TOWARDS THE EFECTIVE PARTICIPATION OF CHILDREN IN ENVIRONMENTAL MANAGEMENT: PLANNING AN ENVIRONMENTAL EDUCATION CENTRE AT WOLFGAT NATURE RESERVE

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Abstract

This paper promotes the inclusion of children within existing public participation processes and shows that children can participate effectively and meaningfully within the field of Environmental Management.

Within South Africa environmental practitioners are still becoming accustomed to public participation exercises and as such are not yet concerned about the role children can play in the process. Due to the limited academic literature on children's participation within a South African context international literature is used as a basis for the research and analysis of a recent project undertaken in Khayelitsha (Cape Town).

Five Grade 10s from a school nearby Wolfgat Nature Reserve were involved in the planning of a proposed Environmental Education Centre.

Although the project was initiated by adults it fulfils most characteristics of effective and meaningful participation. The fact that this project links directly into an existing process and that the learners will present their findings at a community level allows both parties to benefit from the process. In addition through the process learners have become more aware of the pressing problems within their community and are able to contribute on a larger scale.

Key words

Children's participation, Environmental management

Introduction

This paper argues for the inclusion of children within existing public participation processes in South Africa. A project in Khayelitsha illustrates how children can participate effectively and meaningfully within the field of Environmental Management in the planning of an Environmental Education Centre.

It is widely recognised that children should form an integral part to any development process and part of their human right is to participate within that process. As this is a relatively new concept in South Africa, the international literature provides the theory for the practice of children's participation.

The cornerstone of children's participation is the1989 UN Convention on the Rights of the Child (especially schedule 12) which since its promulgation has been incorporated into a number of other international initiatives such as Agenda 21 and the Habitat Agenda.

The concept of involving children in planning is not new. The Growing up in Cities programme (GUIC) set up by UNESCO in the late 1970s set out to involve children in changing policies for the planning of city space. More recently there have been an increasing number of environmental projects where children have formed an integral part of the process. Hart (1997) has written a book specifically about the theory and practice of involving citizens in community development and environmental care and there have also been a number of books and a very recent UNICEF[1] publication specifically on the topic of children's participation.

Researchers agree that there are no blueprints for effective participation with children. Each project must develop its own methodology appropriate to its own aims (Lansdown, 2001). Two experienced practitioners do however provide some form of assistance or guidance. Hart (1992) does suggest categories of children's participation, which are more a means to show what is not participation. Lansdown (2001) has proposed a list of characteristics of genuine and effective participation that apply to all efforts to involve children.

A recent project in Khayelitsha (Cape Town), in which Grade 10 learners from a school near the previously neglected Wolfgat Nature reserve have been integrated into the public participation

process, is assessed against Hart's (1992) ladder and Lansdown's (2001) characteristics. The learners are tasked with the planning of an environmental centre for Wolfgat Nature Reserve which they will present at a community meeting in August and among peers at the Science Expo in the same month.

This centre has been identified as one of the future priority projects within the Environmental Management Programme and thus they are able to contribute at an early stage within the process.

The analysis of the process showed that although adults initiated this project, on most accounts it involved effective and genuine participation by the learners. The major flaws were mainly in the project's lack of inclusiveness and equality. This was because the project involved a group of children specifically chosen within the context of an existing project. Another problem was the fact that at times the facilitator controlled and directed proceeding without collaboration with the children on goals and the methods of involvement.

The learners all expressed how they were proud to be involved in the project and that their parent's or guardians were proud of them. The officials have encouraged the process of involving learners and the learners are now more prepared and confident in their plans for the Environmental Education Centre. In addition to this some of the learners have their own ideas for improving the environmental awareness of Khayelitsha residents. Therefore this project is in the rare category where participation has the potential to benefit all parties involved and to contribute to the sustainable development of Wolfgat Nature Reserve.

Literature Review

Since the 1970s, but more so in the 1990s, children's participation has increasingly been evident in the environmental and development sectors. Although not common practise, the active involvement of children is becoming integral to the overall sustainability and success of a number of projects (Hart, 1997).

There are now a number of books and UNICEF publications that illustrate examples of projects, both in first and third world contexts, where children (mostly 14 and under) are genuinely participating and have been actively involved in community development, environmental care and

[1] United Nations Children's Fund

planning projects or programmes (Hart, 1992, Hart, 1997, Johnson *et al.*, 1998, Holden and Clough, 1998, Lansdown, 2001).

A large number of the projects are linked to social development issues such as health and welfare. An important lesson to be learnt from these projects is that children can participate within different aspects of environmental work. There are examples of children being involved in the initial planning and conceptualisation of a project, in the active management, monitoring, research, analysis and lobbying. There seems to be no limit or extent to which that children can participate. The major constraint is generally the perceptions of adults who underestimate the capabilities of children (Johnson *et al.*, 1998).

