Many countries suffer from high levels of water and sanitation-related diseases that affect the poorer segments of society, and children in particular. To break the transmission routes of these diseases increased access to water and sanitation must be combined with improved hygiene practices. Experience has shown that an effective method to improve hygiene is by teaching basic health and hygiene in schools, since children are important agents of change. This fieldnote describes the experiences from a model for health and hygiene promotion through the school system in Peru.
In Lima, Peru, the NGO Kallpa carried out a study in 1988 of the health and living conditions of 1,700 students in a public school in an urban shanty town on the outskirts of Lima. The study concluded that health education in the area was poor and ineffective. The health and education authorities were not coordinating dissemination of health information and education through the school system and the school curriculum did not respond at all to the difficult health conditions faced by the students.

As a result of the study, the NGO Kallpa set up an innovative pilot project: to promote health and hygiene in poorer urban and rural areas through the school system by incorporating everyone involved in the education process from parents and pupils to teachers and school maintenance staff. Since starting the pilot project in 1989, the NGO has developed and refined a model for "health-promoting schools" that has been adopted today for nationwide use in Peru by the Ministries of Health and Education.

The NGO's model is based on four lines of action, which are closely interrelated:

1. **MANAGING THE PROCESS**
   The educational community agrees to create a Health Committee to improve local management skills so the school can take over the management of its own program after a pilot phase. The make-up of the Health Committee reflects the diverse actors in the educational community. Its members include the school principal, health coordinator, teachers, students, parents, school maintenance personnel and a representative of the Ministry of Health. The Health Committee directs each school's program; it also administers and adds to the donated fund.

2. **EDUCATING**
   The teachers actively encourage the involvement of children and of all people linked to the educational community. Health representatives train teachers in health issues, as well as on how to work participatively and to create teaching materials. In larger schools, representatives teach other teachers. Teachers train Students as “health monitors” for each grade of primary and secondary school.

3. **PROVIDING SERVICES**
   The Health Coordinator is a teacher trained to administer the school's dispensary, which contains basic commercial medications and plant-based remedies used by local populations. He/she provides basic health services to students. The service maintenance personnel is trained to keep school facilities and grounds in healthy condition. The health coordinator's outreach may include testing for parasites, lice control, and food served in and outside of the school.

4. **COMMUNICATING**
   Mass dissemination of information about health and hygiene to families and the local community. The NGO, students and teachers participate in various awareness campaigns, which may include parades, flyers, banners, etc.
HOW DOES THE MODEL WORK?

The model follows a step-by-step methodology, consisting of six different steps in the project cycle.

1. The NGO presents the model to regional and provincial health and education authorities. Thereafter, schools are selected by the NGO through a school district competition. Basic requirements for selection are that the school have an active parent-teacher association and that teachers are willing to take on new challenges.

2. The model is then presented to the educational community which, in turn, sets up a Health Committee as the "motor" for the school's health promotion strategy. The committee is made up of a team representing the educational community. It also administers the autonomous health fund, presented at a public ceremony. This ceremony conveys prestige as well as the social pressure for a committee to carry out its functions properly and effectively.

3. The Health Committee undertakes an assessment of the school's health conditions by surveying all students or, if the student body is very large, a sample group. One question always included in the survey is: What things about the school do you not like? Students may be asked to write or draw their answers.

4. Based on the assessment, the Health Committee develops a work plan to be implemented by the educational community. Activities focus initially on improving health services and training teachers and student health monitors.

Example of activities:
One Health Committee tackled "deplorable" hygiene services; rebuilt bathrooms and provided chlorinated drinking water; created modules to teach children how to use and maintain bathrooms, which consisted of holes in the floor and flushing with buckets of water.

5. During the start-up phase, the NGO representative works closely with the Health Committee. As the committee gains confidence, the NGO reduces contact to a once-a-month three-hour meeting to monitor implementation of the work plan and to help resolve problems and conflicts. The NGO is involved in the project during the eight months of the school year.

