## The relationship between water and sanitation and inclusive education



Paper prepared for Water Aid by Ingrid Lewis, EENET Co-ordinator February 2009

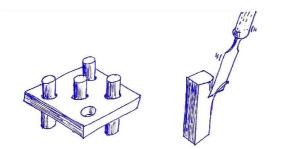
## What is inclusive education?

Many international and national commitments are now focused on providing quality education for all children. Inclusive education is one important way of supporting all children to participate and learn in mainstream schools – regardless of disability, gender, ethnicity, refugee status, health status, etc.

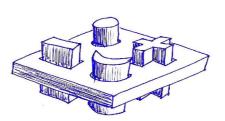
Inclusive education is not just about education for disabled students, although that is a very common misconception. Inclusive education is also not just about helping children to *access* education. For education to be inclusive, every learner also needs to be *participating* (in all aspects of school life) and *achieving* (academically and socially) to the best of their abilities.

The key thing about inclusive education is that it focuses on changing the education system so that every child is welcome, rather than on changing the individual child so that he/she can fit into the existing discriminatory system. This means changing the system both in terms of teaching and learning practices and attitudes, and the physical environment.

The following diagrams represent the difference between an education system that seeks to change the child to fit into an unchanged system (left); and a flexible inclusive education system (right).



Changing the child to fit the system



Inclusive education – creating a flexible system that welcomes every child

# Why is water and sanitation such a key issue in efforts to promote quality, inclusive education for all children?

Water and sanitation issues often have significant impacts on children's access to education and on their participation and achievement while at school. The following messages about these impacts were mostly gathered from school children, and some from their teachers, during action research projects in schools that are working towards inclusion. The featured schools are in Uganda and Zambia. The methods used to gather these messages will be outlined later.

The stakeholder views expressed here illustrate some of the more obvious reasons why water and sanitation facilities affect education. However, they also show us some impacts that might be far less obvious to outsiders or to adults – the sort of things we can only learn about by consulting the school children themselves.

### Water

- We need to drink to think. Children who do not drink regularly at school have lower concentration levels, affecting their ability to participate in lessons, and ultimately their learning and achievement levels. However, many schools can't provide safe water supplies on campus (or indeed any water supply), and children may often be thirsty.
- Children often have to work hard to get water for use in the school for drinking, cleaning, etc. They may have to carry large, heavy containers from water holes/taps/wells. Some children at one primary school in Zambia told us that when they carry water containers they get dirty and then their teachers punish them for wearing dirty uniforms in school. One deaf student in Uganda explained the photo of a water tank that she took:

"Sometimes when there's not enough water in the tank, we have to go to the village to fetch water. It's hard work."

• The location of taps, etc, in a school influences who is able to access the drinking water that is so vital for effective learning. The photo below shows a tap on the edge of a banana plantation in a primary school in Uganda. Some children thought it was a good location for the tap, as any split water was watering the trees which provide them with food. But other children pointed out that the surrounding area was so rough, it was not possible or safe for some children to go there, especially those using wheelchairs or crutches.



Primary school, Uganda

- The location of water sources in schools also impacts on girls' safety (or their perception of their safety). This in turn affects whether they choose to come to school, or whether their parents allow them to come to school. For instance, a tap like the one above located on the edge of a wooded area may be considered too risky for girls to use. The location of taps in schools also sometimes places other children at risk, perhaps from bullying by their peers (if the site is hidden from the view of teachers), or from abuse by community members (if the tap is accessed by people from outside the school).
- The condition of **water supplies in the community** impacts on children's education. If children have to work hard to get water for their family's needs, they may not be able to attend school or they may be too tired to participate and learn when they get to school. Such work often disproportionately affects girls. The girls in the photo below are fetching water for their families when they should be at school.



Girls fetching water, Zambia

Communities with generally poor water and sanitation facilities, poor housing, etc, find it difficult to attract or keep the best teachers. In some countries teachers are deployed by the government to locations without having a choice. But where they have some freedom to choose, we shouldn't underestimate the role that basic infrastructure plays in teachers' decisions about where to work. Lack of access to water and sanitation and other basic needs or comforts, can lead to situations where schools have a high turnover of staff. Any initiatives to

promote inclusion may constantly stall as new staff have to be brought up to speed. Alternatively, such schools may find themselves relying on unqualified or untrained teachers from within the community, which can have a significant impact on the quality of learning for the children.

### Sanitation

In this paper we use sanitation to refer to a range of issues highlighted by children and teachers, such as toilets, washing facilities, rubbish disposal and food preparation.