Children's participation in South Africa

Academic literature within South Africa reveals a limited number of published articles that illustrate the active participation of children in environmental management projects. The academic fields where examples of active participation by children in projects are mostly found in the fields of Sociology (de Wet, pers. comm.).

A project undertaken in an informal settlement in Johannesburg, within the Growing Up in Cities (GUIC) programme mentioned below in the international section, provides an excellent example of participatory work undertaken within South Africa. Swart-Kruger (2000) discovered at first children did not feel comfortable by being involved in the project. However the project did manage to link children with officials in Johannesburg and to establish stronger structures whereby children's views could be heard by decision-makers.

Environmental Education as a field of study that is potentially the most closely linked to the subject of children's participation in environmental management. Despite this potential link, few academic papers could be sourced on the subject, although a paper by Johnson (1994) had involved children from the local community in the development of an Environmental Education Centre. The practice of participation has a stronger practical basis and despite the scarcity of academic literature, there are projects undertaken by consultants, local governments and most notably schools across the country where children participate in environmental management (Buirski, L., pers. comm.). The problem is that not many of these projects or programmes are linked to existing public participation processes which generally run independently of Environmental Education initiatives.

The above information is not entirely surprising in the light of the current approach to public participation. It is a widely accepted principle that broad based community involvement is essential for responsible and accountable environmental planning and resource management (Kahn, 1998). Ideally the aim of participation is for all parties to work together to produce better decisions than if they had acted independently but in practice many technical specialists find the involvement of public in projects as an "irritating add-on" (Greyling, 2000, p. 154).

South Africa ratified the Convention on the Rights of the Child on the 16th of June 1995 but it is not surprising that relatively few environmental practitioners have taken note of the participatory rights schedule within the Convention. With the plethora of laws applicable to the environmental field, children's rights seem to be the least of practitioners' worries. However environmental law has not entirely forgotten the child or in this case 'youth' as shown by principle 2 (4)(q) of the National Environmental Management Act (Act 107 of 1998) which states: "the vital role of woman and youth in environmental management and development must be recognised and their full participation therein must be promoted".

Participatory approaches and methodologies remain a relatively new concept for South Africans (Swift, 1998). Thus at a time where effective public participation is a relatively new practice for environmental practitioners they must be reminded that it is also an international and national legal requirement to recognise youth. This paper shows that, instead of being another 'irritating add-on', the effective and genuine participation of children can improve the process of public participation.

International literature

> Young people must be active participants in evaluating their communities, in determining priorities for change, and in helping make change happen. In the process, they not only improve the quality of their communities, but develop greater awareness of the world around them, greater appreciation of their own value and capabilities, and invaluable experience in being constructive, contributing members of their communities (UNESCO, 1977, foreword).

Within international literature the idea of actively involving children in issues concerning their immediate environment is not new. One of the earliest programmes established explicitly to involve

children in the planning of their local environment is the Growing Up In Cities (GUIC) programme initiated by UNESCO[2]. GUIC originated in the participatory planning movement of the 1970s, and specifically the ideas of the influential urban planner, Kevin Lynch. Lynch believed it was necessary to understand how children and adolescents use and perceive their local environment in order "to make a better quality of life a reality for all." (UNESCO, n.d.)

Children's Rights

The UN Convention on the Rights of the Child (the Convention) adopted on 20 November 1989 provides the cornerstone for children's participatory rights. Flekkoy and Kaufman (1997, p. 6) deal with the history and rationale behind children's rights by explaining that in a democratic society the concept of human rights rests on a concern for the "protection of the dignity, integrity and equality of the individual as well as for society". Many parents fear that children's rights imply a loss of control over children who already have too much freedom (Hart, 1997). However, Lansdown (2001, p.1) believes that what is implied by the convention is that "adults need to work more closely in collaboration with children to help them articulate their lives, to develop strategies for change and to exercise their rights".

Article 12 of the Convention on the Rights of the Child lies at the heart of the participatory provisions of the Convention stating that children have the right to express their views on matters that affect their lives. It is this participatory clause that has provided the basis for many projects currently being undertaken worldwide.

The participatory principles of the Convention have also been integrated into a number of other international initiatives. The most significant being Agenda 21, which stems from the Rio declaration of 1992. In section B of chapter 25 DEAT (1998 p. 50) states:

> National governments, according to their policies, should take measures to ensure that the interests of children are taken fully into account in the participatory process for sustainable development and environmental improvement.