6. An external evaluation based on pre-established standards is done twice a year by a three-person team consisting of one representative each from the health and education ministries, and from a civil institution. As an incentive, depending on points achieved, the school is awarded a flag, whose color reflects the success obtained in fulfilling the objectives implicit in the competition to be a "health-promoting school". The flag is the visible symbol of each school community's progress towards tackling its own health issues.

Significance of the flag colors in the evaluation:
Green with gold: Excellence. Optimum results. School is capable of working completely autonomously.
Green: Success. Good results and considerable capacity for autonomy.
Blue: Correct. Acceptable results. Insufficient autonomy.
Black: Failure. Work plan unfulfilled and no results.

Of the 152 schools which have participated in the program, 43% have received a green with gold flag, 41% a green flag and 16% a blue flag for the year 2000.
HEALTH-PROMOTING SCHOOLS TIMELINE

From the single-school pilot in 1990, the program has expanded to 152 urban and rural schools involving 70,000 students nationwide. Today, a consortium exists to implement the program in 250 schools in five different cities of Peru. The consortium includes both the Health and Education Ministries and several other NGOs. By 2003, the goal is to have the program operating in all public schools throughout the country.

Evolution of the model:
1990: Kallpa initiates the project "botiquines escolares" (school medicine cabinets), in one school in a shantytown south of Lima.
1991: Cholera epidemic in Peru requires mass dissemination of basic hygiene and health practices. Kallpa works against the epidemic through schools with "botiquines escolares" and education material.
1990-96: The project "botiquines escolares" expands to other departments, Cusco, Ayacucho, Lima and Iquitos. Design of school curricula and course for teaching health in teacher training institutes.
1997: The project "botiquines escolares" is evaluated and recommended. The project "Health-Promoting Schools" is established and executed as a pilot project in three schools in the southern part of Lima.
2003: Goal: to establish the program in all public schools nationwide.

FROM PILOT PROJECT TO MASS IMPLEMENTATION: changes in strategy by NGO

The NGO's own role changed during the decade from implementing the project itself to that of promoter and process facilitator. By lowering its profile, the NGO encouraged the local community to assume responsibility for the program.

- Health Coordinator position, initially filled by an NGO professional, was assumed by a trained teacher.
- Emphasis for implementation shifted from the Health Coordinator to the school's Health Committee in order to broaden the responsibility for the program.
- NGO reduced its leadership in the program in favor of giving the school community a greater say in how it was run. Adopted facilitator role.
- School rituals and symbols incorporated into strategy to mesh the program into the educational community: flags, parades, posters, public recognition (ceremonies, lapel pennants, etc).

INSTITUTIONAL FRAMEWORK FOR THE PROGRAM
Actors and Commitment

<table>
<thead>
<tr>
<th>Ministry of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Official recognition of Kallpa.</td>
</tr>
<tr>
<td>• Audits the Autonomous Health Fund.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit for District Educational Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approves agreements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional &amp; Sector Directorates for Health and Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Coordinate actions with Kallpa.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NGO Kallpa</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Promotes a strategy for Primary Health Services for school children with participation of the educational community: teachers, parents, health coordinators and students.</td>
</tr>
<tr>
<td>• Provides the schools with a health fund to finance Health Committees' actions.</td>
</tr>
<tr>
<td>• Provides training.</td>
</tr>
<tr>
<td>• Awards prizes to the School.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Recognize the work performed by KALLPA in a district by supporting its actions and providing follow up.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministry of Health and UBAS (administrative unit at local level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invites institutional participation and designates UBAS (administrative unit at local level) directors as counterparts.</td>
</tr>
<tr>
<td>• Coordinates specific goals for teaching area with UBAS and NGO.</td>
</tr>
<tr>
<td>• UBAS certifies teachers' participation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministry of Health and Ministry of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide local Basic Health and Education Services.</td>
</tr>
<tr>
<td>• Evaluate the program.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NGOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The NGO Pro Vida provides the medicines for the school medicine chest.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Committee and School Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The School is committed to participating in the project and to supporting data collection.</td>
</tr>
</tbody>
</table>
RESULTS

A NEW MODEL EVOLVED from the pilot, with a defined strategy, proven methodology and low-cost educational materials to accompany each step of the program implementation.

