

Secondary School Students' Participation in School Grounds Improvement: Emerging Findings from a Study in England

Mark Rickinson, Educational Research Consultant &
Dawn Sanders, National Foundation for Educational Research, England

Abstract

In a recent review of school grounds research, Dymont (2004a) highlights a lack of studies on the process of school grounds improvement, particularly in the secondary school context. This paper seeks to respond to this gap in the literature by reporting emerging findings from a three-year action research study of six English secondary schools involved in improving their grounds. It focuses particularly on the nature and dynamics of student participation in the process of school grounds improvement. Drawing on in-depth case-study research during the first two years of the programme, we discuss how the schools have been approaching the task of improving their grounds, and what the benefits and challenges have been for the participating students. Against a backdrop of long-standing neglect of secondary school grounds, we hope that this paper will lead to further dialogue in this critical and sometimes forgotten area of practice and research.

Résumé

Dans une révision récente d'une recherche sur les cours d'école, Dymont (2004b) met en évidence le manque d'études sur le procédé de l'amélioration des cours d'école, particulièrement dans le contexte des écoles secondaires. Cet article cherche à combler ce fossé dans la documentation en rapportant de nouvelles constatations tirées d'une étude de recherche active d'une durée de 3 ans, dans 6 écoles secondaires anglaises engagées dans l'amélioration de leur cours d'école. Il met l'accent particulièrement sur la nature et la dynamique de la participation étudiante dans le processus de mise en valeur des cours d'école. Se basant sur une recherche approfondie d'un cas pendant les 2 premières années du programme, nous discutons de comment les écoles avaient abordé la tâche d'améliorer leur cour et quels en avaient été les bénéfices et les défis pour les élèves participants. Avec en toile de fond, une négligence de longue date des cours d'écoles secondaires, nous espérons que cet article conduira à dialoguer de nouveau dans cette aire de pratique et de recherche critique et parfois oubliée.

In a recent review of school grounds research, Dymont (2004a; 2004b) highlights a shortage of work on the *process* of school grounds improvement. Her argument is that:

While several researchers and practitioners have pointed to the importance of process, much of the literature reviewed here points to benefits that emerge *after* the school ground has been transformed. Yet what are the benefits for students, teachers, parents, and administrators who are involved in the process of green-ing a school ground? (2004a, p. 25, original emphasis)

In addition, there has also been a dearth of research on grounds improvement in the *secondary school* context. With some important exceptions (for example, Skamp & Bergman, 2001; Titman, 1999), it would seem that much of what is known about the process of school grounds improvement comes from research in primary school and early years settings.

This paper seeks to respond to these gaps in the literature by reporting emerging findings from a three-year action research study of six English secondary schools involved in improving their grounds. The six schools are participants in a programme called the Secondary Action Research Programme (SARP), which is coordinated by Learning through Landscapes, the UK's national school grounds charity (Rickinson, 2004). The purpose of the programme is to develop innovative approaches and research-based evidence on improving secondary school grounds in ways that engage and empower young people. Given the lack of knowledge and understanding about school grounds development in the secondary school context, the programme was set up as an action research project combining real, practical developments with systematic reflection and learning. This has involved a partnership between school staff, and students, Learning through Landscapes facilitators, and researchers from the National Foundation for Educational Research.

With the programme now in its third year, this paper reflects on how the schools have been approaching the task of improving their grounds, and what the process has been like for the participating students. It draws on in-depth case-study interviews to explore the benefits and challenges of the process from the perspective of the student participants. The paper begins by considering the contemporary context of secondary school grounds development in the UK. It then outlines the aims and methodology of the Secondary Action Research Programme. Attention then turns to findings emerging from the first two years of the programme. These focus on models of school grounds improvement, and the benefits and challenges for participating students. The paper ends with a consideration of implications for future practice and research in this area.