[2] United Nations Educational, Scientific and Cultural Organisation

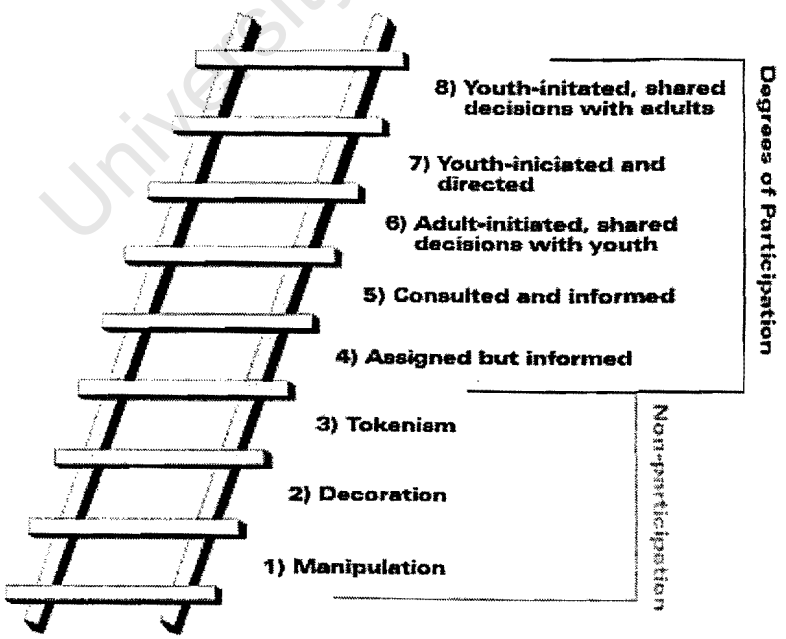
What is effective participation?

Leading researchers in the field of children's participation agree that there are no blue prints to effective consultation and participation with children and that participation must be a dynamic, constructive process (Hart, 1997, Lansdown, 2001). They do however provide researchers with some structures and general characteristics that can be useful for the assessment or guidance of projects.

The ladder of children's participation

Hart (1992) first put forward an adaptation of Arstein's ladder which is an indicator of categories of participation (Figure 1). Later Hart (1997) argues that children may operate at one of the upper rungs of the ladder depending upon their ability and interest in the project. Ultimately this ladder should provide guidance on how adults can support the involvement of children to the maximum of their desire and capacity. A summary of the ladder for children's participation from Hart (1997) is expanded on below.

Figure 1 - Ladder of children's participation (Hart, 1992)



Manipulation or deception

This is found at the lowest rung of the ladder and thus reflects the worst form of child participation. Manipulation or deception suggests adults consciously use children's voices to carry their own messages.

Decoration

Children are often used to 'fly the flag' for a cause or process they do not truly understand or for which they had no prior involvement in.

Tokenism

Children are often asked by adults to present projects where the children have had little or no choice about the subject, the style of communication or expression of their own opinions. It is a common form of participation, particularly at conferences where children from a certain ethnic group or other oppressed minority are used to communicate 'adult' findings.

It is important to note that the first three rungs are classified as being non-participation and that participation starts at rung four. Hart (1997) stresses that it is not necessary that children always operate at the highest possible rungs of the ladder. The most important principle is choice. It must be realised that children may not want to participate to the maximum degree of their ability in all projects.

Assigned but informed ('social mobilisation')

This is a commonly used approach to children's participation by international development agencies working in developing countries. Social mobilisation alone achieves very little in the democratisation of children it merely carries messages from adults to children in a short-term top down approach. Children also learn that they are only used when needed.

Consulted and informed

These are projects designed and run by adults. However they have virtue as participatory projects when children understand the process, are consulted and have their opinions treated seriously.

Adult-initiated, shared decisions with children

To achieve real shared decision projects, children need to be involved in some degree in the entire process. Often children are involved in the conceptual part of the project and then adults finish it off often compromising certain of the children's options due to realistic constraints. However it is felt that children should know why compromises are made and thus be involved, even at the implementation phase so as to understand the reality of projects.

Child initiated and child directed

It is difficult to find projects that fit into this category. Children's playtime is regarded as an important time when children can initiate and direct their own ideas and as such is seen as an important training ground where children learn how to cooperate with others. In reality children will more often carry out projects in secret because they fear that adults will not understand their desire or capacity to carry them out.

Child-initiated, shared decisions with adults

The ultimate aim of participation is not to create entirely independent functioning groups of children. Well organised groups of teenagers understand that, although they may be able to carry out projects themselves, they may need to work with adults in positions of power at some time. Thus it is important for decisions to be shared. A lesson that adults need to learn is that they do not always need to be the initiators of projects and often it is
better to listen and observe , encourage and empower.

Characteristics of effective and genuine participation

In a recent UNICEF publication Lansdown (2001) suggests a number of characteristics of effective and genuine participation that provide a useful guideline for analysing projects.

