FROM THE DIRECTOR

Welcome to the second eNews for 2014. A lot of change is taking place across our sector and with this comes opportunity as well. In the area of sustainability in Australia we have also seen change and although there is a general shift in the management of our environment, the Lowry Institute and the Climate Institute are finding in their surveys that there is also a shift in the public mood around these issues. The survey from the Lowry Institute has noted for the first time in about two years:

‘In a striking shift in public opinion, 45% of Australians now see global warming as a ‘serious and pressing problem’, up 5 points since 2013 and 9 points since 2012. 63% of Australians say the government ‘should take a leadership role on reducing emissions’, while only 28% say ‘it should wait for an international consensus before acting’.

As with concerns about global warming, attitudes towards Australia’s leadership options on emissions reduction differ according to age. A very substantial 70% of adults aged 18-44 years say that Australia should take a leadership role, compared with 56% of those aged 45 and older.

Furthermore, 63% consider that Australia should be taking a leadership role in managing carbon emissions with only 7 per cent saying we should do nothing.

The Climate Change Institute has similar results. In their report, Climate of the Nation 2014, the Climate Institute finds that a much stronger majority of Australians accept that climate change is occurring: 70 per cent today, up 6 points from 2012. Only 13 per cent disagree, a drop of 4 per cent.

Most of those who agree that climate change is occurring say that this is at least partly caused by humans (84 per cent). More than a third now think that humans are the main cause of climate change, up 6 per cent from 2012. Just 14 per cent of those who accept that climate change is occurring attribute this mainly to natural cycles, though this is up 3 per cent from 2012 and 2013 - Source, Lowry Institute Poll 2014.

Importantly, almost all of those who accept that climate change is occurring (89 per cent) perceive that Australia is feeling the impacts now. Some 39 per cent think that Australia is already experiencing “a lot” of impacts, up 4 points from 2013. Climate of the Nation 2014 finds that for the first time, more Australians support the carbon pricing laws than oppose them. Over a third (34 per cent) support the laws, which is up 6 points from 2012. Opposition is down 22 points from 2012 to 30 per cent - Source, Climate Institute.

So if you sometimes think that your work no longer counts and all your efforts fall on deaf ears – remember that increasingly the people around you are starting to agree with you again. So keep up the good work.

Linda Condon
International Greens Skills Network Director

Linda Condon will be presenting at the WFCP World Congress in Beijing in late October on ‘The Greening of Australia’ and she would be pleased to include case studies and other matters relating to green skills and sustainability in her presentation. Please contact her at lcondon@tda.edu.au if you would like her to include your latest developments on green matters.
This eNews will focus on the latest report from the Gen Green Team and inform you about what teachers and students are thinking when it comes to sustainability – the economy, environment and social aspects of training and learning. The report can be downloaded at [gengreen.org.au](http://gengreen.org.au) and is a very useful and interesting read.

In this research, skills for sustainability are broadly conceived as including skills for social, economic and environmental sustainability – a triple bottom line approach. Since 2009 Australian governments have been implementing an agreement that embeds skills for sustainability into vocational education and training, despite scant information about the actual levels of demand for, and supply of these skills.

This study provides evidence on the actual depth and breadth of the uptake of these skills within Australian training organisations and workplaces. The demand studied in this research is that expressed by the primary consumers of Australian Vocational Education and Training (VET) services, students who engage in VET studies; this is known in the literature as social demand for education.

VET students and teachers responded to two survey instruments that explored the sustainability values, behaviours, learning and teaching of Australian apprentices, trainees and their teachers. The results of this study show ‘a social demand’ for skills for sustainability. In summary, the results show that:

- Apprentices, trainees and their teachers cared a great deal about social, economic and environmental sustainability;
- Supply was closely aligned to social demand for skills for sustainability so that demand for skills for sustainability from VET students was almost entirely met;
- There are important differences in the teaching, learning and utilisation of skills for sustainability that are related to gender and age; and
- In class learning of environmental skills has increased over time and now slightly outweighs learning of these skills at work, however community learning of these skills outweighs both.

Gen Green 4 Australia research provides some evidence that implementation of the Green Skills Agreement has to some extent achieved its intent. The findings suggest that:

- Further action is required to embed green skills in the VET system, especially in the areas of energy efficiency and supply chains;
- The VET system plays an important role in supporting community cohesion and economic literacy, especially for women;
- It is important that social sustainability is properly considered in analysis informing VET policy;
- Gender differences in values and behaviours and gender and age differences in learning skills for sustainability have important implications for the design of future skills for sustainability programs; and
- VET students and their teachers have unique insights into the supply of and demand for skills for sustainability, and this viewpoint can contribute, now and in the future, to the further development of skills for sustainability in Australia.

