14
DR ADELE WILSON HONOURED WITH PRESTIGIOUS WINIFRED CURTIS AWARD	15
APPLICATIONS NOW OPEN FOR A RUTH DIRCKS SCHOLARSHIP TO ATTEND CONASTA 67	16
THE DRIME MINISTER'S DRIZE FOR EXCELLENCE IN TEACHING OF SCIENCE — WHY NOT HAVE A GO?	17

### NATIONAL SCIENCE WEEK - RESOURCES





Science Week resources from ASTA, printable poster and curriculum linked activity booklet:

http://asta.edu.au/programs/natscienceweek/resources/2018

### FROM THE PRESIDENT

By Rose Anderson

Time flies so fast; I can't believe that we are now in Term 2 already! Already this year we have seen major STAT activities: CONSTAT 2018 and STAT AGM. Both the AGM and CONSTAT 2018 were held at Hellyer College in Burnie. The Conference was a huge success as a great professional learning and networking opportunity that all delegates thoroughly enjoyed. This was made possible by the amazing efforts of our conveners Perviz Marker and Ann Burke. On behalf of STAT, we thank you very much! See inside for more on CONSTAT 2018.



Congratulations to *Dr. Adele Wilson*, for being the winner of the **2018 Winifred Curtis Memorial Medal**. I hope that you will continue to aim for excellence *Dr. Wilson* and I hope to see more of your influence in 2019.

The theme of the National Science Week 11-19 August 2018 is Game Changers. A number of schools have applied and won the National Science week grants. We are excited to experience more fun-filled science activities happening across the state.

At the AGM, 2018 Council was elected. I would like to thank the returning councillors: Jill Reade, John Bardenhagen, Ann Burke, Jenny Dudgeon, Sonya Mathews, Denise Devitt and Doug Grubert for their willingness to continue to serve the Association. A special thank you and welcome goes our new councillors: Amanda Hughes, Heather Marshall, Bob Fletcher and Sharon Fraser. I hope they all have a rewarding year. On behalf of STAT, I would like to thank our outgoing councillors for their service: Bruce Duncan, Darrin Timms, Fiona Phillips and Joee Kelk. We appreciate their selfless giving of their time, talents, and effort to help serve the Association. We hope that you keep supporting STAT.

Our new STATIC Editor is Bob Fletcher - congratulations! STAT is indeed indebted to the outgoing editor *Joee Kelk* for her tireless efforts during the past two and a half years.

# CONSTAT 2018 HOSTED IN BURNIE, FRIDAY 23 AND SATURDAY 24 MARCH, 2018.

CONSTAT 2018, the state conference of the Science Teachers' Association of Tasmania took place in Burnie on Friday 23<sup>rd</sup> and Saturday 24<sup>th</sup> March, providing two days of engaging fieldtrips and conference proceedings for visiting delegates. Friday's program included visits to Murnong Wild Food Garden in Wynyard, Hellyer Road Distillery in Burnie and a NW walk through Geological Time. Murnong Wild Food garden owner, Rees Campbell, showcased some culinary and medicinal uses of native plants, explained how they were grown and provided visiting teachers with sampling opportunities for her produce. Hellyer Road Distillery hosted tours focussing on the Chemistry behind the fermentation and distillation process, and importantly, opportunities to taste the original and finely wooded whiskey variables produced on-site. The geological tour allowed participants to gain an understanding of aspects of local geological evolution from its relationship with parts of North America through to examples of rocks formed under different climatic conditions and geological environments. Feedback on all fieldtrips was very positive.







**Bush Foods** 

**Hellyer Road Distillery** 

Fossil Bluff

The conference dinner was held at THE POINT in Burnie, overlooking West Park, home ground of Burnie Dockers. Delegates enjoyed a pre-dinner drinks reception followed by a three-course meal, presentation of the Dr Winifred Curtis Medal to Dr Adele Wilson by Prof. Margaret Noble, presentation of Distinguished Service Award to Dr Denise Devitt by STAT President Rose Anderson, a dinner address by entomologist Dr Gurion Ang and musical entertainment provided by Hellyer College House Band. The STAT dinner was truly a nourishing event for body and soul!