Figure 2 - Characteristics of effective and genuine participation

THE PROJECT

- Issue is of real relevance to children themselves
- Capacity to make a difference – where possible produce long-term or institutional change
- Linked to children's direct day-to-day experience
- Adequate time and resources made available
- Realistic expectations of children
- Clear goals and targets agreed with the children
- Addresses the promotion or protection of children's rights

VALUES

- Honesty from adults about the project and the process
- Inclusive- equal opportunity for participation by all groups of interested children
- Equal respect for children of all ages, abilities, ethnicity, social background
- Information is shares with the children to enable them to make real choices
- Children's views are taken seriously
- Voluntary nature of children's involvement
- Decision-making is shared

METHODOLOGY

- Clarity of purpose
- Child-friendly meeting places, language and structures
- Involvement of children from the earliest possible stages
- Training provided to help children acquire necessary skills
- Methods of involvement developed in collaboration with children
- Adult support provided where needed
- Strategies developed for sustainability

Lansdown (2001 p. 11)

Louise Chawla summarises the main issues highlighted above in the foreword of a recent South African GUIC programme

> There is much talk now about children's participation, but with the rhetoric is the risk that children may be used in tokenism or manipulative ways as decoration or tools in adult schemes. The story of Canaansland demonstrates that when children are approached in an authentic spirit of co-operation, they have insights that only they can share about the problems and possibilities that they face, as well as well-considered and feasible ideas how to make their lives and life for their community better (Chawla, 2000, foreword).

It is against this background and with particular reference to Hart's ladder of participation and Lansdown's characteristics of effective and genuine participation that the participation of learners in the planning of an environmental centre at Wolfgat should be evaluated.

The planning of an Environmental Education Centre

The inspiration for this research is drawn from a group focus interview held with grade 11 learners from the Centre of Science and Technology (COSAT) in Khayelitsha. The learners all come from Khayelitsha or nearby settlements. These settlements are some of the poorest within the City of Cape Town (CoCT) and the majority of the learners have grown up in poor socio-economic conditions.

The interview was used to enrich the social information of the Conservation and Development Framework for the False Bay Coastline project, a project undertaken by UCT Masters students for the CMC[3] Administration. The aim of this project was to develop an initial framework whereby developments within the False Bay Coastal area could be assessed and valuable resources in the area protected and enhanced. As very little qualitative data was available on perceptions and uses of the False Bay Coastline the study team consulted the group of learners (Davey *et al.*, 2001).