Contemporary Debates about Secondary School Grounds in the UK

Within contemporary educational discourse, there is evidence of renewed interest in the educational significance of learning beyond the classroom, including work in outdoor spaces such as school grounds and gardens. The UK Government's Growing Schools Programme seeks to enable and inspire "all schools to use the outdoor classroom, both within and beyond the school grounds, as a context for learning across the curriculum" (<http://www.teachernet.gov.uk/growingschools/>). This comes in response to fears about declining outdoor learning opportunities for school pupils (e.g., Barker, Slingsby, & Tilling, 2002; British Broadcasting Corporation, 2004), as well as concern about young people's understanding of food, farming, and countryside issues (e.g., Policy Commission, 2002) and increased recognition of the importance of learning beyond the classroom and the school (e.g., Bentley, 1998; Department for Education and Skills, 2002).

There has also been considerable policy attention focused on the state of the buildings and grounds in English secondary schools. The Department for Education and Skills' Five Year Strategy for Children and Learners states that "The physical state of the secondary school infrastructure was in a deplorable state in 1997, run down after decades of under-investment and neglect" (Department for Education and Skills, 2004). The impact of this on schools' outdoor environments and facilities is evident in a number of recent research reports. A study of 32 secondary schools across England found that "other than provision for sports, there was little evidence of school grounds having been designed to support the formal, informal [or] hidden curriculum" (Titman, 1999, p. 8). In the eyes of students and staff, secondary school grounds were rarely seen to meet even the most basic needs for shelter, shade, and social spaces. This is echoed by a more recent analysis of young people's responses to the *Guardian's* 2001 "The School I'd Like" competition, which drew together the views of pupils in over 1500 primary and secondary schools (Burke & Grosvenor, 2003). The survey reported that "the majority of entries mention the outside environment of the school, and most find it wanting" (p. 45). The impression gained was that "school yards are in the main colourless, hard spaces and children feel their own vulnerability and that of others in such an environment" (p. 46).

Furthermore, recent investigations into secondary school teachers' views of school grounds suggest a range of factors hindering the effective use of such spaces for teaching and learning. These include inadequacies in teacher training, a lack of confidence in teaching outdoors, inflexibility in the National Curriculum, an absence of opportunities for students to voice their needs, as well as a lack of management expertise (see, for example, Malone & Tranter, 2003; Rickinson et al., 2004; Skamp & Bergman, 2001; Titman, 1999). It was in response to these kinds of challenges that Learning through Landscapes launched a research and development project focused specifically on six secondary schools seeking to improve their grounds.



Figure 1. “It’s very big but there’s nothing in it.” (Student quotation from Burke & Grosvenor, 2003). Source: An image of one of the Secondary Action Research Programme schools taken in 2001, *Learning through Landscapes*, England.

Learning through Landscapes Secondary Action Research Programme

Over the last three years (2001-2004), Learning through Landscapes has been working in partnership with Sport England and the New Opportunities Fund to deliver a targeted programme of school grounds improvements throughout England. As part of this programme, a group of six secondary schools has participated in a more concentrated initiative called the Grounds for Improvement Secondary Action Research Programme. These schools received an award of £50,000 each to enable their staff and students to develop and implement a new approach to school grounds improvement through action research supported by facilitators from Learning through Landscapes and researchers from the National Foundation for Educational Research.

Aims

The stated aim of the Secondary Action Research Programme was “to develop and demonstrate the value of a new approach to the education and motivation of young people in secondary schools, through their full and meaningful participation in the design and management of their own school grounds environment” (Learning through Landscapes, 2001). More specifically, the programme sought to generate innovative approaches and research-

based evidence on improving secondary school grounds in ways that engage and empower young people. This was shaped by two key research questions:

- How can secondary schools engage their students in school grounds improvement?
- What are the impacts of school grounds projects on students and schools?

These questions took account of the fact that very little research has been undertaken on school grounds improvement in the secondary school context, and the work that has been done has tended to look at questions of impact rather than of process.