Delegates enjoy the conference dinner at THE POINT, Burnie.





STAT President, Rose Anderson



Dr Adele Wilson is awarded by Prof Marg Noble



**Denise Devitt recognised** 







### Conference Proceedings – Hellyer College – Saturday 24th April.

Registration commenced at 8.30 am, followed by STAT welcome from president, Rosemary Anderson, and official opening by Judith Fahey, principal of Hellyer College. This was followed by the first of two keynote addresses, delivered by **Prof Deborah Corrigan**, Deputy Dean of the Faculty of Science Education at Monash University.

Deborah spoke of the challenges posed by the persistent decline in school-science popularity, despite public interest in Science and STEM remaining remarkably high. She canvassed reasons as to why students can be so interested in Science out of school but not within, and shared her thoughts on how 21st century Science teachers might try to generate enthusiasm about learning Science and STEM subjects, at a time when the knowledge and skills involved, are so vital.

Morning tea was served immediately after the keynote address and delegates enjoyed the culinary delights of Hot-Mother catering, coupled with the opportunity to

visit trade displays hosted by Ciderhouse, John Monash Science School outreach, Teacher Earth Science Education Program, Bookend Trust and UTAS Science and Engineering Outreach.



**Above:** Prof. Debbie Corrigan shares the benefits of her research into student engagement with very interested delegates. **Below:** Trade exhibits at Hellyer College.











Adele Wilson, Michael van der Ploeg, Ian Pattie, Doug Grubert, Fiona Taylor, Rosemary Anderson, Andrew Hughes and Dr Claire Hawkins.





The second workshop offered selections from the presentations of: Prof Deb Corrigan, Dr Marj Colvill, Louise Rogers and Kathleen O'Leary, Amanda Hughes and Heather Prebble, Dr Donna Satterthwait, Darcy Vickers, Simon Ellingsen and Richard Holwill.





The Annual General Meeting of STAT was then chaired by President, Rosemary Anderson, and the focus was a call for new members and acceptance of nominations for the roles of President, Treasurer and many other council portfolios. The AGM was well attended by both members and a team of councillors, who work toward implementation of STAT initiatives to support teaching/learning of Science across the state.



Delegates then enjoyed lunch, once again prepared by Hot-Mother Catering, who served up a mix of delicious meats, salads and desserts. Delegates were very complimentary of the food served at CONSTAT.





The afternoon program commenced with the second keynote address, delivered by Assoc. Prof. Sharon Fraser, from UTAS School of Science Education. Sharon began her career as a scientist, and now uses these skills in the farming of pepperbush, on her family property. The theme running throughout her academic career and research is that of capacity building, and she related her experiences of embedding learning and teaching enhancement initiatives in teaching programs. Her STEM research involvements include several key areas of science education and the promotion of engagement in science/mathematics learning through both improved teaching practice, and the investigation of what is knowable in science. She engages with pre-service and inservice teachers toward developing a love of science, and an excitement about engaging in STEM/STEAM.



The keynote was followed by the afternoon workshop session. Here delegates could select from presentations from: A/P Sharon Fraser, John Bardenhagen, Philip Sansom, Kelly Spence, Jason Dicker, Mandy Jackson, Sue Saunders and Ann Burke.



In a very fitting manner, CONSTAT 2018 came to rousing finale with the Bubbles and Bangs of Dr Jeremy Just, who presented Chemistry demonstrations as a final engaging

spectacle for an appreciative audience.







