Local Communities and Schools Tackling Sustainability and Climate Change

Rick Flowers[†] **& Andrew Chodkiewicz**
University of Technology, Sydney

Abstract

Local communities and their schools remain key sites for actions tackling issues of sustainability and climate change. A government-funded environmental education initiative, the Australian Sustainable Schools Initiative (AuSSI), working together with state based Sustainable Schools Programs (SSP), has the ability to support the development of more effective community and school relationships. We are interested in the possibilities of enabling more authentic and transformative learning experiences in community and school relationships, by developing a more analytical approach to communities and schools working together. Drawing on Uzzell's (1999) framework and a number of recent empirical studies we describe how communities and schools in one Australian State, New South Wales, have been working together for environmental sustainability. We point to how the links between local communities and schools continue to be under-utilised, and suggest ways that these important relationships can be strengthened and extended.

Introduction

Local communities and schools remain key sites for the development and implementation of programs that tackle issues of climate change and sustainability. Despite widespread agreement about the importance of developing environmental awareness during childhood and through the school years (Department of Environment and Heritage, 2005; Fisman, 2005; Palmer, Suggate, Robottom, & Hart, 1999) opportunities and support for environmental education in Australian schools and their communities have remained limited. We argue that partnerships between communities and schools have the potential for achieving more transformative change, through more authentic and transformative learning experiences in, about, and for the local environment.

Recently, a lack of direct experiences of nature and teachers' uncertainty about environmental education have been identified as factors that prevent school children and young people from gaining an awareness of the environment. For example, Malone (2007) refers to children growing up in Australia without any direct experiences of the environment as the "bubble wrap generation". Kennelly & Taylor (2007, p. 7) have also pointed to the lack of agreement among primary school teachers and educators in Australia "on what environmental education should actually look like in schools,

[†]*Address for correspondence*: Rick Flowers, Head of Adult Education Program, Faculty of Arts and Social Sciences, UTS, PO Box 123, Broadway, NSW 2007. Email: Rick.Flowers@uts.edu.au

and there is teacher uncertainty as to what is achievable in particular school contexts and even uncertainty as to whether or not environmental education is appropriate in schools".

Despite these issues, there is, however, a growing interest in what Kalantzis and Cope (2008) call "new learning", and in exploring new approaches to environmental education with children and young people. These include experiential learning (Kennelly & Taylor, 2007); place based education (Smith, 2007); local learning (Fisman, 2005); and free choice environmental education (Kola-Olusanya, 2005). Many also emphasise the need to re-orient and strengthen environmental education in schools, and to establish whole-school approaches to sustainability that involve staff, students and the community (Ferreira, Ryan, & Tilbury, 2006; Henderson & Tilbury, 2004; Shallcross & Robinson, 2008; Tilbury, Coleman, & Garlick, 2005).

While calling for such approaches, these studies also note that reaching out beyond the school gate through direct, authentic and transformative educational experiences remains a major challenge for educators (Hayes & Chodkiewicz, 2006; Kalantzis & Cope, 2008; Whelan, 2005). In this paper we describe and discuss some of the ways communities and schools have been working together for sustainability in one Australian State, New South Wales (NSW). Based on this, we offer our thoughts for the effective development and implementation of authentic and transformative learning opportunities.

Sustainable Schools Programs

Environmental education in schools, and efforts to use whole-school approaches, have been in existence for decades. Among the well established international whole-school programs are Eco-Schools, set up in 1994 and now operating in 43 countries, involving more than 27,000 schools and 4,000 local authorities (FEE, 2008); Enviro Schools in the UK and New Zealand; and the Canadian Green Schools program in over 5,500 schools (SEEDS, 2009).

In Australia, sustainable schools programs were first piloted in 2003-4 in two Australian states, NSW and Victoria. The programs were then expanded to include all Australian States and Territories, with Federal Government support and co-ordination provided through the Australian Sustainable Schools Initiative (AuSSI). A total of $2 000 000 over three years was allocated in 2005 to support the program (DEH, 2005a). For the 2009/10 financial year the allocation is $650,000, with each State and Territory matching the level of Federal government funding (K. Plowman, personal communication, May 29, 2009).