• The accessibility of toilets affects whether or not students decide to come to school, and whether or not they find school a comfortable place, conducive to studying. The issue of going to the toilet is often at the top of a child's list of worries in relation to school – in any country, whether rich or poor.

For disabled students, accessibility of toilets means access to the general area in which the toilets are located, and access into the toilet. It may also mean finding safe and dignified solutions to help a child use the toilet or clean themselves. Accessibility solutions are often seen to be those that require funds, materials or expertise, such as ramps, handrails, adapted seating, etc. In the photo below, teachers were proud to show the adaptations that have been made to their student latrines, funded by an external donor. However, the students highlighted that there are too few such toilets in their huge school, especially in the boarding facilities that were some distance from the main school buildings.



Latrine with hand rails, secondary school, Uganda

However, improved accessibility for disabled students can also involve low-cost innovation. Such solutions may not be the ideal, but they can be encouraged as a way to support inclusion in the absence of immediate funding for adapted facilities. Teachers in Zambia told us about a child who couldn't walk and usually moved around by crawling. As part of an action research project to investigate barriers to inclusion, the teachers learned that this child had never used the toilet at school. He would avoid drinking all day and wait to use the toilet until he got home. When asked why, he said it was because he didn't like putting his hands on the dirty latrine floor. The teachers visited him and his mother at home and

asked how he managed to use their own latrine. His mother explained that she lends him her plastic sandals to put on his hands, so he doesn't get too dirty when he's going to the latrine. The teachers decided that they could do something similar in school, while they were waiting to raise enough money to build a more suitably designed latrine.

• **Privacy and safety** are key issues in the location of toilets, especially for girls. Toilets – in any country – can become places where children face increased risks of bullying by fellow students or abuse by adults (especially where community members may enter the school to use the facilities). The photo below shows a primary school in Zambia, where boys were regularly hanging out around the girls' latrines. Given that these latrines have neither doors nor roofs, the girls unsurprisingly felt too worried or embarrassed to use them, except maybe during lesson time when the boys were in the classrooms – which of course would affect the girls' participation and learning.



Boys playing near the girls' latrines, primary school, Zambia

The children who took the following photo said that these latrines – though far from perfectly accessible – made them feel so much more welcome in school:



"Previously there had been no toilets at all. Imagine, there are no hedges or bushes – where do you think we could go?!"

New latrines, primary school, Zambia

The children we spoke to in both countries highlighted the cleanliness of school toilets as greatly affecting their education. While this is a very common complaint, the children we spoke to in Zambia expanded their explanations. The style of toilet (whether it is easy or difficult to keep clean, free from smell and flies) and the training received by children were highlighted as specific problems. Since very few schools can afford to pay adults to work as cleaners, it is usually school children who have the responsibility of keeping school toilets clean. The children felt that if they are not used to using latrines at home, or have not been shown how to clean a latrine, it's not surprising that school toilets are such unwelcoming places.

The children in Zambia who took these photos wanted to highlight these issues by showing the vast difference between the toilets for the students (left) and the toilets for the teachers (right). They suggested that perhaps the school should do more education on how to 'manage' a latrine, and also that perhaps a rota for cleaning (by students) and inspection (by teachers) could be developed.



Latrine for students



Latrine for teachers

 Is there a hand washing facility near the toilets? Often there isn't anywhere for school children to wash their hands after using the toilets, or the facility may be placed in an inconvenient or unwelcoming place. The hand washing water and bowl shown below was placed outside the head teacher's room!



Hand washing facility, primary school, Zambia

Rubbish disposal is an aspect of the education experience that is rarely thought about, but it was touched upon by children in all the schools we worked with. Most schools had open pits into which rubbish could be thrown. The children showed clearly in their photos that these were often dangerously deep, that rubbish would blow away again, and that the pits were often located in unhygienic places (the photo on the right shows rubbish dumped near an area where food is being prepared and pots washed). They also explained how bad smells and flies can be very distracting, affecting their ability to concentrate in class. One primary school in Zambia had a rubbish pit next to the library. No students wanted to do independent study in the library because of the bad smell. When the head teacher saw the photos and heard the children's explanation, he had the pit filled in – and children started to use the library more often.



Rubbish pits, primary school, Zambia

Rubbish near food preparation, secondary school, Uganda

• Food preparation or the sale of food within schools was another issue that children said has an effect on how safe they feel in school, and therefore on whether or not the decide to attend. Some children highlighted that outsiders would come and sell unhygienic food on campus (below left photo). Others explained that the areas where the school itself prepared food were unclean. One child in a secondary school in Uganda explained the two photos (below centre and right):

"It shows that the food cooked is not healthy and can cause various diseases and diarrhoea. A student can be affected in class because every time he/she is in and out of class because of diarrhoea they miss lessons, leading to failure and punishments if found outside."