**CONSTAT** co-convenors. Perviz and Ann, would like to individuals, many businesses and associations for their and varied generous donations contributions and which helped to make the conference happen in the norththis vear. contributions included financial



support by way of sponsorship, free use of the conference venue, donations for satchel inclusion and trade gifts for delegates, generous giving of time by field-trip providers, trades display personnel, guest speakers and workshop providers. The contributions were too many and varied to be mentioned individually, but to all who helped, be it in large or small ways, please know that your contribution was greatly appreciated.

We now look forward to seeing many of you again at CONSTAT 2019 in the north or south of the state.

Ann and Perviz, May 2018.

### A special thank you to our sponsors



### TASMANIAN STUDENT LEADS THE WAY!

Caitlin Roberts from The Friends' School has been selected to represent the BHP Billiton Foundation Science and Engineering Awards at the Intel International Science and Engineering Fair (Intel ISEF) in May 2018.





Each year over 1,800 high school students from more than 75 countries, regions, and territories are awarded the opportunity to showcase their independent research and compete for \$4 million in prizes. The BHP Billiton Foundation and Intel Foundation provide support for the BHP Billiton Foundation Science and Engineering Awards Australian delegation attending the fair.

### Project title: <u>The protease inhibiting effect of almonds</u>

Video URL: <a href="https://vimeo.com/254159855">https://vimeo.com/254159855</a>

**Project summary:** Caitlin Roberts' passion for nutritional health led her to investigate the digestive properties of almonds. She compared the rate of protein digestion of skim milk when either activated or natural almonds were consumed and how this process occurs. This research contributes to a body of research aimed at understanding how nutritional intake can be optimised.

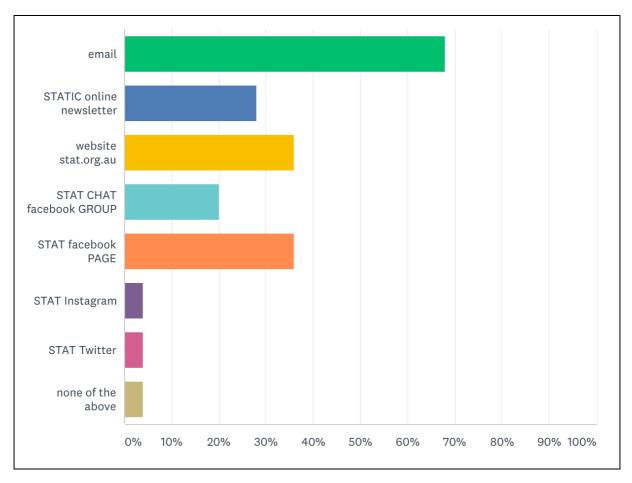
See more from the finalists and winners at scienceawards.org.au/Student-Awards

### **SURVEY SAYS**

From the STATIC and STAT Communications Survey.

Most respondents report that email is their main source of STAT news, followed by Facebook page and then the website. The full results of the survey will be compiled and distributed to STAT Council and discussed at the next Council meeting on 14 May 2018.

### Q1. How do you receive STAT news? Select as many as apply:



### **GET SOCIAL WITH STAT**

STAT has a number of social media accounts – jump on and connect with other science teachers, ask for help and find out the latest news and information on PL and more.



### **GOODBYE FROM THIS EDITOR**

By Joee, STATIC Editor 2016-2017-2018

I started editing STATIC in January 2016 and it was an exciting prospect to be able to move the STAT newsletter from an old paper format, print-and-post in the snail-mail, to the new electronic format. By most reports STATIC readers appreciate the paperless option of reading an e-version, and plenty of school members choose to print out the pdf file to circulate through their staffrooms in hardcopy.

In my two and a half years as editor, STAT communication has moved to the faster email based system, which means that information on professional learning opportunities and student competitions is distributed to all members as soon as it is available. STAT has also accessed social media, and many members and science teachers now receive STAT news through Facebook. Both of these formats are a great step towards keeping members informed in a timely manner about the organisation and science teaching in Tasmania.

