
34th WEDC International Conference, Addis Ababa, Ethiopia, 2009**WATER, SANITATION AND HYGIENE:
SUSTAINABLE DEVELOPMENT AND MULTISECTORAL APPROACHES****Integrated water and sanitation life skills approaches:
the Zambian case study***Adenya E.A., Zambia*REVIEWED 155

The rationale of every education system ensures that all children access quality basic learning. Life skills education has not been fully integrated in formal basic education curricular. The approach is so broad; it cannot be encapsulated in few subjects. Investment into Water Sanitation and Hygiene Education (WASHE) has been limited. Curative health measures have superseded preventive services. Life Skills education is commonly relegated to additional activities after the completion of the formal curriculum. Psycho-social skills have been equally ignored. This should not be the trend. This paper mentions the major approaches to WASHE Life Skills used in primary schools in Zambia and outlines a new approach used in a case study in Zambia. A blend of what is feasible is suggested. The proposed approach is learner centred, interactive and participatory aimed at reinforcing existing knowledge, positive attitudes, and socially healthy skills.

Introduction

The life skills approach focuses on the knowledge, attitudes and behaviours that support people in taking greater responsibility for their own lives. Life skills education with a focus on Water Sanitation and Hygiene Education (WASHE) aims at increasing enrolment, retention and progression, whilst reducing absenteeism, repetition and drop-out. It recognises that it can be challenging for children to make healthy life choices, or resist negative pressures, or reduce risky behaviours. Life skills education uses teaching and learning methods that go beyond the transmission of information. They are interactive and participatory with room for both information focused sessions and child-centred sessions. Through the use of participatory learning activities, such as games, exercises, and group assignments, the children acquire a wider range of life skills including those of health and hygiene. Examples here include personal grooming, disease avoidance, respect for others and adherence to set social norms. Four major life skills approaches have been employed in primary schools. These are namely:-

- Participatory Hygiene and Sanitation Transformation –PHAST
The main emphasis is on the control of diarrhoeal diseases. It employs visual materials (referred to as ‘toolkits’). These are modified and adapted to reflect the actual cultural and physical characteristics of communities in a particular area (Wood et al 1998). It is easier to tailor sanitation based messages for children. www.who.org
- The Junior Farmer Field and Life Schools – JFFLS (FAO/WFP)
These are designed to empower orphans and other vulnerable children who live in communities heavily impacted by HIV and AIDS. These schools pay particular attention to local agricultural production skills that have not been passed down due to the untimely death of the parents (FAO 2007). Life skills such as hygiene, self esteem, HIV and AIDS prevention, nutrition, business and psycho-social skills are covered in JFFLS. www.fao.org/hiv aids
- Focussing Resources on School Health – The FRESH initiative www.freshschools.org
FRESH entails a core of simple and familiar interventions that capture the best practices from programme experiences. It is an initiative which promotes the focussing of resources on the school-aged child. The core interventions in this framework include:-

- i) provision of safe water and sanitation
- ii) an essential step towards a healthy physical learning environment and
- iii) skills based health education.
- The School Sanitation, Health and Nutrition –SSHE/ SSHN

It is also referred to as School Sanitation and Health Education. The overall aim of the school sanitation and hygiene education project is to improve the health and nutritional status (including the learning capacity) of school children in schools. The implementation is done through community participation in cleaning the surrounding environment of schools, increasing access to safe and accessible water supplies and improving sanitary means of excreta disposal by providing latrines. Hygiene education programmes are integrated in the school curriculum.

The Integrated Water Sanitation and Development – IWSD (A case study)

As a way of improving the SSHN and FRESH approaches in Zambia, Africare (International NGO) collaborated with UNICEF to implement an Integrated Water and Sanitation Development (IWSD) in Luapula Province for a period of one year from March 2007 to March 2008. The project was implemented in Nchelenge and Mansa Districts of Luapula Province, Zambia. The overall objective of the programme was to upgrade and improve nutrition, health, and hygiene conditions of selected schools and surrounding communities using the “child friendly school concept.” The major additive to SSHN and FRESH, was a practical way of integrating hardware (toilets, water points) with the software (hygiene education). The link to nutrition, food security and livelihoods was fostered through school gardens.