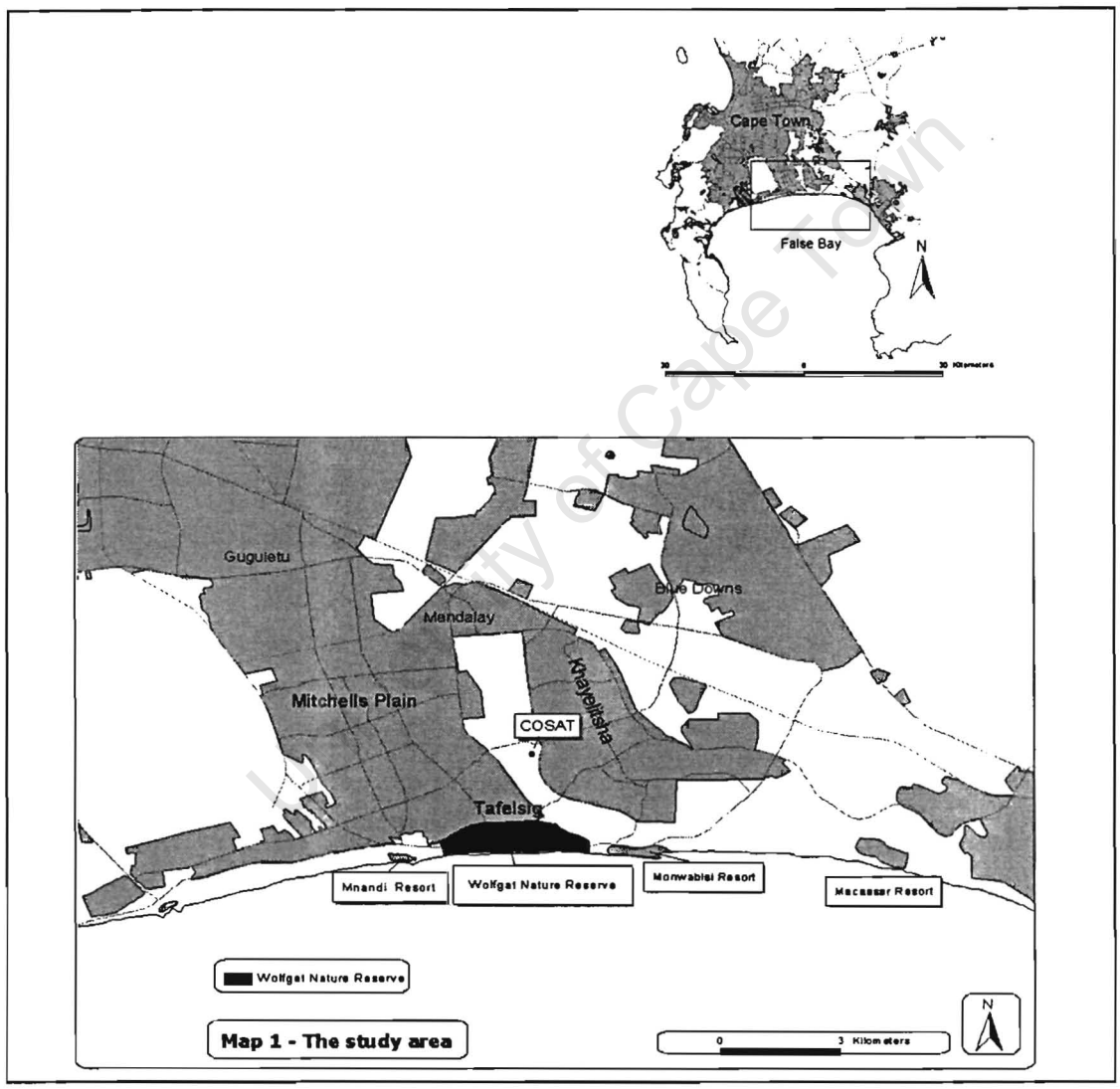
The insights that these learners shared about cultural linkages to the sea and open space as well as their personal perceptions of the coastline highlighted the usefulness of such research. The children expressed strong and well articulated views on a number of issues. They emphasised the social importance of parties that take place during the summer holidays and voiced passionate opinions regarding the planning of urban initiation sites. The latter was of particular relevance to them as many of the boys were about to go through the ceremony within the year. They were also able to explain other cultural events unfamiliar to the study team.

Within the context of the aforementioned literature on children's participation the initial involvement of learners (Davey *et al.*, 2001) would be classified as being non-participative and placed at the level of rung 3 'tokenism' of Hart's ladder (see figure 1). The students were being consulted in order to gain extra information within a specific aspect of the research being conducted. They were not informed about the greater project and as such had little or no say within the greater designs of the project.

[3] Cape Metropolitan Council

Wolfgat Nature Reserve

The Wolfgat Nature Reserve (Wolfgat) is located on the False Bay coastline south of the Cape Flats settlements of Mitchells Plain and Khayelitsha (see map1). Although declared as a nature reserve in 1986, it has been neglected and poorly managed and in the early 1990s there was a feeling that it may be deproclaimed. However, Khan (1994) through interviews with residents of Mitchells Plain found that the reserve was supported by most of the residents but that there was significant number of people who were not aware that the reserve even existed.



For a time in the 1990s the reserve was used as an outdoor classroom by local teachers but has since been poorly managed and social conditions in the neighbouring settlement of Tafelsig have deteriorated. These views are supported by Davey *et al.* (2001) who in their recent social

assessment of Mitchells Plain noted that Tafelsig was an area often publicised for its high incidence of gang related crime.

The Environmental Management Programme

Historically there was no public participation in the process of developing the 1992 management plan and since 1997 management decisions have been largely ad hoc with very little involvement of the surrounding communities (City of Cape Town: Cape Town Administration, 2001). The City of Cape Town (CoCT): Cape Town Administration is currently reviving the status of Wolfgat by formulating an environmental management programme for the reserve. This programme will be a publicly agreed plan and to date there have been a number of public meetings which have been well attended by interested and affected parties from Mitchells Plain and for the first time, within the history of Wolfgat, residents of Khayelitsha have been included in proceedings. The management programme is still in its draft form and will shortly be going to council for acceptance (O' Donoghue, B., pers. comm.). Although the public participation process has been thorough and commendable there has been no involvement of the 'public' below the age of 18 at any of the meetings.

COSAT

The Centre of Science and Technology (COSAT) is a pilot project initiative of the Western Cape Education Department, situated on the campus of the Good Hope College in Khayelitsha located approximately two kilometres from the eastern boundary of Wolfgat (see map 1.). The school offers full-time tuition to small groups of learners drawn from local township secondary schools on a three year programme (Grades 10-12) devised to produce high quality matriculation passes particularly in mathematics and physical science. COSAT came into being in 1999 and in that short period the learners have been strongly involved in extra-mural activities of which a number have been linked to environmental projects (Clark, J., pers. comm.).