But the move to instant communication means the role of STATIC, a traditional quarterly newsletter, is once again in need of review. If it is no longer the primary source of "news" for STAT members, the role and content of STATIC needs to be reconsidered for this new era. The recent survey on STATIC and STAT communications has given STAT council plenty to think about in terms of how this might be approached. Given the significant number of hours of volunteer time needed to make each edition happen – council member reporting, writing, photography, interviewing, editing, proofreading, uploading and emailing – it may end up that STAT council decides that there is a better use of this valuable person power.

It's been an honour to work with STAT council for the last three and a half years. I'm now taking a break from STAT to focus on some of my other personal and volunteer projects such as screenwriting and the <u>Launceston STEMinists</u>.

Next Deadline: Stay tuned or contact STATIC editor editorstatic@gmail.com

### YOUNG TASSIE SCIENTISTS - FREE SCHOOL INCURSIONS







Registrations for free Young Tassie Scientist visits will open in Term 2 www.youngtassiescientist.com

### EXPLOSIVE CLOSING FOR CONSTAT

By Jeannie-Marie Leroi

Delegates were treated to an amazing science show at the 2018 CONSTAT closing, presented by science communicator Jeremy Just and ably assisted by Adele Wilson, the 2018 Winifred Curtis Medal awardee. Not only was chemistry "magic" on display, but also quick and spectacular demonstrations suitable for the classroom were presented in a highly engaging fashion.



Jeremy has just finished his PhD in Chemistry as well as finding time for science outreach and engagement across Tasmania. He mentors the Young Tassie Scientist program, hosts National Science Week Quiz nights, and has been a member of the Questacon Science Circus performing exciting science shows for schools and communities across Australia.

If you are interested in having Jeremy present a science show at your school in 2018 (subject to availability), please contact <a href="Modele.Wilson@utas.edu.au">Adele.Wilson@utas.edu.au</a>.



### THE JOY OF CHEMISTRY

By Jeremy Just, Young Tassie Scientists.

When I was a kid I learned that fire was a chemical reaction. From there I discovered the joy of chemistry, and have been learning all about it ever since. I have also studied many other types of science at university, including pharmacology, toxicology, physics, zoology, and biochemistry. My PhD research looked into new methods to extract chemicals out of plants.

I have a strong passion for science communication. I started with the Young Tassie Scientists back in 2011, and since then I have spent time travelling Tasmania and Australia presenting science shows to thousands of people across the country. Now I get to present chemistry shows, to share (safely!) the chemistry of fire.

One of the best things I have found about being a scientist is the joy of sharing knowledge with others, watching as people develop an interest and are amazed by the same things that amazed me as a student. I don't know what I'll do when I grow up, but I do know there will be lots of science, and lots of talking to people about science.



### 2018 FESTIVAL OF BRIGHT IDEAS - DATE SAVER

Schools Day Friday 17 August. Public Saturday 18 August.

Princes Wharf Hobart 10am-5pm.

Find out more: http://fostivalefbrightideas.com.au



# DR ADELE WILSON HONOURED WITH PRESTIGIOUS WINIFRED CURTIS AWARD

By Jeannie-Marie Leroi

The Science Teachers Association of Tasmania has presented Dr Adele Wilson with the Winifred Curtis Memorial Medal for Excellence in Science Education at the CONSTAT conference in Burnie on 23 March. The Award is presented to those who have demonstrated excellence in science teaching, outreach and education.

Dr Wilson has been working to inform, inspire and engage students since 2003. She has delivered thousands of science shows, presentations in schools, halls and theatres across

Australia and the UK, provided dozens of workshops for teachers, training for science communicators, and coordinated groups of volunteers. She also administers a suite of science outreach and engagement programs and events for the University of Tasmania - in schools and the Tasmanian community - via the College of Sciences and Engineering.

This includes flagship activities such as the Young Tassie Scientists program, which assists early career researchers with training and experience in science communication while providing high quality science demonstrations to



classrooms and community groups across the state. Dr Wilson was also recognised for this and other Science Week activities through the 2015 Vice-Chancellors Team Award for Outstanding Community Engagement.