In 2009, more than 2,650 schools are involved in the various SSPs across Australia, a significant increase on the 450 schools in four states in 2005. Starting with almost 200 schools in its pilot program, the NSW SSP had grown to involve almost 700 schools representing just over 20% of the 3,300 schools in NSW (K. Plowman, personal communication, May 29, 2009). Supported by a partnership between two key government departments (school education and the environment), the NSW SSP provides schools with a way of focusing their efforts for sustainability, and, more recently, to address climate change. The SSP assists schools to address three key areas - the school curriculum, the school's management of resources, and the school grounds. The SSP encourages schools to plan and take actions in a more systematic way to address issues of energy, water, waste and bio-diversity (Smith, 2006). Schools are also encouraged to set up a broad based team within the school to oversee their program, to carry out a school audit, and to develop a plan of action. The SSP provides a tool to schools to enable them to develop a school environmental management plan (SEMP) through which they plan and coordinate their environmental education efforts.

Taking a whole-school approach and working with a school's local community is a central feature of a SEMP. This means not only a focus on teachers, students and the classroom, but also drawing on the community both inside and outside the school. This includes, for example, building connections and support with parents, local businesses and key agencies such as local government (Smith, 2006).

Nature of Change

A key feature of AuSSI and the SSPs has been the encouragement of schools to work together with local communities for sustainability, and, more recently, to tackle climate change. The question that must be asked, however, is what type of change can SSPs hope to achieve? One way of categorising the nature of change is to consider a change continuum that ranges from conservative views of change on the one hand, to reformist or transformative views of change on the other.

A conservative view of change focuses on preserving existing conditions, which means maintaining things as they are, being cautious and moderate, so as to minimise any changes that do occur. A reformist view sees change being achieved through improvement and alterations, usually achieved by tackling specific issues like cleaning up a creek, reducing litter and waste, and cutting energy or water use. According to Wheeler (2004, p. 8), a reformist view of change is problematic because it addresses symptoms but does not tackle foundational norms or structures. Wheeler (2004) argues that a transformative view involves a deeper approach to social change that addresses root causes and seeks to achieve major structural or systemic changes for sustainability.

In our research we observed that all three views are present in Sustainable Schools Programs, with the reformist view being most represented. But we, like Sterling (2003) believe that major transformative change across the education sector is required to achieve a more sustainable society. Sterling argues that most education policy makers and practitioners are unaware of the scale of change needed to achieve sustainability and suggests that most education for sustainability has become little more than another curriculum box to be ticked, rather than a key to a transformation that reaches into all aspects of a student's educational experiences. He points to the need for a fundamental re-orientation of education policy towards a new holistic vision of education for sustainability. On a more specific note, we argue that more attention should be paid to the possibilities of education that happens outside classrooms in community settings, is action-oriented, and experiential (Flowers, Guevara, & Whelan, 2009). But it seems that in the SSPs only a minority of schools have pursued these transformative possibilities.

Kinds of Communities

Theoretically, school sustainability programs and planning guidelines encourage schools to work with their "community" (DEWHA, 2008; NSW DET, 2008). Recent evidence indicates that both schools and communities are beginning to see the importance of working together (Chodkiewicz & Flowers, 2005; Tilbury et. al., 2005). Developing community-school partnerships and professional networks within local communities is seen as an effective way to re-orient teacher education towards sustainability (Ferreira, Ryan, & Tilbury, 2007) as partnerships and networks help with "sharing expertise… maximising the multiplier effect by networking across institutions… and providing mutual peer support and encouragement" (p. 48). They also note that if teachers engage in professional networks they are able to gain support, advice and access to information from their peers.

While there is growing evidence about the value of schools working with "communities", our research suggests that in practice, not many teachers think analytically about the kinds of relationships that can be developed with communities.

To be analytical requires an inclination and ability to interrogate not only the kinds of relationships – which we do in the next section – but also the kinds of communities. "Community" is often used generically, making it difficult for schools to identify who their community is. However, Flowers (2002) has identified different kinds of communities that could be involved with schools.

Parents and School Community

In NSW, when one mentions school-community relationship building most teachers will initially associate this with the relationships between the school and parents. Parent participation can take two main forms: assisting teachers with programs and activities – be it sport, lessons, arts or other; or participation in school governance – be it the School Council, working committees etc. This means that parents participate in the formulation of the school's educational goals and policies.

Students and School Community

Another type of school–community relationship is that between the school and its student body. The following questions are likely to assist in guiding the work with the student body. What role do students play in decisions about the school? How much value do students participating in governance add to the school experience, to the quality of teaching and learning? How much value is added when explicit efforts are made to strengthen a student-centred learning culture? Where are notions of student responsibility, student initiative, and a sense of student community nurtured?

Local Neighbourhoods and School Community

From an international and historical perspective one of the strongest traditions in community-school relationship building is the community schooling movement. In this tradition the focus is on the possibilities and desirability of strengthening relationships with neighbourhoods and communities in the local areas surrounding the school. In many cases this leads to schools being used for multiple purposes – examples include, community gardens, adult literacy classes, social activities for adults, and meeting place (Poster, 1971).

