

Chapter 13

A System–Wide School–Based Program for Sustainability: Climate Clever Energy Savers

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ABSTRACT

This chapter reports on an external evaluation of a statewide Education for Sustainability program conducted in Australia. The Climate Clever Energy Savers Program, conducted by the NSW Department of Education and Communities, invited students in primary and secondary schools (from Years 3 to 10), to participate in projects with their teachers' support, aimed at reducing their school's electricity consumption and costs. The chapter describes the Program in the context of the importance of sustainability development, and the centrality of education in achieving this. The ongoing evaluation investigates outcomes of the school-based projects, as well as teachers' views on the available support. This chapter investigates three case studies of the Program, examining outcomes, commonalities and differences across these sites. It describes the use of the Sustainability Action Process as a framework for guiding projects' progress. The chapter concludes with implications for practice and further research emerging from the case study investigations.

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ORGANIZATION BACKGROUND

The New South Wales Department of Education and Communities (DEC) is the largest education system in Australia and the largest employer of teachers in the Southern Hemisphere. It is responsible for the school education of approximately one third of Australian school students. Its commitment to environmental and later sustainability education grew out of international and national concerns about environmental and sustainability education during the 1980s that gained momentum in the 1990s (e.g. Fien, 1997; Fensham, 1990; Gough, 1992; Robottom, 1984; Walker, 1995).

The NSW DEC environmental education policy has much in common with the UNESCO (1997) *Educating for a sustainable future* document. Specifically, the Department of Education and Training (DET, predecessor to DEC) policy describes environmental education as lifelong, multi-disciplinary, systemic and futures-oriented (DET, 2001a). It promotes associated knowledge, understanding, attitudes, skills and participatory action. It aims to imbue learners with a sense of agency and responsibility. Part of this process involves “promoting sustainable lifestyles. This requires understanding of the need to achieve a balance between the environmental, social and economic impacts of development” (DET, 2001a, p.7).

The DET (2001a) environmental policy made environmental education a mandatory, cross-curriculum requirement in all schools in NSW. Notably, environmental education was not introduced as a distinct curriculum area but viewed as a transdisciplinary field to which all school curricula would contribute and by which all curriculum areas would be enriched. However, its uptake appears to have been stronger in primary schools than in secondary schools (Imeson & Skamp, 1995).

Soon after the release of the environmental education policy, the Sustainable Schools Program (SSP) was proposed (NSW DET, 2001b).

SSP required schools to develop a School Environmental Management Plan (SEMP) such that each school took account of its own contexts to develop an environmental plan to shift towards more sustainable practices. The SSP promoted a whole-of-school approach embracing three areas of responsibility: the curriculum, management of resources and management of school grounds (DET, 2001b, p. 7). Curriculum initiatives focused on addressing sustainability as part of the existing curriculum as well as developing interdisciplinary topics as vehicles for learning environmental sustainability. Management of resources includes activities such as avoiding, reducing, reusing and recycling materials and energies where possible (Cupitt & Smith, 2012), while management of school grounds includes practices such as managing and reducing litter, erosion and water usage, as well as tree-planting, weeding, and storm water control. Mandatory reporting on these areas was required in the SEMP.

A school's SEMP was supposed to be holistic and integrated in nature, and participatory in practice (DET, 2001b). An initial evaluation of SSP and SEMPs, based on surveys of teachers in primary during the pilot phase 2002-2004, suggested that the SSP had promoted productive environmental actions in schools (Chodkiewicz & Flowers, 2005). Consequently, SEMPs became compulsory in NSW government schools in 2006. Unfortunately there has been no evaluation of the mandatory phase of this program. The Climate Clever Energy Savers (CCES) project discussed in this chapter builds on the earlier initiatives in environmental sustainability in Government schools including the environmental education policy, the SSP and the mandating of SEMPs.

SETTING THE STAGE

There are a number of challenges that need to be addressed if sustainability education is to maximise its effectiveness. These include: time

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