HEALTH COMPONENT IN SCHOOL CURRICULUM: the health component has been incorporated to the school curriculum and today, there are established mechanisms for transmitting its contents and teacher's training.

IMPROVED COORDINATION: the NGO and the education and health authorities at regional and local levels actively coordinate their activities to create favorable conditions for sustainable hygiene and health education in schools.

LOCAL MANAGEMENT CAPACITY STRENGTHENED through the work of Health Committees and their administration of the autonomous health fund.

CHANGE OF HABITS: the model based on a multidisciplinary intervention and active participation by the educational community generated rapid changes and improvements in hygiene habits.

AUTONOMOUS HEALTH FUND allows for quick, tangible improvements in school's health and sanitation conditions, thereby reinforcing the health promotion process. Initial successes lead the committee to search for additional funding (mostly given in kind), which is an essential step to achieving self-sufficiency.

INCREASED TEAMWORK: participatory approach generates attitudes of teamwork and tolerance that carry over into the classroom, to the benefit of the students.

IMPROVED SELF-ESTEEM: service personnel, technically trained to maintain healthy conditions, gain self-esteem and become key players in keeping schools clean.

SOCIAL RESPONSIBILITY: student health monitors learn social responsibility and develop leadership qualities.

BETTER ORGANIZATION: a more fluid relationship develops between parents and school authorities and the school and its community. This is the basis for future organizational efforts to benefit the local community.

RECOGNITION: use of rituals and symbols as important incentives to the school community: flags, parades, posters, public recognition (ceremonies, lapel pennants, etc.).

INDEPENDENT SCHOOLS: 40% of all the schools that have participated in the program, are managing their own health and hygiene activities today.

RISKS

- Competition between schools may translate into pressure on teachers and stifle their creative endeavors.
- Student health monitors may tend towards “controlist” attitudes, particularly in urban schools.
- Some Health Committees may have difficulty in diversifying their strategies to obtain additional funding for the program.
FINANCING AND COSTS

The direct annual cost of the health-promoting school program averages US$3.00 per student. During the first three years, up to 30% of the program’s funding is provided by the NGO and up to 70% or more by local funds raised by the Health Committee. After three years, the program is to be financed entirely by the Health Committee. The Health Committee administers the finances through an established autonomous health fund. The Health Committee determines the budget to meet the operating costs for promoting health and hygiene in the school. The Ministry of Education audits the Health Committee’s bookkeeping.

Example: Reyna del Carmen school in Lima

Expenses and sources during the 1999-2000 school year

The Reyna del Carmen school is located in an urban shanty town in Lima, and is participating in Kallpa's 3-year program. There are 17 teachers, 2 assistants, 4 maintenance personnel in this school, serving 570 students between the ages of 0-6.

**SOURCES OF FUNDS**

- Health Committee/local funds, including products in kind $1,224
- Kallpa $300

**DIRECT COSTS**

- Total school budget for operation and maintenance $10,486
- Total school budget for health and hygiene education, including products in kind $1,524

  **Cost per student** $2.70

**INDIRECT COSTS FOR HEALTH AND HYGIENE PROGRAM**

- Monitoring and Evaluation of Health and Hygiene Program
  - Health Ministry: 5 days twice a year $500
  - Education Ministry: 5 days twice a year $500
  - NGO: 2 days twice a year $200

- **Technical Assistance**
  - Kallpa: facilitate and build capacity: 1 staff, full time, 10 months ($1.75 per student) $1,000

- Health Ministry: training based on demand from the school (4 days a year) $200

This fieldnote is produced by the Water and Sanitation Program team in the Andean Region in cooperation with the NGO Kallpa.