

Level 2, 2009

Education for Sustainability

A commentary on preparation for the external achievement standards

Describe world views, their expression through practices and the consequences for a sustainable future (90812)

Describe aspects of sustainability in relation to a sustainable future (90814)

Many of the issues and contexts in which learning for sustainability could occur were covered in the 2008 commentary. This commentary is a brief update with additional references to useful resources and should be read in association with the 2008 commentary and the 2009 assessment report.

If a candidate for either of the two external standards is to gain their best possible grades they should read and understand the requirements for each standard thoroughly.

Candidates operating at NCEA Level 2 should have enough knowledge and relevant supporting information to be able to avoid overly simplistic answers. Very few things are black and white, particularly when dealing with important issues and the process of sustainability. Learning for a sustainable future means recognising and understanding un-sustainability in order to truly grasp sustainability. Sustainability learning requires that the candidate engage with issues on both a personal and an interpersonal level, using an inquiry or problem based learning model. It is important that candidates work with or relate to a range of people and places that allow them to gain skills in solving practical real world problems or that expose them to different perspectives on sustainability.

There is a need to ensure that candidates are aware of, and understand, the key concepts, terms and aspects of sustainability. The Senior Secondary Curriculum Guide for Education for Sustainability¹ offers support in this regard. Examples of the key concepts include interdependence, equity, biodiversity, personal and social responsibility, natural capital, limits to growth, as well as ecological, social, economic and cultural aspects. The diagram on the planning pages of AS90814 is a strong sustainability model and is well explained in *Strong Sustainability for New Zealand – Principles and Scenarios*.² It is expected that candidates for the external standards in Education for Sustainability are able to show a sound understanding of how the aspects of sustainability interrelate i.e. they need to have a degree of systemic awareness so that they can at least describe how elements of a system are linked. Candidates who develop a deeper understanding of interdependence would be able to illustrate the relevance and importance of the interconnections to the system as a whole. An example of this may be the case of the introduction of stoats to control another introduced species, rabbits, whose impact on the natural ecosystem had caused an imbalance. The stoats moved into the bush and turned their attention to our native birds, which has affected the biodiversity of NZ. Systems thinking and learning activities to develop it are well illustrated in chapter 11 of *The handbook of sustainability literacy – Skills for a changing world*³

One important area that could be explored further with candidates and potential examination candidates in Education for Sustainability is environmental ethics. Exploring environmental ethics allows both the teacher and the candidate to engage in critical thinking, reflection and discussion about how we relate to the natural world and to each other, and our rights to live in a healthy

¹ <http://seniorsecondary.tki.org.nz/Social-sciences/Education-for-sustainability>

² <http://www.nakedize.com/strong-sustainability.cfm> or www.phase2.org

³ <http://www.sustainability-literacy.org/index.html>

sustainable environment. Recommended reading in this field is *Doing environmental ethics* by Robert Traer (2009, Westview Press), which provides readings, follow up questions and worksheets that save time for a busy teacher. In examining various perspectives on the environment it is important that the candidate understands that few things are absolute. The false dichotomy of Western scientific: bad/ indigenous: good is one that a number of candidates have proposed in examination essays. It is best if candidates are given the opportunity during the year to examine how different world views have developed over time, who the key figures within each world view were or are and the impact each world view has had on people's thinking and the environment. If they are able to hear from people who hold a particular world view or examine writings on it, all the better for their understanding and their ability to reference their argument when writing the examination essay.

Many candidates also discussed Māori world views as if they were in the past rather than relevant perspectives for the present and the future. One candidate in the 2009 examination stated that Māori traditions are dying out when the reality is that they are being reclaimed and re-framed for today's world. Here it would be important for candidates to gain some understanding of the important place consultation with Māori (and as a consequence their world views) has within legal and advisory frameworks such as the RMA, the Bioethics Council, ERMA and the health sector etc. Where a school or teacher is able to establish a partnership with local iwi or hapū with respect to learning for a sustainable future the depth of understanding of a Māori world view is likely to be greater.

Partnerships with people and organisations beyond the school gate are important if sustainability education is to be practised effectively and enhanced. In this respect place-based education (PBE) also has a role in educating for a sustainable future as it reinforces the importance of community and of getting candidates out into the local environment. Two authors worth reading for further insight into place-based education are David Sobel and David Orr. Wikipedia also carries a useful discussion of PBE with links http://en.wikipedia.org/wiki/Place-Based_Education & http://wiki.bssd.org/index.php/Place_Based_Education

Newspapers and other media are also useful resources throughout the year. Keeping candidates abreast of current issues relevant to sustainability is invaluable when it comes to examination time. Candidates who could illustrate their discussion of the examination questions with relevant recent examples often also demonstrated an ability to synthesize information and ideas. They were obviously interested in and aware of issues and debates.

Other useful resources that support teaching and learning for sustainability can be found on TKI these include the Senior Guidelines Education for Sustainability <http://seniorsecondary.tki.org.nz/Social-sciences/Education-for-sustainability> and the Education for Sustainability website <http://efs.tki.org.nz/>. Useful overseas websites include The Centre for Ecoliteracy <http://ecoliteracy.org/education/sustainability.html> , and The David Suzuki Foundation <http://www.davidsuzuki.org/>.