Dr Wilson has a unique enthusiasm for science and a willingness to share her passion with young people. She leads science outreach programs that connect students to the many and varied aspects of science - from hands-on activities to interactive presentations, all of which foster the knowledge and the wonder of science in audiences of all ages and backgrounds.

Dr Winifred Curtis was a truly remarkable Tasmanian, and author of the five volumes of The Student's Flora of Tasmania (published 1956 -1994). Having migrated from the UK in 1939, Dr Curtis took up a position with the Dept. of Botany at the University of Tasmania in Hobart. This award honours her memory and commitment to science education.

The Winifred Curtis award for science educators is an initiative of the Science Teachers Association of Tasmania and is sponsored by the College of Sciences and Engineering at the University of Tasmania.

### APPLICATIONS NOW OPEN FOR A RUTH DIRCKS SCHOLARSHIP TO ATTEND CONASTA 67

By CONASTA 67 Events Team

Applications open now and will close on 11 May 2018.

The Ruth Dircks Scholarship is an initiative designed to promote the attendance and participation of teachers at CONASTA each year. CONASTA is the major science education conference in Australia with the opportunity for primary and secondary science teachers to partake in 130 workshops. With over 500 people in attendance each year, it is a great networking event. In 2018 two scholarships will be offered covering the cost of registration valued at \$585. If you have ever wanted to attend CONASTA but just haven't had all the funds, now is your opportunity.

ASTA loves to provide science teachers with opportunities for fun and learning. In addition to the fantastic speaker line-up and diverse workshops, a huge effort goes into providing social experiences and chances to make new friends and catch up with old ones. This year's conference includes our traditional Conference Banquet Dinner, happy hours and Science Breakfast - events that are raved about from conference to conference. This year's Conference Banquet Dinner will take place at the National Maritime Museum, in beautiful Darling

Harbour.

If you have always wondered what the fuss is about CONASTA, this is your chance to find out.

For further information and to apply for a Ruth Dircks Scholarship: <a href="http://asta.edu.au/awards/ruthdircks">http://asta.edu.au/awards/ruthdircks</a>

To register to attend CONASTA 66, national science educators conference: <a href="https://asta.eventsair.com/QuickEventWebsitePortal/consta-67/event-home-page./">https://asta.eventsair.com/QuickEventWebsitePortal/consta-67/event-home-page./</a>

And if that is not reason enough for you to attend CONASTA in Sydney, in addition to the wonderful PD opportunities offered at CONASTA 67, on the Wednesday of the program, we will be sharing the venue and the program with the International Conference on Chemistry Education, providing all delegates with the opportunity to move freely between the two events and programs.

What are you waiting for? Early bird registrations close on 31 May.



# THE PRIME MINISTER'S PRIZE FOR EXCELLENCE IN TEACHING OF SCIENCE – WHY NOT HAVE A GO?

By Jill Reade, ASTA councillor 2017

Psst – did you know there is a prize worth \$50 000 which is offered each year to one Primary teacher and one Secondary teacher in the country who have shown excellence in their teaching of Science?

Who applies for a prize like this? Well not as many people in Tasmania as you might think. In fact, last year no-one from Tasmania was prepared to try out the process. But two Tasmanians have won the prize in the past, both of them Primary teachers so we certainly have the talent here.







So, what does it take? What is it like to apply? This is some information about applying for the PM's Prize from two successful candidates and a third who, while unsuccessful, was short-listed and encouraged to try again but has chosen not to. We also have talented Secondary teachers, so although these comments are all from Primary teachers all the comments apply to secondary teachers who should also have a try.

#### 1. Who encouraged you to try for the PMs prize?

A: My principal encouraged me.

B: After winning the national BHP Billiton Foundation Teacher Award, I was encouraged to apply for the PM's Prize.