Methodology

This programme was neither a straightforward school grounds project nor an evaluation of a school grounds project. Instead, it was set up as an action research project, involving a combination of:

- development activities (undertaken by staff and students in the case-study schools, with support from the Learning through Landscapes facilitators and others such as designers or landscape architects);
- action research activities (ongoing in-school reflection and discussion about programme activities by participating staff and students, often in association with the Learning through Landscapes facilitators); and
- evaluation activities (annual cross-school evaluation of developments, progress, and impacts at each of the six case-study schools, undertaken by National Foundation for Educational Research researchers and/or Learning through Landscapes facilitators).

This paper reports findings emerging from the National Foundation for Educational Research evaluation activities undertaken during the first two years of the programme. In order to generate qualitative insights into the process and impacts of the Secondary Action Research Programme, in-depth case-study visits were made to each of the six Secondary Action Research Programme schools towards the end of the first and second year of the programme. During these visits, interviews and/or group discussions were undertaken with: one or two members of staff who had been involved in the Secondary Action Research Programme work; a small group of students who had been involved in the Secondary Action Research Programme work; a small group of students who had not had any active involvement in the Secondary Action Research Programme work; and, where possible, one or two external participants, such as the Learning through Landscapes facilitator, landscape architects, and designers. These interviews, which in several cases were undertaken while walking around the grounds, provided an opportunity to

explore participating staff and students' experiences of the Secondary Action Research Programme work, the nature of their roles, and the extent to which they felt the Secondary Action Research Programme had impacted on the school. Speaking with non-participating students and external participants made it possible to explore perceptions of the Secondary Action Research Programme within the school more widely and the role of external individuals.

The data from these interviews/group discussions was analyzed using a qualitative analysis framework, which looked at the views of staff, participating students, non-participating students and external participants across various aspects of the programme. Emerging findings were then identified across the six schools in relation to the two main research questions. While further methodological discussion is beyond the scope of this paper, more details about the study and related issues are available elsewhere (Carlsson & Sanders, in press; Rickinson, 2004).

Case-study Schools

The six case-study schools were selected by Learning through Landscapes early on in the initial development of the programme. They were selected on the basis of two main criteria: first, they were all secondary schools that had little or no previous experience of developing their grounds or of working with Learning through Landscapes; and second, they were in contrasting geographical locations within England. These criteria were important in terms of being able to learn lessons that would be potentially relevant for other secondary schools in a range of settings with little experience in grounds development.

The sample included schools within inner-city London and Birmingham, outer areas of London, Southampton, and Havant, and a former mining town near Rotherham. All were located in areas of high social deprivation, with well above average numbers of students with eligibility for free school meals. In terms of their outdoor environments, there was a mixture of needs and challenges. Some had considerable space, but very few facilities, others had a predominance of sports facilities but few other provisions, one had little else except bare tarmac and an off-site sports field, and several had difficulties with vandalism, litter and/or seasonal water-logging (see Rickinson, 2004 for more details).

Emerging Models of Secondary School Grounds Development

A key aim of the Secondary Action Research Programme was to generate insights into the ways in which secondary schools might approach the task of improving their grounds. At this stage in the programme, there are two distinct models emerging from the six case-study schools. These are:

- the school council/student steering group model and
- the curriculum-based model.

Figure 2 outlines the key characteristics of the two approaches, before a more detailed consideration of how each worked in particular Secondary Action Research Programme schools.

	School Council/Student Steering Group	Curriculum-based
Staff involved	Staff responsible for school council/student steering group, and a senior manager.	A senior manager and one or two heads of department e.g. technology, science, PSHE ¹ .
Students involved	Members of the school council/student steering group (mixed year groups).	Whole-school consultation followed by work in certain subject classes e.g. technology, science, PSHE.
Rationale	Builds continuity of involvement, and avoids taking non-school council students out of class.	SARP work connects well with learning within particular curriculum subjects.

Figure 2. Two Models of Secondary School Ground Development.