The majority of organisations which participated were TAFE institutes but it should be noted that private providers were also asked to participate but numbers were small. Recruitment resulted in 649 VET students and 417 TAFE teachers participating. Recruitment depended on successful engagement of participating institutes of TAFE and uptake across the institutes was highly variable, with most respondents coming from eight metropolitan and regional TAFEs in the ACT, NSW, QLD, and WA, supplemented by smaller populations attending another nine institutes. Contributing to the total number were four students and 29 teachers from private RTOs. Responses were received from 60 apprentices and trainees who have competed in the WSA regional or national competitions, or who were Australian competitors in the WorldSkills International Competitions. See graph: [Ranked student and teacher espoused values](#).
Many of you will be aware that students still learn more from VET education about sustainability than elsewhere and this is confirmed with the data this survey. But what is even more interesting is that now family and friends are a marginally greater source of knowledge about environmental sustainability than class environments. This probably reflects that many people now think that sources of information about even complex issues like climate change, energy efficiency and resources depletion can be sought from the public space. See graph:

Students’ sources of learning environmental, social and economic skills

Some other issues which emerged are the areas both teachers and students feel they are less likely to teach/be taught about skills relating to environmental sustainability (ie water usage, energy efficiency, material toxicity, recycling and supply chain issues) than skills relating to respecting people, equality, diversity and rights at work. See graph: Ranked student and teacher epoused.
This information is concerning but maybe it reflects the general sentiment in the community and maybe with a shift in community thinking which is emerging, this thinking will also change. It also supports the notion that teachers need more skills to deliver the more technical aspects of environmental sustainability and considering 17% of those surveyed expressed either a lack of knowledge or resources, maybe more professional development is needed to support these teachers. This professional development could target energy efficiency, greening of supply chains, systems thinking, critical thinking, material toxicity and recycling techniques as a start.

Barriers to teaching skills for sustainability (cumulative across all skills)

- I have not been able to access professional development, 124%
- I don’t have the skills, 186%
- I am not confident, 41%
- I don’t have the teaching resources, 206%
- I don’t have the teaching time, 206%
- It’s not in the training package, 17754%
- I don’t believe it is important for my students, 7723%

Teachers were also asked a range of additional questions around barriers to teaching skills for sustainability. Resource constraints and lack of skills and knowledge accounted for less than a quarter of the responses where the greatest reason expressed was that it was not in the Training Package (54%) and 23% did not think it was important. See graph: Barriers to teaching skills for sustainability (cumulative across all skills).
TEACHING & LEARNING RESOURCES

Sustainability Study Guides

The Sustainability Study Guides are aimed at year 7 – 10 Science students but may be useful anyway. Note for teachers that the study links to the National Curriculum.

These study guides are valuable resources for the study of sustainable resource management in food and fibre production. They are particularly relevant for the study of sustainable resource management in the Years 5, 6, 7 and 8 Technologies Curriculum in the food and fibre production strand. There are also many links in Science in Years 6 and 7 in the Biological Sciences strand and the Science as a Human Endeavour strand. There are free study guides on water, food security, biodiversity and farming.

Sustainability Kit

The Sustainability Kit is another useful website which provides resources for EIS but a login is required for access. This site has games, videos and links. These teacher training resources have been compiled to assist trainers and teachers embed Education for Sustainability in accredited and non accredited training.

EVENTS

Melbourne Sustainable Society Institute

A range of events are regularly held in Melbourne through the Melbourne Sustainable Society Institute at Melbourne University. The next event is free and is about China’s Energy Transition: Effects on Global Climate and Sustainable Development.

Event date  Monday, 25 August 2014  Event time  6:00 - 7:30pm
Event location  Carillo Gantner Theatre, Sidney Myer Asia Centre, 761 Swanston St, University of Melbourne.

The website also has a listing of interesting and relevant conferences held throughout the world on issues relating to sustainability.

Sustainable Business Australia

Sustainable Business Australia has its annual conference coming up. The 2014 Australia’s Sustainability in Business Conference & Exhibition (formerly Australian Sustainability Conference & Exhibition), alongside All-Energy Australia, Waste Expo and Inter-Water Australia will form Australia’s most significant showcase for the clean energy, sustainability, waste and recycling and water industries.

Event date  Wednesday 15 - Thursday 16 October 2014  Event location  Melbourne

PROJECTS

I have recently been involved in the re-accreditation process for the Graduate Certificate in Education for Sustainability. The process is being managed by Swinburne University and the new course although similar will have a few changes in it to ensure that students engaged in the course develop a deeper understanding of Education for Sustainability. It should be ready for delivery by the end of 2014.

In addition, the Environment and Sustainability Learning and Teaching Academic Standards (LTAS) project, being led by the University of Newcastle in collaboration with the Australian National University, Flinders University, Macquarie University and the University of New South Wales, have consulted with a range of stakeholders including TDA, through Linda Condon. The Project is being undertaken on behalf of the Australian Council of Environmental Deans and Directors and is funded by the Australian Government Office for Learning and Teaching. It aims to develop Threshold Learning Outcomes (TLOs) for the environment and sustainability field – documenting what students need to know and be able to do to upon graduation.

For more information contact Ms Anna Ferguson, Project Manager, Learning and Teaching Academic Standards (LTAS) Statement for Environment and Sustainability Project at anna.ferguson@newcastle.edu.au