Limitations and constraints

One of the major limitations to the study was time. The time available to work with the learners due to their school commitments, and the academic commitments of the project facilitator resulted in

the research being limited to a month. Thus this paper is largely an assessment of the section of the project in which the researcher interacted with the learners. This work was completed approximately a month and a half before the group's presentation at the Expo for young scientists and the community meeting.
The project will continue under the guidance of one of the teachers at COSAT.

The timing of the project overlapped with the learner's exams which was a distraction factor for some of the learners.

Language was also a potential constraint as the researcher/facilitator used English and all the students were first language Xhosa speakers.

Methodology

The project was initiated in early May of 2001 through independent negotiations first with various teachers at COSAT and then with the City of Cape Town: Cape Town Administration manager of the environmental management programme for Wolfgat. It was decided that the project would form a part of the extracurricular work of the learners and be put forward as an entry to the annual Expo for young scientists [4]. The project would also provide the grounds for the facilitators research project. Most significantly it would be integral to one of the major projects proposed within the draft environmental programme for Wolfgat Nature Reserve whereby the planning of an Environmental Education Centre is proposed (City of Cape Town: Cape Town Administration, 2001). The outcome of the project will thus be of benefit to the officials and it was suggested by one of the officials that the learners present their findings at a Wolfgat environmental management programme community meeting planned for August.

The main role of the researcher was as a facilitator, guiding the learners in their planning of an Environmental Education Centre through group discussions, meetings with environmental professionals and field trips. Throughout the process the researcher (referred to as the facilitator from this point on) encouraged the learners to develop an original plan that the learners could substantiate through their own research and personal experiences.

Meetings with the learners took place intermittently over a period of five weeks starting just before their midyear examinations and ending on the last day of the term in June 2001. All meetings were facilitated in English although informal discussions among the students were always encouraged, where Xhosa was used.

Each meeting and field trip provided an opportunity for the facilitator to record observations of behaviour, level of interaction and what the group or individual learner had achieved. Once the learners had presented a consolidated design of their proposed Environmental Education Centre a focus group interview was held in which learners could express their opinions on the process to date. A series of informal questions were asked and the answers were recorded on a tape recorder and notebook.

The process undertaken for this project was then classified according to Hart's (1992) ladder of participation and then compared and contrasted with Lansdown's (2001) characteristics of effective and genuine participation to contextualise the project and to allow for discussion on both positive and negative points emerging from the project.

The process

Five learners from a group of 40 Grade 10 COSAT students volunteered to participate in the project. The group consisted of four males and one female ranging in age from 15 to 17. Two of the learners live in Khayelitsha while the other three live in Blue Downs, Mandalay and Gugulethu (see map1).

An introductory meeting[5] was arranged at which the project was explained to the learners. Each learner was given a map of the area of Khayelitsha and shown the location of Wolfgat in relation to the location of COSAT. It was discovered that only one of the learners had heard about Wolfgat but did not know much about the nature reserve. Thus it was decided that the students should find out as much about the reserve as they could by gathering information from as many sources as possible. The learners were encouraged to do interviews and find out information on nature reserves and the general topic of environmental education.

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[4] The mission of the Expo is to contribute to the development of critical skills to meet the demands of the 21st century by creating interest and stimulating participation in the sciences and technology.
[5] This took place on the 24th of May 2001

A second meeting[6] to assess how far the learners had progressed was organised approximately 2 weeks later at COSAT. This was an informal feedback session. The learners had completed one group interview with a teacher from a school nearby and individual interviews with adult residents from Khayelitsha or family members. One member of the group was not present due to illness and two members arrived very late. This was explained by 'teenage African time' and did not reflective apathy of the members present at the meeting since they expressed great interest and had in their free time been busy gathering information. Some of the students had sourced information from Encarta[7] and others from local newspapers and friends and family. At this meeting information sheets and a booklet on the requirements for the EXPO for young scientists was given to them and the facilitator was informed that the learners had tried to organise a trip to Wolfgat with one of the teachers but it had not come to fruition.

As a field trip to Wolfgat was seen to be important by both facilitator and learners, this was organised by the facilitator. The aim of the field trip[8] was to assist the students in conceptualising an idea for the Environmental Education Centre. Each student was given a map of the reserve so that they could take field notes and a manual camera was available to visually capture any issues of concern or interest. Before leaving on the field trip a group discussion was held on issues surrounding nature reserves and the unique problems facing urban nature reserves. While visiting the reserve the children met with the foreman of a group clearing aliens for Ukuvuka[9]. He showed the children how to identify aliens and what methods were used for each of the alien species eradication.