School Council/Student Steering Group Model

This approach to school ground improvement draws on the skills and energies of a particular group of students and staff, either in the form of an existing school council² or a specially-created school grounds steering group. The participating students in this model, therefore, are those who are either elected school council members or individuals who volunteer or are chosen to be involved with a steering group. Active staff participants are those with a responsibility for the school council and/or a particular interest in student participation/grounds improvement. Case-study 1, below, provides an illustration of the ways in which this approach worked in one of the Secondary Action Research Programme schools.

Case-study 1: Making Use of the School Council

The Secondary Action Research Programme process at Longford Community School was coordinated primarily by the school council, which had been created shortly before this project commenced. In the words of the assistant headteacher: “They have been the driving force and they have been the ones who have constantly said ‘This is what we want.’”

The council was made up of two representatives of each year group along with a staff facilitator. They were also supported by input from the assistant headteacher (in the earlier consultation phase), the premises manager (in the later design and installation phases) and the Learning through Landscapes facilitator (throughout the process).

Some examples of the tasks that the school council undertook were as follows:

- developing ideas as to how to collect the views and ideas of other students and staff in the school about the grounds
- making a consultation video about the grounds, which was then shown in a whole-school assembly, and creating a poster to publicize a school grounds competition
- visiting another school that had made improvements in its grounds and then considering what they might learn from this for their own school
- meeting with the premises manager to discuss different design possibilities and then feeding these back to their tutor groups for wider comment.

During interviews towards the end of the implementation phases, the school council members described how they had enjoyed “getting information from the students and then helping the school ... so more people are not just sitting being bored [at break and lunchtime]. They have something to do.”

The benefits of the involvement of council members were further endorsed by the assistant headteacher:

Without them it wouldn't have happened, because we as teachers can't drive this. We would have only put into place what adults wanted and it's not about the learning of the students and they drove it and have created now a space that, hopefully, as you can see, will benefit them massively.

Curriculum-based Model

This model involves staff and students working on school grounds improvement within particular curriculum subjects. It is not uncommon, however, for this model to commence with initial whole-school consultation that is not linked to any particular curriculum area, but which then leads into more focused design and development work in the context of one or more curriculum subjects. This is well-illustrated by the following case-study.

Case-study 2:

Developing School Grounds Through Design and Technology Lessons

The Secondary Action Research Programme work at Millbrook Community School commenced with a range of consultation activities, including:

- Learning through Landscapes-facilitated activities about the grounds with a group of 20 students selected from across all the year groups; and
- informal lunchtime events to collect general student opinion about the grounds using, for example, graffiti walls, picture boards, and video interviews.

The outcomes of these exercises fed into the development of a zoning plan in order to identify areas in the grounds where particular activities might take place.

It was at this stage that the project moved into the Design and Technology curriculum, where the focus was on developing designs for a social seating area and a sports fitness trail. The work involved a class of year 10 students working with designers from a playground design company as part of GCSE³ Technology. The main activity was carried out in a two-day workshop, when students were able to research and sketch designs alongside professional designers, as well as use some professional site survey equipment. The students also had chance to visit the factory where the equipment was made and were able to carve on their designs.

Benefits for Participating Students

A desire to engage students in the process was common to both of the models described above, and attention now turns to what the process has been like for the participating students. It was clear from interviews with participating students and staff at each of the Secondary Action Research Programme schools that several benefits had come from the process of undertaking this work. These were related to students':

- consultation, collaboration, and decision-making skills;
- curriculum and careers-related learning; and
- self-confidence and fulfilment.

Consultation, Collaboration, and Decision-making Skills

A point echoed by participating students at three schools was the way in which this work had provided an opportunity to learn about notions and techniques of consultation. A challenge encountered by members of the school council at one of the schools, for example, was "to decide the best way of getting everyone's opinion without saying 'We want to do this.'" As one of the year 10 (14-15-year-old) councillors explained:

After the visit to [a nearby school that had done work in its school grounds] we came back and we had a discussion about what we saw had happened and all the good and bad with it and then it was the process where we had to decide a method of getting our school involved and keeping them interested as well as tell them what's going on. We had to decide the best way of getting information out and collecting it back in because it wasn't just our project.