Food sellers on campus, primary school, Zambia

Unhygienic food preparation areas, secondary school, Uganda

## How can we find out about the ways in which water and sanitation are affecting children's education?

- There is a wide range of participatory methods that can be used to find out what schools need to make them more inclusive – both in terms of the physical environment and the teaching practices and attitudes. Many of these methods are build on principles of action research (using research as a process for suggesting, trying and evaluating solutions to problems) and on well-established approaches such as 'participatory learning and action' (PLA).
- Investigation into inclusion issues in schools is best done on an **ongoing basis**, which is why action research cycles are increasingly being used. It is very difficult to solve problems of exclusion in a short, one-off intervention. It may take time to get to the root of the problems that are causing exclusion from access, participation or learning. Toilets and personal hygiene may be taboo subjects, and children may be worried about criticising their school. Time is also needed so that any outside intervention plans are based genuinely on what the school, its students and staff need, and not on a rushed decision by them to accept any water/sanitation facility that is being offered by a donor or government.

More importantly, ongoing work is needed because many of the water and sanitation issues that cause children to feel excluded from or within education may not need costly interventions. Instead they may require changes in attitudes and practices – such as teaching children how to clean a latrine, or creating a rota so that teachers monitor toilet areas for bullying – which cannot happen overnight.

#### **Useful tools**

The following approaches have been used successfully by EENET to help children and young people (and their teachers) to begin talking about inclusion/exclusion at their school. The methods enable facilitators to work at a pace that suits the participants' abilities, and which doesn't rush them into discussing topics that they may find difficult or embarrassing to talk about.

#### Mapping

As with well-known mapping techniques used in community development work, children can be asked to make maps of the school. The maps can show the places they like and don't like (or this can be phrased as welcoming/unwelcoming or inclusive/exclusive places, depending in the children's age and language skills).

The task should ideally be left relatively open, so that they map the whole school (very rarely are water and sanitation facilities not included in such maps). This way facilitators can build up a picture of whether exclusion related to water/sanitation is linked to other issues of exclusion, or other unsafe/unwelcoming places in the school. This should enable a more holistic approach to finding solutions.

Mapping activities can also be combined with elements of the curriculum, for instance they can be done as part of a geography or art class. This enables the teacher to be more involved in the process and helps schools feel less like the activities are distracting them from meeting often strict curriculum schedules.



Students making a school map, primary school, Zambia

#### **Drawings and photography**

There is a relatively long history in development work of using drawing activities to help children tell adults about things they may not feel able to talk about, or to get them started on discussing particular topics. Drawing may be particularly useful for helping children talk about attitudes and behaviour that they find upsetting or exclusionary, such as bullying or abuse. Photography can achieve the same. With children who are inexperienced photographers, photography may be more effective at helping them talk about places and spaces, which are easier to capture on film than behaviour and attitudes. Often, however, a conversation can be started around a photo of a place, which then leads into discussions about behaviour and attitudes that happen in or near this place.

Children may find it reassuring to discuss difficult subjects through a photo – they can, if they need to, distance themselves from the story of the photo while still conveying the significance of the picture. For instance, they are free to say "this is the kind of place where children could get bullied" rather than having to say "this is where I get bullied".

As with the mapping, children can be asked to take photos of safe/unsafe, welcoming/unwelcoming places. They can work in groups and negotiate with each other where to take photos. This discussion time can help them to reflect on their experiences before they commit anything to film. Activities can again be designed so that they feed into curriculum needs. They can teach children important skills such as team work, negotiation, narration, etc.

Photos can be presented in a variety of different ways. We often ask children to make posters in their groups, which can be decorated as artistically as they want, and may contain written labels for the photos. Again this can feed into the curriculum by teaching children skills for presenting information clearly and succinctly.



Photo poster created by students in a primary school in Uganda. The poster has been decorated with tactile objects and also has Braille labels for the blind student in the group

Photography may not be possible in every community. But with work supported by an external facilitator/organisation it is increasingly feasible. For an entire action research project in five schools in Zambia we spent less than £200 in total on low-cost digital cameras, a portable photo printer, ink, photo paper and drawing materials. Even small towns these days often have photo processing facilities or, increasingly, shops where digital photos from cameras or mobile phones can be printed.