Separatist Causes and School Community

There have been grand traditions of building school communities, largely based on building local geographic communities or democratic and participatory structures. But more prosaic traditions are building separatist communities, such as cultural and religious communities. Examples include Aboriginal community schools, Islamic schools, and Church of England schools.

Independence, Community Action and School Community

Imagine if current and past students, teachers and families at a particular school agreed as a community to take a stance on certain issues, for example, aircraft noise or refugees and asylum seekers. A school community would be strengthened by a shared commitment to undertaking some sort of community action. The school would, for the time of the campaign, become part of a wider community coalition.

Community Service and Business Partnerships and School Community

In this tradition schools organise community service projects and work-experience projects for students. There are three aspects of this tradition to highlight. The first aspect is that of schools, especially privileged and elite schools, being of service to disadvantaged communities. The second aspect is that of building partnerships with

businesses for fund-raising purposes. The third aspect is that community service and business partnerships provide valuable opportunities for students to engage in project-based learning activities.

Consumerist and Market-Driven Communities and School Community

With the increasing proportion of private schools and the encouragement of public schools to be more specialised, schools are being defined increasingly by their marketability. Stakeholders typically ask: How popular are they, and what do they offer that other schools don't? And so, school communities are increasingly defined as groups of consumers willing to apply and pay.

The value of this typology is how it illustrates a variety of ways schools and communities can work together. It will be up to participants in each situation to analyse how they conceive "community" and what opportunities or constraints arise from those concepts.

Uzzell's Framework for Understanding School-Community Partnerships

While policies may encourage or recommend them, developing ongoing effective community-school relationships to support learning is not easy. Based on a study of partnerships in US schools, Schutz (2006) argues that while policies have been put in place to increase community participation in schools, in practice there has been what he describes as "a tragic failure" of school-based community engagement strategies.

We feel that one way of helping schools to better understand what can be achieved through community-school partnerships is a framework developed by Uzzell (1999) for supporting schools to move from just working on their own on environmental issues to working together with and alongside their communities as change agents. He felt that environmental education was generally based on an approach to teaching and learning which was top-down, where schools did not work closely with their communities, and did not create opportunities for children to learn by engaging in direct environmental action. Uzzell described four different kinds of relationships between schools and communities. The types of relationships he identified fell into four categories, with the school as either:

- an isolated island, working on its own;
- inviting the community into the school;
- being a guest in the local community; or
- working together with the community as a social agent.

School as an Isolated Island

For Uzzell this kind of relationship saw the school undertake learning about environmental issues only within the school. This meant that activities or projects occurred within the classroom or the school grounds and did not engage with or deal directly at all with the local community.

Local Community Invited into School

The second kind of relationship was where the school invited members of the local community (agencies, local councils, or local environment groups) into the school to discuss or take part in specific topics or projects that took place within the school. Uzzell felt learning was generally restricted to presentations, talks or discussions. Also the environmental issues addressed were always directly related to the curriculum.

School as a Guest in the Community

The third kind of relationship involved teachers and students going outside the school to visit a site, to address specific local environment issues or to take actions as a guest in the local community. For Uzzell, schools while being guests in the community, still controlled how and what actions they would be involved in. While Uzzell did not fully elaborate on the kinds of activities in this category, they could include such things as class visits to centres, facilities or natural habitats, classes monitoring a local creek, or taking part in a dune care restoration project. A feature of this type of activity was that generally for the school to participate, activities needed to be directly related to a particular school learning module or subject.

School as a Social Agent

The fourth kind of relationship was where the school participants went outside into the community and worked together with groups from outside the school to achieve significant change on an environmental issue. The difference from the other kinds of relationships was that the explicit aim of this kind of involvement was to bring about change, as a result of the school involvement. The key here was seeing partnerships as a way of taking actions that achieved both more transformative learning for students and teachers and brought about more fundamental and deeper change on environmental issues in the local community. Examples in NSW schools of this kind of involvement have seen schools involved as a partner in local environmental campaigns against aircraft noise, acting to preserve native habitats from development, or acting to stop the building of a freeway.

We believe that where schools think about environmental education, and realise that schools can take on relationships in the community where students learn and work as social change agents, Uzzell's (1999) framework is a useful tool. As Uzzell suggested, this type of environmental education enables schools to encourage the development, among both students and teachers, of responsible, action-oriented strategies to tackle real concrete environmental problems within their local community. In this way students and teachers can learn more fully and be involved in more transformative change - not only in learning about nature and their environment, but also about social, cultural and political factors and how they operate and impact on the environment in practice (Uzzell 1999, p. 412).