Another area of learning described by students was related to the process of collaboration and teamwork. Students at one school reflected positively about the way they had worked together in their school grounds steering group:

The planning has been quite good because we decided everything together and everyone had their opinions and we got all their opinions together and chose what we wanted as a whole to make sure that everyone was happy.

There was a similar story elsewhere from students who had carried out garden design work as part of their ICT lessons. They explained how the process “makes you work good as a team, it's not just your ideas it's everybody else's ideas,” which “helps your individual skills and your team work skills” and “your social skills because you have to talk to a lot of people.” One participant shared how this had impacted on her personally: “Me being very strong-minded, I had to learn to keep back a bit ... I did have to pull my opinions back a bit.”

At another school, where year 9 (13-14-year-old) students had worked in small groups as part of a series of Technology lessons about the school grounds, the collaborative element had brought challenges as well as opportunities. As one female student put it:

It's better to work with a team because you are not doing all the work on your own, but it's also annoying though because you can have fall outs and some people disappear and you've got all the work.

One interviewee made the further point that group work also involved thinking for yourself: “It's harder when you've got to think for yourself rather than ‘Here's the instructions and do it now.’”

Participating students also spoke of developing skills in decision-making. One example of this was in relation to selecting a landscape architect to work on the school grounds project. One year 9 boy had vivid memories of interviewing his school's landscape architect:

There was six of us in the meeting and we were split down the middle, one of them was more organized and dressed smartly and the other one was more arty and relaxed. I thought the one that was better dressed made the better impression, but I thought the other one might have been nicer and concerned with our opinions.

When asked whether he had learnt anything from this experience, he explained that:

I think I learnt that planning is essential and that when you are choosing who you are working with and you are fortunate enough to choose then you should analyze it and plan it and will you be able to work with this person.

He added that this was particularly significant because “often when you are in a work place you don’t get a chance to choose as much as we did.”

A related area of learning mentioned by staff in two schools was the way in which the Secondary Action Research Programme had given students real-life experience of having to make compromises and needing to invest time in the process. A year 10 student who had been part of the steering group in her school reflected how “things kept getting delayed and it showed you how many steps need to be taken to get something done.” At another school, the head of technology commented on the process of students seeing their designs undergo substantial alteration before implementation:

The disappointment they had was a learning experience—we’ve ended up with a compromise. They normally get their own way; paring down to the possible is positive and new for them.

Curriculum and Careers-related Learning

An additional area of benefit for participating students was curriculum-related learning. Within the context of school grounds work undertaken as part of curriculum lessons, there were reports of the development of new skills and understanding relating to design and technology. At one school, the year 10 participating students cited several ways in which their technology-based Secondary Action Research Programme work had been beneficial. One boy had particularly enjoyed being able to “see what they do with measurements on the computer, and how they cut and that,” while others spoke about “putting the ideas onto the computer,” and doing “graphic drawing, and hand sketching.” The active nature of the work was noted favourably by these students: “It has been a lot better getting involved in the process, rather than just paperwork.”

Their comments also suggested that these experiences had been helpful for their studies: “Seeing how all the stuff has been done on the computers—that has helped”; “You know like what you’ve got to do and what is expected on the computer.” This was certainly the view of their technology teacher who felt that the Secondary Action Research Programme work “followed the technology curriculum very closely” and had given them “an understanding of the things that happen when you design things,” as well as “first-hand experience of time scheduling, seeing machines, learning about industrial safety, and planning.” His view was that “these are all things they will take into an exam room” and so “will improve their GCSE results.”

For some students, their Secondary Action Research Programme work had helped to inform their understanding of careers in the design/landscaping area:

It's an opportunity to learn different aspects of the other people's life like designing and architects. It helps people think about what other jobs they want to do when they leave school like designing and helping people out with their garden and things.

Such insights into the working lives of others even had the unexpected outcome of making young people more realistic about the demands of particular careers: "It can actually put you off careers, because I wanted to be an architect for ages until I did this course and now I don't want to."