C: ASTA Executive encouraged me and then a member of STAT Council took this up.

#### 2. Is it okay to decide you can apply yourself and approach a nominator?

B: When I got back to school I talked to my principal about the award and he was very supportive.

C: Yes, it is – especially if you have changed your work place, as new colleagues may not have any notion of what you have done or are doing and most will not understand what you have done outside of your regular classroom commitments.

A: They'd have to be keen as there is a lot of work involved for the nominator in round one, and again in round two if you are short-listed.

Find out about <u>Tasmanian winner Michael van der Ploeg</u> online here:



### 3. How might you decide that you are the sort of person who can or should apply?

C: This is a really significant award with national recognition so you do need to have done more than just "doing a good or even great job within your school" as that is what you are paid for. So, I would ask yourself some key questions:

- Do you consider science education to be a major consideration in your professional life? (In primary schools this would be integrated with other disciplines).
- Do you take a leadership role in science education in your school, local community, and professional association?
- Are you a professional learning presenter at your local, State or national conferences?
- Do you give your students opportunities to succeed in science outside of the classroom? Do you share this with colleagues in your educational community?
- Do you work to support science education both with students and colleagues beyond your professional commitment to quality classroom education?
- A: You would look at the criteria/questions and judge that against your experience.
- B: You really need to look at the criteria for the award and see if you fit this. This award looks at a teacher's contribution outside their classroom as well as within the school.

### 4. Did you have to apply more than once?

A: I only ever did this once, as it was too much work for the nominator and the two referees who had to be asked to assist in the process.

B: No

C: I did have two applications but the initial application was from a kind colleague who submitted the application without any consultation so it was a lovely letter but lacked substance. Your nominator needs to have an understanding of the nomination process. Having said that, many applicants do apply more than once (sometimes more than twice) so my recommendation would be that if you are shortlisted (and you will be told) then try again the next year. You can use the original application as a starting point and add the "many good things" you have done in the intervening 12 months. In recent years it is very common for applicants to apply more than once

### 5. What type of information did you and your nominator collect?

- B: This nomination takes in many aspects of your science teaching and contributions you have made over a number of years. Not only did the application look at the current science program delivered but it also collected information from the work done with other teachers, schools, parents and the wider community.
- A: Things you had done/achieved/inspired in others,
- C: Basically, the selection criteria are outlined in the "how to apply" information and these need to be addressed. It is worth looking at these and using it as a guide to ensure that you have evidence to support most criteria.

### 6. Does your nominator make much of a difference?

- B: This makes a huge difference. You really need a very supportive principal/senior staff, colleagues and parents who know and understand your programs, its achievements and the effect it has on raising student outcomes.
- C: Your nominator needs to understand the significance and the criteria it is like a high-powered job application and the need to address the criteria with specific and significant examples is important. If you have a colleague in your workplace that you would like to nominate or you would like to be nominated yourself, then it is worth communicating with the professional association for guidance and to obtain supporting evidence. Your nominator needs to know and understand your work well.
- A: Yes, as they'd have to be super keen and believe in you to go through this rigorous process.

### 7. How much evidence is enough?

- C: Obviously, it needs to be significant but it is just as important, if not more so, for the evidence to be quality. A 45-minute after school, professional learning session that you have facilitated on a specific topic will not carry as much weight as a presentation at a State or national conference with very positive feedback, or a major contribution to the profession over a significant period of time.
- B: Gathering evidence from as many sources as possible is a great start. The application looked at the school program first, its impact on students, teachers and the community and then branched out to the wider community. The application had a word count to adhere to so during the process what to leave out became critical. We found that the nominators would highlight particular areas which would then lead to a comprehensive overview and a really clear picture of the impact my science teaching was having on people's lives.