Bridget O'Donoghue and Clive James of the environmental department of the City of Cape Town (CoCT): Cape Town Administration also addressed the students while on the field trip. Ms O'Donoghue officially invited the students to present their findings at the next community meeting. The meeting with the CoCT officials was coincidentally as they were on a site visit that day.

After the learners had completed their exams, a further field trip[10] was organised by the facilitator in which the learners were taken to two other nature reserves in differing stages of development. Prior to leaving on the field trip the learners were encouraged to present any ideas they had developed so

[6] This meeting took place on the 9th of June 2001
[7] A CD ROM encyclopaedia
[8] This took place on the 12th of June 2001
[9] Ukuvuka is an NGO set up after the devastating fires experienced in Cape Town at the Beginning of 2000 to clear alien vegetation and reduce fire risk

far. The group decided that two ideas would be presented as the two stronger voices within the group had conflicting ideas. With the thoughts of their proposals in mind the group went to visit Edith Stevens Nature Reserve, a reserve in the process of being developed as an area for recreation and education. They were met by Mr Kevin Winter of the Environmental and Geographical Science department of UCT[11] who showed them how to test water for phosphates and explained to them the practicalities behind the Environmental management programme at Edith Stevens Reserve. After this the facilitator took them on a quick tour of Rondevlei Nature Reserve, an established reserve with an active Environmental Centre offering a range of services to visiting schools. The learners were encouraged to take field notes and had the use of a digital camera supplied by COSAT.

Finally due to time constraints on both facilitator and learners, a meeting on the last day of the school term was held at COSAT. The group was encouraged to integrate their ideas from the previous meeting with ideas gleaned from the previous field trip. After presenting their final idea it was decided to do the group focus interview with four of the group members as another opportunity for all of them to be together would not arise before the end of the school holidays.

Analysis of the process

Firstly if placed in context with the previous work undertaken by Davey *et al.* (2001) this project is a significant improvement in its level of participation. It can be classified as being at step 6 – adult initiated shared decisions with children (see fig. 1).

The project was initiated by the facilitator and thus adult initiated. However, Hart (1997) suggests that it is not necessary that children always operate at the highest possible rungs of the ladder. Within the field of public participation in environmental management it is very rare that the public initiates participation, especially when it comes to official management programmes linked to nature reserves or Environmental Impact Assessments (EIAs) that are either initiated by proponents or the officials themselves. In that case very few projects could ever be classified at a rung higher than level 6.

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[10] this field trip took place on the 26th of June 2001
[11] The University of Cape Town

In light of the above the project was also assessed according to Lansdown's (2001) Characteristics of effective and genuine participation. The following analysis is structured according to Lansdown's characteristics (figure 2).

The project

The project mostly fulfilled the characteristics suggested by Lansdown (2001). As the project involved the planning of an Environmental Education Centre whose main clientele will ultimately be children it was seen to be entirely relevant to the learners, particularly as the reserve is located very close to their school. The capacity to make a difference hangs on the learner's presentation at the community meeting in August and whether their ideas or aspect of their ideas are incorporated into the planning for the future. Of significance is the fact that the learners will be a part of the public participation linked to the future management of the reserve.

Although the reserve is situated close to the learners' school it is not in their day-to-day experience to visit the reserve and prior to this project most of the students had only driven through the reserve on their way to Mnandi or Strandfontein Resorts (see Map 1). Thus for all the students visiting the reserve, and in particular walking in the reserve and being shown the plant and animal spoor, was a new experience. However the social issues surrounding the reserve, which are pressing issues in the day-to-day management of the reserve, are very familiar to the learners and they showed great insight into the issues of crime and informal settlements during informal discussions on the topic and this knowledge was reflected in the their practical approach to planning the Environmental Education Centre.

As the project was extra-curricular, dedicated time for the learners to work on the project always had to be negotiated. This may have limited the time available to work on the project but helped to maintain the voluntary nature of the project.

The main expectation of the learners was for them to present a plan that reflects the ideas and experiences of their age group, and as such this was realistic. However there were a number of research skills necessary to present and formulate their findings. Unfortunately there was limited time to teach all these skills to the learners. Fortunately as a group they were able to assist each other for some tasks. This was particularly evident when they carried out interviews. In their own time they organised a group interview with a teacher from a neighbouring school. Afterwards they

went out individually to interview different adult residents in Khayelitsha. As there were members within the group who had previous experience in interviewing people they facilitated the initial group meeting. During the final group focus interview one member of the group who had no previous experience in interviews did say that although he was shy at first he had found it a good learning experience.

Unfortunately there were unrealistic expectations when it came to the presentation of their findings, especially field trips and interviews in written form. This aspect of the project will have to be addressed after the holidays when the learners write up the project to present to the Expo for young scientists.

