

Flourishing collaborations: the story of Wakehurst Place, RBG Kew and a local school.

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1. Doing research in Botanical Gardens' education

‘We need to pay attention to the actual process whereby research is carried out...If the researcher is living for an extended period in the community he is studying, his personal life is inextricably mixed with his research. A real explanation then of how the research was done necessarily involves a rather personal account of how the researcher lived during the period of study’ (Whyte, 1993: 279). This presentation aims to give an insight to my ongoing PhD research and share some preliminary thoughts emerging from my data.

From my previous experience as an educator in the Balkan Botanical Garden of Kroussia, Greece I had identified the relationships between botanical gardens and schools as an important and interesting area for research. My literature review acted as a dual impetus: to place my research interest in the wider context of outdoor education and to spot a neglected aspect of the topic (Bryman, 2004).

Sanders (2005) conducted a longitudinal study of a sample of 7-11 year old pupils from three schools visiting the Chelsea Physic Garden as part of their school work and concluded that most benefit is to be gained by the learner when the botanic garden visit is more than a ‘one-off’ event and builds upon knowledge gained by experiencing cumulative visits over several years.

Stewart (2004) investigated the nature of learning in a botanic garden by focusing on the excursion experiences of primary and secondary school’s students and teachers to Royal Botanic Gardens Sydney. The findings demonstrated that school excursions to a botanic garden involve two types of learning: learning for cognitive gain refers to the measurable cognitive outcomes that students can achieve during tightly structured activities such as visits to specific displays to conduct specific tasks. ‘Scheme –building’ learning is achieved when students demonstrate long term recall of plants, plant displays and specific locations at a botanic garden.

An exploration of the educational role of botanical gardens should not miss reference to the wider context of outdoor education in UK. Although outdoor education in 50’s and 60’s gained popularity especially with the establishment of various outdoor education centres, since ‘70s it has seen a decline partially because of the reduced funding to local education authorities and a lack of a strong positioning of outdoor education in the school curriculum (Higgins & Morgan, 1999). Within contemporary educational discourse, there is evidence of renewed interest in the educational significance of learning beyond the classroom highlighted recently by the Department of Education and skills publishing the ‘Learning outside the classroom manifesto’.

2. The ‘what’ and the ‘so what’ of my research

A thorough literature review of research on outdoor learning (Rickinson, *et al.*, 2004) argued the need for in-depth considerations of the ‘learning’ aspect of outdoor learning, and also for further research on the relationship between indoor and outdoor environmental learning.

My research question arises from both research gaps and indications from current practice: What are the learning opportunities for students, teachers, Botanic gardens educators and volunteers during the collaboration of local schools with Wakehurst Place, Kew Gardens?

This inquiry will open current practice up to scrutiny by identifying the links between how schools and botanical gardens collaborate, factors that promote or impede their collaboration and the learning that takes place (intended and unintended) during their educational interactions. How the learning in botanical gardens can be integrated to the learning that takes place in the classroom will also be addressed.

The proposed research, apart from aiming to address research gaps, is aiming to contribute to educational practice as well. My research intends first of all to improve my own practice as an educator by gaining a better understanding of how pupils learn in a Botanical Garden. Also I intend to inform the current practices and the effectiveness of Wakehurst Place learning programme and schools' outdoor education. Given the great pressure that school inspection puts on teacher and head teachers related to the school curriculum and achievements, this research is a good opportunity for the school to gain evidence on the impact that the visits to the gardens have on learners. Other Botanical gardens and schools may be also inspired and get ideas from the specific collaboration I am investigating and adopt elements of the collaboration that make sense and fit with their unique conditions.

My research findings up to this stage confirm my intentions. One of the school teachers commented when I asked him if he intends to evaluate what was learned during the outdoor activities in the Botanical Gardens: 'I don't have much time since the curriculum requirements are too many. So it's really good that you are here, doing the interviews asking the pupils these questions' (Interview with teacher 13/3/2007). One of the Botanical Gardens' educators pointed out 'it's useful for me to participate in these interviews as by your questions I am reflecting on my practice which I wouldn't do otherwise in such a detailed way' Also she added that my research will put light on what happens after the visit because when the schools leave the gardens the educators don't have any information about the effect of their teaching (Interview with Wakehurst Place educator, 18/9/2007).

3. Seeking a flourishing collaboration: the choice of my case studies

The research has focused on Wakehurst Place, Kew Gardens and its close collaboration with one local school. The choice of the particular cases was made on the grounds of the case from which the researcher can learn the most. Wakehurst Place has been chosen because it is managed and funded by Royal Botanical Gardens Kew which has a long history and significance as a botanical garden in Britain and worldwide. Another determinant for selecting Wakehurst Place is its well established educational programme, continuously improved over the years. It is important that for school visits to Wakehurst Place, teachers have the opportunity to plan the activities with the gardens' educators. This kind of operating allows enhanced quality of the programmes and the development of more close relationships between schools and the gardens. The specific local school which is situated in walking distance from the gardens, is a country side, small school with 100 mainly English, with middle class background pupils. The choice of the school was made because of its long term relationship with Wakehurst Place and its contribution to the development of Wakehurst Place learning programme. Because of the walking distance all the pupils of the school have the opportunity to visit the gardens more than once every year as part of their school outdoor education. Wakehurst place is regarded as the outdoor classroom of the school as one teacher highlighted (Interview with school teacher 12/10/2006)

4. The ethnographic approach

The main methodology used in this study is ethnography. Ethnography and especially participant observation entail the extended involvement of the researcher in the social life of those he studies (Bryman, 2004). In more detail my research design includes:

- Participant observation in the school classroom of any preparation work that may occur before the visit to the Gardens.
- Observation of the 'planning meeting' between the Gardens' educator and the school teacher.