Self-confidence and Fulfilment

Comments made by staff and students in some of the schools suggested that involvement in the process was beneficial in terms of participants' self-confidence. When asked whether she had learnt anything from her Secondary Action Research Programme experiences, one student participant said that:

I learnt that I prefer doing communication things. I don't get shy in front of people. If I'm in a situation where I need to be confident I can do that. [I learnt that] I can do things if I try.

The head of Personal, Social, and Health Education (PSHE) at another school explained: "their confidence and their belief in themselves has really begun to shoot up." A similar idea was made about student participants by a deputy headteacher: "I hope they feel special, their ideas have been listened to, and some of their ideas have been used."

Student participants at several schools considered that their involvement had given them a sense of satisfaction through having done something "to help the school." A school council member at one school, for example, talked about how she had particularly enjoyed "getting the information from the students and then helping the school ... so more people are not just sitting being bored, they have something to do." A female year 10 participant at another school described how "It helps you to see how much you can make a difference."

This effect was also noted by staff. One assistant headteacher commented that: "They are two weeks from ending their student council year and they can turn around and think 'Yeah, we've done this, we've made it happen.'" In a similar way, one of the participating students at another school spoke of being motivated by "the idea that you've got the power to change the school and you can design how everything would look and what you wanted."

Challenges for Participating Students

The preceding section has highlighted a number of positive impacts associated with the Secondary Action Research Programme process. In highlighting these reported benefits, however, it is important to emphasize that by their nature they are restricted to those students who were actively involved in the process. This is not to detract from the power and significance of the experiences that these students have reported, but simply to emphasize the fact that such benefits cannot be generalized beyond the relatively small group of participating staff and students in each Secondary Action Research Programme school.

Another crucially important point that needs recognizing is the fact that the Secondary Action Research Programme process presented considerable challenges (as well as benefits) for students and staff. Across the Secondary Action Research Programme schools, there were six main types of difficulties associated with the Secondary Action Research Programme process. These suggest that the potential benefits of participation in school grounds improvement can be challenged by:

- *The consultation or design process taking too long.* Students and staff at several schools voiced concerns about maintaining “momentum” during consultation and design work. With hindsight, the coordinator in one school said that “the consultation period was too long; it could have been much more focused.”
- *A sense of hopelessness about the likelihood of future vandalism.* A strong theme in the interviews with participating students at two of the schools was deep concern about the likelihood of future vandalism. Typical comments from one group were: “It will be vandalised after the first week ... that’s what we worry about”; “It is worth doing it, but what’s the point if it’s going to get wrecked anyway?”
- *The active, collaborative nature of the process.* An important point made by a head of department at one school was the idea that undertaking school grounds development through the curriculum can present a considerable challenge for teachers and students. This highlights the important influence that the teaching and learning cultures of individual departments and teachers can have on school grounds development in the secondary school context. As one member of staff remarked, “Secondary teachers can get out of their comfort zones very easily.”
- *Students’ plans not making it into practice.* Participating students at one school expressed considerable frustration about the fact that “all of our ideas got changed.” As one explained, “They said the whole way through ‘Yeah it’s safe enough’ and then at the last minute they said ‘No, it can’t get put through now.’” This was echoed by all the students interviewed, and led one to conclude that the only advice he would give to students in another school was that “It’s a waste of time, because you don’t get what you want.”

- *Conflicts with participating students' other activities or lessons.* The deputy head at one school noted how “pulling students from lessons on a regular basis so that they are missing class is not easy.” Furthermore, undertaking Secondary Action Research Programme work *within* lessons was not without conflicts for some participants: “Sometimes it’s got nothing to do with technology. It’s not really helping us to decide what to take next year. Some people are designing gardens when they really want to do woodwork.”
- *The workload involved.* Several staff made mention of the commitment of time and energy required by the Secondary Action Research Programme process.