One potential flaw within the project was the unstructured or iterative process used by the facilitator. This meant that there often were no clear goals and targets and not all methods of involvement were developed in collaboration with children which resulted in both learners and facilitator being a bit unsure of their respective roles within the project.

The promotion of children's rights within the process of the project can be illustrated by the growth of one of the learners in the group. This learner lives in one of the poorest areas of Khayelitsha and had no previous experience of practical environmental work. At the beginning of the project he was very shy and because his command of English was not as good as the others, he did not contribute much during group discussions. However by the end of the project and particularly during the group focus interview he was very articulate showing great insight and interest into the issues learnt during the project.

Values

Throughout the process the learners were treated with respect. At all times information was shared with the learners and interaction with adults, who were knowledgeable on subjects linked to the project, was encouraged. The significance of these interactions was noted when the students made a specific mention of meeting with the officials during the field trip to Wolfgat as the highlight of the project. This reflected how officials have accentuated power relations in the eyes of the learners.

The limitations of the projects inclusiveness and equal respect of all groups, ages, ethnicity and ability are reflected in the fact that this project focussed on a particular group of learners from a

school within a specific community. However the exclusiveness of the project is justified by practical constraints such as language and the skills of the facilitator. The project was designed to combat some of these constraints. Students from COSAT were chosen as they were able to understand and communicate in English and would have the necessary skills to complete the project. It must be noted that a different process and/or facilitator would have been required for learners or children of different ages, abilities, ethnicity and social background.

Children's views within the context of learners' culture are traditionally not taken seriously. This was expressed by a member of the group who said "adults today had inherited the beliefs of their forefathers. They believe that children have no knowledge and experience." Despite this they felt that their ideas would be taken seriously at the community meeting. Their reason for this confidence was due to the positive response the project had received from both other members of the community and the council representatives from the environmental management department.

The voluntary nature of the project meant that all the learners who were involved were interested in the subject of the project and had been attracted to the project of their interest in the environment.

Methodology

All meetings were held at COSAT, which was a convenient and familiar meeting place for all the learners. This also meant that the learners had access to computer facilities during school time. English was the main language used during meetings and is the main language used at school. A facilitator who could speak both English and Xhosa would maybe been better suited for the project however the learners themselves agreed that it was important that they learn to communicate in English as this would assist them in the learning of the language.

The learners are particularly fortunate in that they are involved in the planning of an environmental centre at the conceptual phase of the project. They are thus in the rare position of being able to contribute within the long-term plan for the reserve identified within the Wolfgat Environmental Management Programme.

The sustainability of the project itself is very important especially as the project must not only be seen as a process that will lead to the presentation of learners' findings at a community meeting or

the Expo for young scientists. The project must be seen within the broader context of the future sustainable development of Wolfgat Nature Reserve. Thus of greater importance is the interest that this group of learners can generate within their community.

During the project the learners expressed their concern that the people of Khayelitsha knew so little about the Reserve. During the final focus group interview one of the learners suggested an idea of setting up a room at the school where people from the community could come and learn about environmental issues. It is ideas like these that need to be encouraged by adults as child initiated projects are very rare yet of critical importance for change and the development of an environmental consciousness within Khayelitsha.

Conclusion

This project illustrated that effective and genuine participation is possible within environmental projects in South Africa. Of critical importance is that children or learners are involved within an existing process and that they are given the chance to meet officials or decision makers within the community. The involvement of children in participation does not have to stop at the project or programme level. If learners are truly passionate about a specific project what is to stop them being interested in broader environmental issues and ultimately coming up with ideas to initiate their own projects?

This project showed that although the interaction with officials was never planned it was the most significant event in the eyes of the learners. The main challenge is the integration of projects into existing environmental management work. A project such as the planning of an Environmental Education centre is appropriate, as ultimately children will benefit from the final design. However it is just as important that children are also included within general environmental projects.

> If we do not allow children to participate there is a price to be paid. Not only do are we denying ourselves the benefit of their uniquely different experiences and perspectives, we may actually be having a negative effect on their well-being (Ivan-Smith, 1998, p. 261)

One way of doing this is setting up partnerships between teachers and environmental management officials as well as environmental consultants by facilitating projects that can be integrated into an existing public participation process. Ivan-Smith and Johnson (1998) believe that working with

children as partners in research enhances the investigative process and promotes children's self confidence and general development. It is thus very important to address the existing power imbalances that exist between children and adults.

> Adults mindsets are socially constructed and reproduced through power relations. Giving children space and encouragement to act and express themselves is doubly fulfilling with rewards for children and adults alike (Chambers, 1998, xvii)

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Vivement les vacances!

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