- Participant observation of the school visit. I usually walk with the pupils to the gardens and follow them throughout the visit.
- Interviews with the Gardens' educator and the volunteers immediately after the visit.
- Participant observation of any follow up activity in the school after the visit. Interviews with the school teacher and six pupils after the visit.
- Participant observation of school activities related to the school-gardens collaboration or also to the environmental policy e.g. the gardening club or the Eco-school committee meetings.
- Participant observation of the learning programme at Wakehurst place e.g. other school visits, educational events for the wide public.

My role as a researcher in the field is varied according to the conditions of each situation. I may be an observer e.g. during the planning meetings or a volunteer during different school visits or even an assistant for school activities e.g. the gardening club.

Access to my settings was an important factor that required special attention. I sent consent forms to the pupils' parents and the pupils were also directly asked if they would like to be part of my research. I was checked through the Criminal Records Bureau for being able to work with children. Furthermore, as part of preparing my fieldwork both the school and the Botanical garden agreed on a Memorandum of understanding which set out guidelines to roles and responsibilities of all participants in the research. But being actually accepted in the everyday activities of the people I am investigating was a more slow process with lots of concern about whether I was accepted or not by them. Spending extended period of time in the Gardens and the school has paid me back by the development of a more informal and relaxed relationship with my participants and their willingness to inform and involve me in their everyday practices.

My research techniques vary from semi-structured interviews (individual interviews with adults and group interviews with pupils), to informal talks, collecting documents, fieldnotes for recording observational data and keeping thoroughly a research diary with reflections on the day and preliminary thoughts about my data. An important feature of ethnography is that the researcher is interested in seeing through the eyes of the people being studied. A variety of techniques are being used for the collection of qualitative data in order to catch the close-up reality and develop a 'thick description' of participants' lived experiences (Cohen *et al.*, 2005). Simply describing what is seen and heard is not enough. To ascribe meaning to observations of specific activities and behaviours one must engage in a process of interpretation that Geertz (1973) has called 'thick description'.

5. A thick description emerging from a visit to Wakehurst Place

An example of fieldwork data and interpretation in the form of thick description developed around the structure of the educational activities in the Gardens, the pupils' self directed learning stimulated by the gardens environment and the dilemma that educators face whether to integrate pupils evolving interests or keep on the initial plan of the visit.

Class5 (10-11 year old pupils) visited Wakehurst Place on 3/10/2006. The theme of the day was 'a place to grow, how plants adapt. 'When the children in the end of investigating the birch habitat started touching the bark one girl asked: 'why the birch is peeling off?' Many guesses from the children followed the question and then another pupil asked 'why other trees don't do that? Sharon linked the change of the trunk's surface with the change of the human's skin. One boy was peeling the birch bark and some others did the same' (Fieldnotes 3/10/2006).

Boy2: This is when we were looking at the birch tree skin, bark.

Researcher: what exactly were you doing with the bark?

Boy2: we were just looking at it, it was pulling off very easily

Girl 1: we were looking how

Girl 2: how it came off

Girl 1: yeah how it shredded its bark (Interview with class5&6, 4/10/2006).

Both school teacher and Gardens' educator recognise that there is a dilemma about following strictly the planned activity or being flexible and integrate pupils' own interest. But that means that the educator should be very knowledgeable and experienced to adjust his teaching accordingly without any preparation.

Teacher: I mean for example you know when we were talking about the tree that had a bark that was waterproof. ...That I think, I saw a couple of boys particularly when she (gardens' educator) said we make boats with this bark I was thinking what they wanted to do was 'we are gonna find some water with this bark and pure it on'; actually prove that it was waterproof. But we only talked about it. And there's no follow up. That would have been perhaps more interesting...I think the option to do a little bit more of that at Wakehurst perhaps would be good, but again it would be hard if the staff aren't experienced teachers. It's not easy just to divert from your planned day so maybe that might be expecting a bit much I think (Interview with the teacher, 12/10/2006).

Gardens educator: It was interesting what the children picked up with the bark that had nothing to do with 'a place to grow' or 'plant adaptation'. But it was something that several of them were interested in and then someone said 'how does the oak tree do it' they don't all peel, why they don't all peel bark off like this? And then picking it up again on the trail, talking about the horse chestnut, looking at the bark and how that has shed it' bark in pieces in different ways... I think it's very good to listen to what children are saying, the questions they are asking and be flexible enough to you know incorporate that...this is a question I am asking myself really, is it better to follow the children's interest and what the children want to learn, because if they want to learn it then they will learn it very well or is it better to stick rigidly, to what you know the teaching objectives are? (Interview with Gardens' educator 3/10/2006).

6. References

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