What these points make clear is that:

- the process of undertaking this work has not been without difficulties; and
- such challenges can limit the benefits of the process for participating students and staff.

For example, the prospect of students enjoying a sense of power and achievement through planning changes in the school grounds can be severely challenged by the consultation process dragging on too long, or the whole project being undermined by concerns about future vandalism.

Conclusions and Implications for School Grounds Practice and Research

We are hopeful that this programme will generate ideas, challenges, and questions that will speak to the inter-related concerns of school grounds practice and school grounds research.

Implications for Practice

What insights into secondary school grounds development have emerged from this programme? This research suggests there are different ways of approaching secondary school grounds improvement, and it is worth considering whether a school council/steering group model, a curriculum-based model, or some combination of these is most appropriate in a specific setting. The former sees the bulk of the work being undertaken by members of the school council or school grounds steering group, often supported by particular members of staff and external individuals. The latter, meanwhile, involves groups of students undertaking grounds-focused design work within particular subject lessons such as ICT, Design and Technology, or Personal, Social, and Health Education. Each approach presents different possibilities for student and staff participation, and brings with it different types of challenges and benefits.

With respect to student engagement, the feedback from participating students and staff in the case-study school presents a powerful case in support

of active engagement and participatory approaches. Benefits for participating students included insights into the challenges of consultation and collaboration, new curriculum and careers-related skills, and feelings of self-confidence. The process of participation in school grounds improvement, however, was not without its challenges. The insights into the difficulties experienced within this programme should be useful to other schools interested in undertaking this kind of work. For example, process benefits were limited where the consultation or design process took too long, where students felt there was a high likelihood of future vandalism, where students' plans did not make it into practice, and where there were conflicts with students' other activities or lessons. This underlines the need for careful and sensitive facilitation, in terms of ensuring a suitable pace, connections between consultation and implementation, communication between active participants and the wider student body and appropriate roles for landscape architects or designers.

In conclusion, the Learning through Landscapes Secondary Action Research Programme can be seen as providing the early beginnings of research evidence on addressing the widespread neglect of outdoor spaces within the secondary school sector. The findings outlined above need to be seen as ideas that can be applied, tested, and developed in other secondary school contexts within, and possibly beyond, the UK.

Implications for Research

There are a number of ideas for future research that might be drawn from this work. It is clear that the school grounds greening process remains little understood and little researched. This work suggests a need for more sustained and careful attention to be given to several aspects of secondary school grounds development. For example, we think that deeper empirical insight is needed into the ways in which secondary schools conceptualize and manage the process of improving their outdoor spaces, and the ways in which the barriers to meaningful student engagement can be negotiated in collaboration with staff and external professionals. Questions of the longer-term sustainability of this work and the impacts of rhythms of change are other dimensions for future reflection and attention.

We also see a need for school grounds research that is about the school as well as the grounds, and most importantly, the relationship between the indoors and the outdoors. The programme reported here has been very much about the beginnings of the improvement process, with little consideration (as yet) of the longer-term impacts on teaching and learning cultures within and beyond the classroom. With growing interest in the re-design of indoor classrooms, there is potential for more integrated enquiries into the indoor and outdoor teaching and learning environments within schools. Related to this are schools' and teachers' philosophies of learning and the extent to which these incorporate a conception of learning as an indoor and outdoor activity. As

Malone and Tranter (2003) found in their study of Australian primary schools: “The school ground design, although instrumental in the potential for extending curricula, is not as vital as having a view of learning that does not distinguish between the indoor-outdoor environments” (p. 299).

Finally, our ongoing experience of this programme has highlighted the value of school grounds initiatives involving partnerships between school staff/students, school grounds professionals and researchers. The challenge of facilitating reflection as well as action, learning as well as physical change and documented experiences as well as lived experiences, is both central and critical. There needs to be many voices, perspectives, and positions in both the doing and the using of future school grounds research.