The project’s specific objectives are:

1. To equip the communities with knowledge and understanding of the transmission routes of water and sanitation related diseases using the PHAST approach.
2. To equip communities with knowledge of integrated urinal/latrine construction and land-use design, thereby enabling the household to assume responsibility for their environment and sanitation.
3. To introduce vegetable gardening and sound environmental management near boreholes in order to improve nutrition and health within schools and communities
4. Train peer educators in PHAST, Life skills, Health issues and child rights.
5. The IWSD concept is more than just construction of toilets and development of Water point. It has a strong focus on Hygiene education and promotion. Herein, children learn new behaviour and information. They are then encouraged to share knowledge and practices with parents, brothers, sisters and the community. This is done through the a) **Child to Child approach, b) Child to parent approach and c) Child to community approach.** IWSD project optimizes use of already existing facilities like Water points and latrines as centre for development. IWSD adds more activities such as:-

- Health education and hygiene through PHAST approach
- Vegetable gardening for nutrition supplementation
- Life skills education
- Tree planting for environmental improvements
- Child rights
- Capacity building of masons in integrated latrine /urinal construction
- Out door activities improves linkages between school and community, between schools and amongst peers (Football, netball, snakes and ladders, chess)

Baseline findings

A baseline conducted at the onset of the programme revealed among other many things that SHN/SSHE committees do exist in schools and in some cases; they needed strengthening and resources in order for them to perform. Water and sanitation especially the recommended ratio of 1 latrine: 25 girls and 1 Latrine: 40 boys were nowhere reached. Hand washing facilities were not adequate if not non-existent. Resources provided for the SHN/SSHE to be fully functional were found to be inadequate. Issues of health, hygiene, water and sanitation, HIV/AIDS, environment, etc can only have impact if all key stakeholders (traditional authorities, parents, school managers and teachers, pupils, CBOs, NGOs, government, local authorities) get actively involved.

The approach in IWSD

The process begins with involvement of stake holders at district level through sensitization meetings (District WASHE (D-WASHE), Project staff, Ministry of Education, Ministry of Health, Community development etc). The stakeholders identify schools with inadequate water and sanitation facilities. These schools are then adopted as “Centres of excellence.” Two neighbouring schools within a radius of 3-5km are nominated as satellites IWSD sites. At the “Centre of Excellence” school, the management, teachers, Parents Teachers’ Association (PTA) and pupils are sensitized on the programme. The outcome is the selection of two focal point teachers (SHN) and 25 peer educators for PHAST training. A two days training for capacity building in seven components of WASHE improvements (use of treated water for drinking, proper use of latrines, hand washing, care for the school environment, solid waste management, personal hygiene and nutrition gardening) is conducted. The school is then supplied with Information Education and Communication (IEC) materials, out door games equipments and bicycles to reach out to satellite schools. A Joint school hygiene and WASHE action plan is developed formulating how the two satellite schools will be coordinated for capacity building.

Integrated Water and Sanitation Development Programme Package

Physical component

- Improvements in water points
- Construction of integrated latrines with urinals and hand washing facilities
- Garbage pit and solid waste management at source

Software component

- Institutional capacity building
- Training and capacity building of teachers
- Health and hygiene education to pupils using PHAST
- Involvement of other stake holders like Ministry of Health for health check ups
- Operations & Maintenance for water supply and sanitation created in schools

Monitoring of the programme at school and programme level.

Source: Mathews M'Hango –Africare Programme Coordinator

A base line questionnaire tool is designed to capture key WASHE indicators with a focus on knowledge, attitudes and practices (KAP). It takes a one day orientation session to familiarize focal point teachers on how to administer it. Both students and parents in the catchments are interviewed. Exchange visits between the “Centre of excellence” and satellite schools are facilitated. These include inter-school games competitions. The drawing of students and parents (community) together fosters important linkages between children and community. The school facilities like latrines, dish racks, water points etc acts as demonstration models. The monitoring of the uptake of KAPs is done by peer educators, Focal Point Teachers, Project staff and the D- WASHE.