Participatory photography, primary schools, Zambia

#### Drama

Drama and role play offer another excellent way to help children depict problems in their school, without necessarily having to come straight out and say "I think this" or "this happens to me". In EENET's experiences, children have often used dramas to show situations around food preparation or distribution, and water collection, as well as mistreatment by teachers or bullying by peers.

## Key points to consider

• School staff often feel threatened when outsiders start asking questions about their school. It is therefore vital that they are on board with whatever activities are planned, and that they recognise that this is a process for improvement, not a means of judging the success of the school. This can be achieved by sharing

examples of other schools that have successfully used action research or participatory photography. We always try to trial activities with the teachers before the children do them, so that the teachers know what is being asked of their students, can see the relevance of the tasks, and offer suggestions for improving the activities within their specific context. Helping teachers to think through how they could use these or similar activities within the curriculum can also help them to become more supportive of the process.

- Children may be keen to talk about toilets and sanitation issues, but their **teachers may try to stop them discussing these taboo subjects**. This is another reason why we work with teachers to help them understand the importance of talking about these issues, and to ensure that they are not constantly monitoring/controlling what the children say, draw or photograph.
- **Careful consideration of communication methods** is vital. Those who struggle to use toilet/water facilities may often be those who find it hardest to communicate as well perhaps because they have an impairment or because they are girls who traditionally are not supposed to speak out, etc. We therefore design activities so that children with various language, motor, visual and hearing abilities can join in. For instance, we might use tactile mapping with blind students, or a buddy system with children who have learning disabilities; or we would use female researchers or fellow female students to help facilitate discussions with young girls. Taking time to build trust and relationships is essential for success.
- Finding other starting points can also be important, especially if participants are reluctant to share ideas, or maybe they are giving such a huge range of responses that we can't tell what is a priority problem. For instance, checking the school attendance records can actually tell us there is a problem with water/sanitation arrangements that is impacting on education. Perhaps certain children never seem to attend school when there is a dry spell (so it's worth investigating if they are struggling to get access to water at home); or maybe girls over a certain age seem to be regularly missing a week of school every month (so it's worth investigating the privacy of the toilets or even the level of education that girls have received about how to deal with their periods).

## Conclusion

This paper provides just a very brief overview of the ways in which water and sanitation in schools and communities can impact on children's education. Very few of these issues can or should be identified solely by outsiders or even by adults within the school/community. Children's experiences of water and sanitation problems will vary from school to school, depending on a variety of other factors such as how supportive their teachers are or how many other problems they are facing. In every situation, therefore, the importance of eliciting children's views cannot be stressed enough. Indeed, children are often the source of some of the most innovative solutions to the problems their schools are facing, because they see and experience more of the school than anyone else.

## **Further reading**

There is a huge amount of literature about inclusive education, action research, participatory photography, etc. However, the following small selection from EENET may be a useful starting point. EENET can provide other reading suggestions on request.

Atlas Alliance (2008) **'Young Voices: Young people's views of inclusive education'**. Book and DVD available from EENET. See also: <u>www.eenet.org.uk/downloads/Young%20Voices.pdf</u>

EENET (2005) 'Learning from Difference: An action research guide for capturing the experience of developing inclusive education', Interactive CD-ROM available from EENET, or basic guidelines document available from: www.eenet.org.uk/key\_issues/action/Learning%20from%20Difference %20Guidelines.pdf

Kaplan, I, Lewis, I and Mumba, P (2005) 'Students Perspectives on Health and Safety in Schools: Using photography to address issues of health and safety in Indonesian, UK and Zambian schools', EENET. Available from: <a href="http://www.eenet.org.uk/images\_section/health\_safety\_schools.pdf">www.eenet.org.uk/images\_section/health\_safety\_schools.pdf</a>

Lewis, I (2004) **'Using Images to Explore and Promote Inclusion: Experiences from Mpika Schools'**, EENET. Available from: <u>www.eenet.org.uk/key\_issues/action/</u> <u>report\_zambia\_yes.pdf</u>

Lewis, I and Kaplan, I (2005) 'Inclusive Classrooms: The use of images in active learning and action research', EENET. Available from: www.eenet.org.uk/key\_issues/action/mpika\_report.pdf

Various other documents are available on the 'Images' <u>www.eenet.org.uk/images\_section/images.shtml</u> and 'Action research' <u>www.eenet.org.uk/key\_issues/action/action.shtml</u> sections of EENET's website.

Note: EENET's website will be redesigned during 2009, so all URLs are liable to change.