### Find out about <u>Tasmanian winner Marjorie Colvill</u> online here:

### 2006 Prime Minister's Prize for Excellence in Science Teaching in Primary Schools

#### Ms Marjorie Colvill

Marjorie Colvill has a clear idea of the perfect science class. It is one in which students set up their own investigations and make their own discoveries - and she has the proof that it works. From kindergarten and primary, to student teachers - she has taught them all. Not only that, Marj is now looking forward to building on her initial research, which indicates that good primary science teaching also enhances literacy!

With nearly 30 years devoted to education and science, the Tasmanian teacher has spread her passion for science from the classrooms of the state's primary schools to the lecture halls of its university, at the same time finding time to hold a range of positions within the state's Department of Education.



### 8. What makes good evidence?

- A: Your curriculum vitae in science and records of people who have worked with you are evidence.
- B: Looking at program achievements and its impact on student outcomes. The application tracked a lot of my students when they left primary school and the decisions they made during and after high school in relation to science. The application was able to get clear evidence from students, teachers and parents of the positive impact a primary school science program has on future endeavours. The application had many quotes from stakeholders and provided a wide range of program examples.
- C: Testimonials from colleagues, your professional association, parents, students (particularly for secondary teachers) and feedback from those who have worked with you over time.

### 9. What happens after the application is submitted?

- A: You wait, get short-listed, are told whether you are required in Canberra if you won. I didn't know how I went, but they asked if I would re-nominate the following year as I had placed in the top 3. At least I got that satisfaction.
- B: I applied in 2012 so the process has changed. But after the submission I received a phone call in September regarding the award outcome.
- C: Initially the receipt of application will be acknowledged. There is a judging panel which meets a couple of times initially and then the final decision is made. My experience was that I heard nothing until I was contacted to say I had won. Judging is completed in July/August and winners and those who are shortlisted are contacted after that. The presentation of Prizes is on the Wednesday of the 3rd week of October in Canberra at a gala dinner in Great Hall of Parliament house. All expenses for the winner are covered (not relief, but your school should be ecstatic) and there are a limited number of personal guests whom you are able to invite.

#### 10. Is it a long process?

- A: Extremely exacting and involved for the nominator, and to a lesser degree the referees. Not that difficult for the nominee just means getting your vitae in order. I don't know if it is a simplerprocess today. I certainly hope so as many great science educators may never have been in the position to gain possible recognition!! It all revolves really around you having someone who deeply understands what you do and is then prepared to back you.
- B: Having a supportive network around you while the process is being completed is very important. It takes time to work through what is needed. The process gave me a profound understanding of the impact my science teaching has with primary students and the way it can change their lives and future choices in the area. Winning the award also gave me a wonderful opportunity to network with a wide variety of fantastic people and amazing life long memories.
- A: The longest part is putting the application together.

### A FINAL THOUGHT:

Are you a go to person for Science Education (and Maths and Technology teachers are also eligible to apply now although the focus is still science) in your workplace?

If the answer is **YES...** 

Then look at the criteria and see how many of them you are able to meet – it's a good professional development plan and gives you something to work towards – gather your evidence as you go – and this will make your application easier when you decide to take up the challenge.

Entries for 2018 are closed so start now and consider finding a nominee for 2019. The process has been changed to make it a little easier so why not check it out?

For more information: <a href="http://www.scienceinpublic.com.au/category/prime-ministers-prize">http://www.scienceinpublic.com.au/category/prime-ministers-prize</a>

### A SUMMARY OF THE SELECTION CRITERIA YOU NEED TO ADDRESS:

The Science Teaching Prizes are awarded on the basis of responses to the selection criteria outlined below. The committee will consider all selection criteria in assessing your nomination.

Responses to the selection criteria will be assessed at both stages of the nomination process. In Stage 1 a summary will be required, and in Stage 2 more detailed responses will be required.

- **♣ Selection criterion 1** Knowledge of science, science education and students
- **Selection criterion 2** Demonstrated innovative and imaginative approaches to achieve high quality learning outcomes in science, maths or technology.
- **♣ Selection criterion 3 -** Contribution to broader science education community.