Analysis of Empirical Studies

The Australian Sustainable Schools Initiative (AuSSI) involves 2,650 schools across the country and seeks to implement a whole-school approach to sustainability. Here we would like to focus on one state, NSW, and its Sustainable Schools Program (NSW SSP) and to highlight the kinds of community engagement and change that can be achieved through the program. We draw on Uzzell's (1999) framework for strengthening school-community relationships for sustainability in our analysis of two empirical studies of community-school relationships for sustainability.

In the first study by Chodkiewicz and Flowers (2005), data was collected from 30 outstanding schools taking part in the NSW SSP and a "text analysis" carried out of summary descriptions of school activities from field staff reports. Using Uzzell's (1999) framework, we assessed the nature of the school-community relationships reported in each of these schools.

In the second study, Chodkiewicz, Smith, Smith, and Flowers (2007) analysed the findings of a survey of local council and school collaborations across NSW (Martin, 2006). The survey reported on how 70 of 152 local councils in NSW were working with

schools on sustainability and climate change issues. Martin (2006) analysed the survey data from councils by grouping the reported activities into ten different categories: in-council programs, in-school programs, community projects and green events, grants and awards, access to council information, resources for teaching, assistance with natural resource management, whole school activities, council networking and regional programs. In order to better understand these activities, Chodkiewicz et al. (2007, p. 8) re-analysed the data applying Uzzell's framework (1999).

Analysing NSW SSP Activities

In analysing NSW SSP school activities among the outstanding 30 schools, Chodkiewicz and Flowers (2005) found that:

- 17% of schools did not engage directly with communities and environmental education that occurred was within the school as the result of the efforts of an individual teacher (school as an isolated island);
- 47% had invited members of the local community into the school to contribute to the teaching of a particular subject area (local community invited into school);
- 20% of the schools had initiated and developed relationships with external groups and included learning and action for the environment in the local community in their teaching program (school as a guest in the community);
- Only 10% were directly involved in learning and action for the environment inside and outside the school; (school as a social agent); and
- In 6% of the schools there was insufficient information to assess and allocate the school activities involved.

The findings confirm the gap between theory and practice. Considering that almost 200 schools were taking part in the NSW SSP, among the 30 schools who were rated by the program as being outstanding, this gap was quite striking. The analysis showed that a majority of these schools (64%) were either working in isolation from their local community or inviting representatives into their school, with 20% going out as a guest into the community. Only 10% were taking a more active and transformative approach, by going out into the community and working as an agent of change on an environmental issue.

Local Councils and School Partnerships

As local councils are one of the largest and most significant agencies for schools to work with in their community, here we report on further empirical research into council environmental activities with NSW schools, that confirms while in theory there is growing interest in schools and communities working together for environmental sustainability, in practice so far only modest efforts have been achieved.

As one of the key local potential partners, councils collect domestic waste, organise recycling programs, manage storm water and are responsible for natural resource management including air, soil, bio-diversity, in local creeks, rivers and beaches. Councils are also important because they can impact on at least 50% of the greenhouse gas emissions in a local area (Westcott, 2007). As such they are an important partner to support work by schools for sustainability and to address issues of climate change. And a number of the schools in the NSW SSP pilot did find that links with their local council provided them with access to a range of environmental education programs, resources and networks (Chodkiewicz & Flowers, 2005).

The kinds of activities reported by Martin (2006) in the Local Government and Shires Association survey of 70 local councils were analysed in a study by Chodkiewicz et al. (2007), which examined the activities in terms of Uzzell's (1999) framework.

Schools as Isolated Island (Uzzell Type 1)

In analyzing Martin's (2006) survey data, Chodkiewicz et al. (2007) noted that councils were not asked to report on which schools they were not involved with. So it was not possible to draw any accurate findings about the extent to which schools were acting as isolated islands in relation to their local council. However the survey results did show that a majority of local councils (82 out of 152) did not respond to the survey, suggesting that a significant proportion of councils were either not involved with local schools or didn't consider it important enough to report their involvement with schools.

Councils Invited into Schools (Uzzell Type 2)

Where councils and schools were working together, Chodkiewicz et al. (2007) found it was mostly according to Uzzell's types 2 and 3. With Uzzell's type 2 activities, Martin (2006) did find reports of councils being invited into schools. Examples of these activities included councils involved in: environmental programs in schools; providing natural resource management assistance to schools through project or program support; assisting with whole-school activities like school audits; providing information and services; providing resources to support student learning on specific issues; giving out council grants and awards recognising schools environmental work, like a Young Environmentalist of the Year award; and giving schools items such as a water tank or a compost bin as a reward for their environmental efforts.

