

Level 2, 2010

Education for Sustainability

A commentary on preparation for the external achievement standards

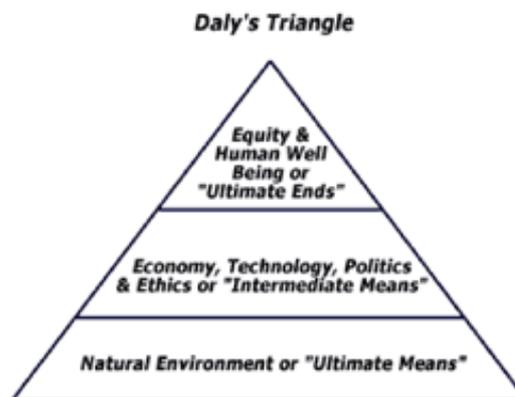
Describe world views, their expression through practices and the consequences for a sustainable future (90812)

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

This commentary is a brief update on the 2009 and 2008 commentaries with additional references to useful resources. It should be read in conjunction with the 2010 assessment report and 2010 annotated exemplars.

Strong sustainability

An understanding of strong sustainability is an important element of learning for both of the external standards. A candidate for these standards should be able to demonstrate an understanding of each aspect as well as how they relate to each other. In order to facilitate this understanding it is advisable to spend some time exploring and discussing diagrams, or other visual media, that illustrate strong sustainability. Two such diagrams are presented below.



Source: http://www.toronto.ca/sustainability/sustainability_theories.htm

A more comprehensive discussion of strong sustainability within a New Zealand framework is offered by Sustainable Aotearoa New Zealand Inc. <http://sites.google.com/site/strongsustainability/> Candidates who performed well in the two Standards in 2010 were able to clearly demonstrate an understanding of at least two aspects and how they were interdependent. They were also able to apply a range of concepts in their discussion beyond a brief mention of them e.g. discuss why it is important to consider future generations in decisions made now rather than just state that 'we have to look after future generations'.

Complexity of ideas

As mentioned in the 2009 commentary, a number of candidates provided overly simplistic answers, particularly in Achievement Standard 90812 World Views. Many candidates presented their argument as dichotomies e.g. good/bad when in most cases the issues are much more complex. It is expected that candidates operating at NCEA Level 2 will have had opportunities throughout the year to explore the complexities of sustainability in a number of different contexts. If possible it is useful for candidates to hear, or learn from, a range of presenters who may offer different perspectives on an issue or on sustainability generally. In exploring world views it is vital that they

have the chance to see how perspectives may have changed over time due to specific influences or how, within the same world view there are often a variety of perspectives that have arisen from differing interpretations of sacred texts or the like.

The Scientific world view has proved problematic for some candidates. It is too easy for many to present scientific practice as something that has primarily contributed to the environmental collapse we now face, without also acknowledging that science has much to contribute to sustainable living. While many scientists employ a particular method of scientific inquiry and experimentation, scientific practice aims to explain and predict and is not authoritarian; theories can change as new insights are gained.

Transfer of knowledge

Candidates should also gain experience in, or practice at, transferring their knowledge to new contexts e.g. if they have studied how Cuba faced economic collapse after the fall of the Soviet Union and turned to sustainable growth, they should consider how they may transfer what they have learnt to another context such as tourism or water. A number of candidates undertaking studies in Education for Sustainability will also be taking Geography, Biology or English classes in which they explore places, peoples and issues relevant to a sustainable future. They should be encouraged to draw on understandings and knowledge from other subjects or experiences beyond the classroom when exploring issues or aspects of sustainability. Being able to draw connections between the context of the question and the things they have studied is an important competency to develop; this can best be developed through the practice of reflective discussion and learning review.

Another skill set that candidates should be encouraged to develop further and transfer to their Education for Sustainability studies is that of analysis and interpretation of data, be it in the form of tables or graphs. The ability to extrapolate meaning from statistical data rather than merely describing the trend is important by NCEA Level 2.

Essay writing skills

The candidates that performed well were those who were able to sort their ideas logically, structure their argument, refer effectively to case studies or supporting evidence and incorporate relevant quotes from the stimulus material. Some copied large chunks from the stimulus material but were able to reinterpret it to add substance to their discussion. It is useful if some time during the year is set aside for the development of essay writing skills so that candidates entering an examination feel confident about applying the knowledge to new contexts. Candidates should however avoid preparing set essays prior to the exam as, in both standards, the context and stimulus material must be incorporated in a manner that shows they have analysed them in the light of the understandings they have.

Useful resources

In previous commentaries a number of resources have been referenced. There is a constant flow of new writing on sustainability both in the printed form and online. Articles in national and local newspapers or magazines are always useful particularly with respect to up-to-the-moment issues. Two recent publications in New Zealand have examined different ways of learning about sustainability – through fiction and action. They are both worth reading for the varied insights they provide.

- Johnson, J. (2010) Representations of environmental concerns in selected science/speculative and realistic fiction. Why are these works critical and relevant for young people today? *Reading Forum New Zealand*, 25(2), 13-28.
- Education Outdoors New Zealand *Out and About* Issue 24, Spring 2010. www.eonz.org.nz