Notes

- ¹ Personal, Social and Health Education (PSHE).
- ² For more information about School Councils in UK schools, see Taylor, M. with Johnson, R. (2002). *Schools' councils: Their Role in Citizenship and Personal and Social Education*. Slough: National Foundation for Educational Research.
- ³ General Certificate of Secondary Education (GCSE).

Acknowledgements

The authors wish to acknowledge: Barbara Chillman, Pippa Doyle, and Neil Jameson at Learning through Landscapes; Marian Morris, Emma Scott, Sue Stoddart, and Julia Rose at the National Foundation for Educational Research; and staff and students at each of the six participating schools. The comments received from our anonymous reviewers were also extremely helpful in finalizing the paper.

Notes on Contributors

Mark Rickinson is a self-employed research consultant, specializing in educational research/evaluation and the use of research by practitioners/policy-makers. Until recently, Mark worked at the National Foundation for Educational Research. He has worked with Learning through Landscapes on their Secondary Action Research Programme and A Guide to Evaluating School Grounds Projects.

Dawn Sanders was a Senior Research Officer at the National Foundation for Educational Research, co-working with Mark Rickinson on environmental education research. In November 2004, Dawn successfully defended her D.Phil thesis, “Botanic gardens: ‘Walled, stranded arks’ or environments for learning?”

at Sussex University. In June, 2005, Dawn became a post doctoral research associate at King's College, London, working with Justin Dillon.

References

- Barker, S., Slingsby, D., & Tilling, S. (2002). *Teaching biology outside the classroom: Is it heading for extinction? A report on biology fieldwork in the 14-19 curriculum* (FSC Occasional Publication 72). Shrewsbury: Field Studies Council.
- Bentley, T. (1998). *Learning beyond the classroom: Education for a changing world*. London: Routledge.
- British Broadcasting Corporation (BBC). (2004). *Schools "shying away from trips."* *BBC News*. Accessed on 11 October 2004 at <http://news.bbc.co.uk/1/hi/education/3694556.stm>.
- Burke, C. & Grosvenor, I. (2003). *The school I'd like: Children and young people's reflections on an education for the 21st century*. London: Routledge Falmer.
- Carlsson, M. & Sanders, D. (in press). *Perspectives on participation in collaborative projects between schools and external actors*. Copenhagen: Danish University of Education Press.
- Department for Education and Skills. (2002). *Schools for the future: Designs for learning communities* (Building Bulletin 95). London: The Stationery Office.
- Department for Education and Skills. (2004). *Department for Education and Skills: Five year strategy for children and learners* (Cm. 6272). London: The Stationery Office.
- Dymont, J.E. (2004a). *The potential impacts of green school grounds: Report of the research*. Unpublished report.
- Dymont, J.E. (2004b). "At that age, you just accept what you have ... you never question things": A case study of student participation in school ground greening projects. *Children, Youth and Environments*, 14(1), 150-160.
- Learning through Landscapes. (2001). *Secondary action research programme: A guide for schools*. Unpublished document.
- Malone, K. & Tranter, P.J. (2003). School grounds as sites for learning: Making the most of environmental opportunities. *Environmental Education Research*, 9(3), 283-303.
- Policy Commission on the Future of Farming and Food. (2002). *Farming & food: A sustainable future*. Accessed on 15 October 2004 at <http://archive.cabinetoffice.gov.uk/farming/pdf/PC%20Report2.pdf>.
- Rickinson, M. (2004). *Grounds for improvement: Secondary action research programme*. Final report. Accessed on 8 February 2005 at <http://www.ltl.org.uk/research/documents/SARP%20Report.pdf>.
- Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M., Sanders, D., & Benefield, P. (2004). *A review of research on outdoor learning: Executive summary*. Shrewsbury: Field Studies Council.
- Skamp, K. & Bergmann, I. (2001). *Facilitating learnscape development, maintenance and use: Teachers' perceptions and self-reported practices*. Lismore, NSW: Southern Cross University, School of Education.
- Titman, W. (1999). *Grounds for concern: A report on secondary school grounds*. Winchester: Learning through Landscapes.