Martin (2006) also showed that councils were involved in many examples of classroom based or curriculum-linked educational activities. In these cases councils provided a guest speaker, delivered a series of environmental talks or education programs in schools, or ran school lessons or workshops on particular aspects of sustainability such as waste, energy use, or storm water.

Attending Council Programs or Events (Uzzell Type 3)

The survey by Martin (2006) also revealed that many schools were attending council programs, facilities or events. They included school visits to council depots, waste treatment centres, nurseries, gardens, or attending council run events (such as community expos or fairs). The survey also noted school-organised field study excursions to local wetlands and coastal or river habitats that were the responsibility of the local council.

Working Together for Environmental Change (Uzzell Type 4)

We think that the most promising initiatives are where not only schools and councils are participating in each other's activities, but where they actually collaborate – ie. Uzzell's type 4. Among the activities where councils were reported to be working with schools for environmental change, Martin (2006) found that most were joint community environmental projects or green events. There were some activities where the school acted as a focus for a broader council led or sponsored community event or project, or where councils were involved with schools as part of an environmental or sustainability network or regional program. Among the examples cited were a Sustainable Suburb community environment event organised at a school; schools working together with a council on a community environmental monitoring programs of local flora and fauna, wildlife, creeks and rivers; schools being involved in council led Bushcare, Landcare or other community garden projects; and school involvement in council led community environmental forums.

In some cases schools and councils also took part together in community based environmental events that were organised by a community based NGO or environmental

group. They included well established events such as Clean Up Australia Day or National Tree Day. There were other examples of events promoted by other agencies such as World Environment Day, Water Week or Weed Busters Week. There were also examples of schools taking part in council led community youth forums or other environmental forums, regional programs like Catchment Days, or various planning workshops and regionally based networks.

In addition, the preliminary findings of a follow up survey of councils working with schools by Martin (2008), showed that among the 62 councils reporting back, the fastest growing new activity that councils noted was their support for environmental education networks of teachers in their area. A total of 25 councils reported that they had set up this kind of network. As mentioned above by Ferreira, Ryan, & Tilbury (2007) supporting professional networks was an important way of supporting schools to work for sustainability. Networks also provided other opportunities for both councils and schools to build and strengthen their relationships and capacity for action on sustainability and climate change across a local government area.

It is evident that the data from local councils confirms the findings of an analysis of outstanding NSW SSP school activities (Chodkiewicz & Flowers, 2005). As a major partner in the local community, although local councils were involved in actions with their local schools, the kinds of relationships and activities they undertook were largely restricted to councils being invited into schools (Uzzell type 2) or schools attending council programs or events (Uzzell type 3). This meant that there were few examples of councils working together with schools to achieve more transformative environmental learning and change in their local areas (Uzzell type 4).

Conclusion

Efforts to support and develop environmental education where schools work seriously with and in local communities, remain limited and so far have been only modestly funded. Efforts like AuSSI, and the SSPs in each state and territory, make a valuable start. However, they remain small programs with a low public profile, and generally little is known about them among Australian environmental educators, school educators, parents or local communities.

There is a need to refocus government efforts on the positive and central role that local community-school partnerships can play in achieving more transformative environmental change. As one starting point, local councils are key important organisations that can be better supported to work with schools across a wide range of environmental education activities. But there are also other opportunities for the development of stronger community-school links, more effective collaborations and partnerships, that bring together other government agencies, non-government environmental groups and schools.

There is value in drawing on Uzzell's (1999) framework to highlight the various ways that schools can work together with communities. We have shown that local councils are already playing a key role in working with schools. In particular, there are many examples of councils and other agencies being invited into schools and schools going out into the community to attend council events or facilities. But not many schools have been working with their communities or with local councils as social agents for environmental change (Uzzell type 4). Thereby they are missing out on opportunities to provide more transformative educational experiences for their students and teachers.

A major challenge for the future is to build on what AuSSI and the various Sustainable Schools Programs have achieved so far, and to strengthen the kinds of relationships and activities that provide opportunities for more authentic and transformative environmental education and actions by local communities in partnership with their

schools. A key aspect of any refocused efforts is the need to draw on a more theorised framework of community and school partnerships. It is necessary to be more analytical, not only about the types or kinds of communities one wants to work with, but also about the types or kinds of partnerships to be developed. Our research suggests that there has, to date, been little theorising or analysis of this kind.

Keywords: Sustainability; learning; communities; schools; local government.

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