Key milestones in IWSD implementation

- Improvements in Physical facilities
- Improvement in learning environment
- Improvement in community to school linkages and school to school linkages
- Improvements in school gardening activities
- Improvements in monitoring SSHE programmes

The multiplier effect

As an implementation result, 25 children selected from each of the 10 schools in two districts were identified and trained in PHAST methodology. 20 satellite schools within 3-5km from the centres of excellence were selected and supported from the centres of excellence. As a result 30 schools comprising of 750 children were trained to implement the programme. Each child hails from an average household of six members. This brings 4500 household members reached with WASHE messages in one year. This is exclusive of drama, poems and songs performed during school sports days, educational days, national holidays and PTA meetings. There was provision of agricultural seeds for food production as well as rehabilitation / improvements of water points in the schools. Integrated latrines which comprise of girls urinals were

constructed under the stewardship of local artisans. Preliminary results indicate an increase in enrolment of students especially girls. More teachers are voluntarily willing to be retained in the pilot schools. A sense of pride and dignity was demonstrated by the students' confidence in explaining hygiene issues, washing hands and using the toilet.

Lessons and outcomes

Children are potential *agents of change* in their homes through their knowledge and use of sanitation and hygiene practices learned at school. The uptake on hand washing as a practice was 100% by the end of the first year. Learning and teaching materials are important. Hygiene education needs to be incorporated into teacher training curriculum.

Challenges

- The distance between the Child friendly schools and satellite schools affects the level interaction and thus the adoption of transformation messages.
- The shortage of area pump minders/menders and lack of artisan associations has proved a challenge, as some breakdowns are not quickly attended to forcing communities to use unsafe sources.
- The elders and guardians when taught by children do not easily accept PHAST topics such as the need to use a toilet. This is in comparison to topics such as hand washing which was much easier to adopt.

Improvement of this approach to Zambian primary schools

Based on the descriptive presentation of the life skills approaches and the UNICEF/AFRICARE case study, I would recommend few improvements towards better school WASHE programming. Infrastructure support is critical to any implementation of WASHE life skills. Stronger links between school sanitation and hygiene education and development have to be fostered. A school needs adequate and well-designed toilets coupled with hand washing facilities. Dish racks and kitchens are also quite essential. The hardware needs to be in place before the promotion of hygiene education. Children should be inducted into learning by association and learning by discovery. The curriculum design has to consider Faecal-Oral disease transmission diagram as its core. The sanitation, hand washing and food barriers as critical pillars for learning health promoting life skills.

The use of resource persons such as artisan associations within the community is not only empowering but also sustaining. Experiences and lessons learned have to be documented and shared with others. The school WASHE facilities must continue to function and remain clean for sustained use. This entails proper operation and maintenance. The PTA need to take an active role in their protection and maintenance. The cleaning should be based on an inclusive routine, rather than a punitive measure. Finally some financial/kind contribution by parents to maintain the facilities could also be considered. (UNICEF/IRC, 1998).

Conclusions and recommendations

This article has been prepared on the principle that it adds and supplements on other life skills lessons learnt so far by other actors in the WASHE and thus this forms a good and formidable planning and implementation basis for subsequent and on-going projects. If past experience remains unknown or unused, then we risk repeating past mistakes or using considerable effort to learn what is already known.

For government to take up responsibility for improving the school environment and the students' hygiene behaviour, effective support is required. The formation of a School Sanitation forum or School Health and Nutrition working group will facilitate better coordination. Policies, as well as standard designs for technical facilities, are to be developed and implemented; and on the basis of an empirical evidence. The wisdom of the present and future School WASHE programmes therefore has to be built on lessons learned from the past.

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