



Photo: Anita Ingevall

Proud children showing their field behind the school, where they grow eight different potato varieties.

Rediscovering cultural roots: children and biodiversity in the Andes

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The small farming communities of the Cusco region of the high Peruvian Andes have a refined perception of the relationship between man and the natural environment. Most communities are descendants of the Quechua and Aymara, which formed the ethnic base of the highly sophisticated Inca civilization that flourished in the region before the Spanish conquest. Their language and culture reveals a nurturing and protective approach to the earth, and to the plant and animal life it supports. Considerable responsibility is placed on mankind to utilize and protect this rich biodiversity through careful husbandry. Local agricultural practices have for centuries reflected these principles.

“*Niñez y Biodiversidad en los Andes del Perú*” or “Childhood and biodiversity in the Peruvian Andes” is a project that seeks to ensure that these values are not lost as small-scale farmers are under increasing pressure to modernize and to try to make a livelihood in an economic context that is increasingly dominated by market forces. Respect for and understanding of the values, skills and knowledge developed over generations are in danger of being lost and people are becoming increasingly alienated from their traditional values and culture. This process starts already in childhood, when the children enter the formal education system and are exposed to knowledge and values derived from a uni-dimensional, economic and exploitative approach to natural resources.

We the teachers who are involved in the “*Niñez y Biodiversidad en los Andes del Perú*” project have reflected on the way in which the ideas and practices taught us by our parents and grandparents often stand in contradiction to the objectives and attitudes cultivated by our present Peruvian school system, where text books describe urban life and attractions and role models that ignore or undervalue the principles upon which peasant agriculture is based. In this way, children are deprived of an important part of their identity. In addition, the neglect of local knowledge makes it increasingly difficult to preserve an understanding of the rich biodiversity on which local agricultural and pastoral practices are based.

The Peruvian Ministry of Education has realized the importance of teaching children in their native languages and established a *Dirección Nacional de Educación Bilingüe Intercultural* (DINEB) that supports the teaching of indigenous languages in primary schools. However, we have come to realize that this is not enough, as the school culture and the content of the curriculum does little to bridge the gap between the realities local children encounter at school and their everyday life at home. Translating the Spanish language curriculum into native languages is not enough to ensure that the collective knowledge passed from generation to generation and embedded in social, economic and cultural practices of our communities is not lost but can be built on and integrated into the formal state curriculum.

The attitudes carried in the content and approach of the formal education system alienate our communities from their cultural roots and undermine their capacity to reproduce their knowledge for the use of future generations. Our primary objective in the “Niñez y Biodiversidad” project is to create more balance in the school curriculum and to counter the dominant image of the peasant farmer as an illiterate who simply “scratches the earth” and who will never be able to get on in the world. A lack of respect for ancestral values and Andean culture in the school system has meant that the knowledge children acquire from a very early age by taking part in household and community activities is largely ignored. What young children learn at home through their role as helpers in the farm household is well described by Mr Benigno Araos Delgado, a member of the Chachapoyas community:

“The children support us a lot on the farm. They help us and by doing so they learn to farm with love and respect. They collect the grains and small potatoes that remain on the land after harvest as well as other plants and fruits they find on their way. We teach them to respect food. We teach them not to throw it away, because food is like a living being and can also cry. As our children grow up, we provide them with small tools so that they can help us and learn to cultivate the farm.”

It is this cultural knowledge and understanding with its rich emotional and spiritual energy that is in danger of being lost and which our “Niñez y Biodiversidad” initiative is determined to keep alive and relevant. We want to ensure that it is reinforced and developed in our schools. To achieve this the teachers involved in the project are working to extend and deepen the official school curriculum. This is possible because, in its attempt to improve primary education, the Peruvian state developed the official school curriculum in such a way that it could be adapted to fit specific local contexts and requirements. However, many factors, including the attitudes and prejudices of teachers themselves and the materials they select has meant that in practice little has been done to increase the local relevance and utility of the standard curriculum.

“Niñez y Biodiversidad” emphasizes that it is not enough just to add native languages to the Spanish language curriculum. We have to recognize the realities, values and culture expressed in these languages as well. We felt that as teachers we were providing bilingual education because of the pressure we felt coming from the educational authorities rather than because we saw it as a way of transmitting Andean culture - its poetry, art, and music and the skills and sensitivities of its agricultural and medical traditions.

So we proposed a different type of school, one that was developed in accordance with our culture and language and that incorporated local knowledge into the curriculum. A school that respected the knowledge of the children and older members of the community and one in which teachers were prepared to take on the role of cultural mediator. To do this we felt it was necessary to involve parents in the learning process. Opportunities would have to be created to re-connect children with the knowledge already present in their communities so they could learn more about local agriculture and the rich biodiversity that has sustained it for generations.

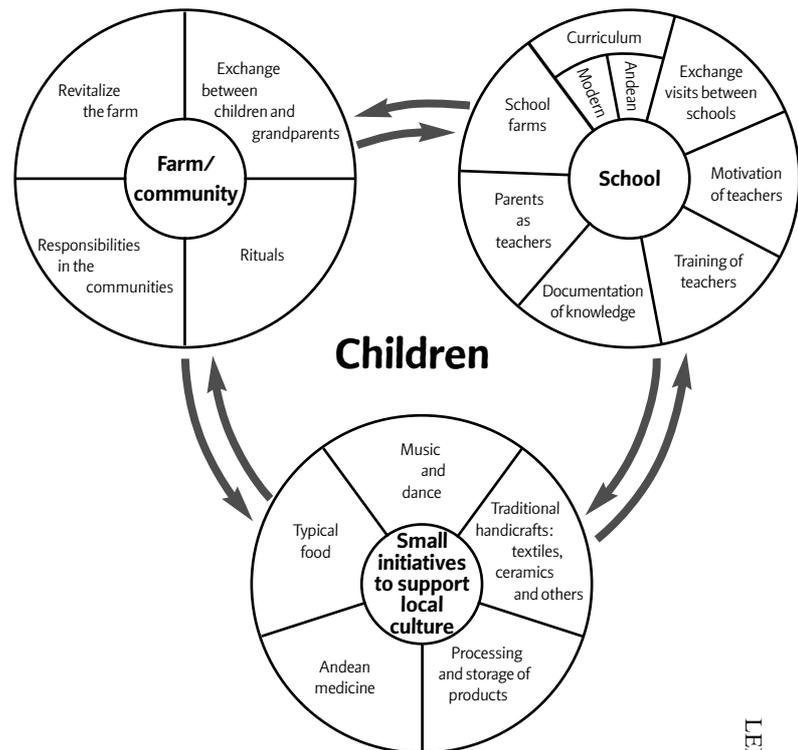
School with a difference

To try to implement our vision of a different school “Niñez y Biodiversidad” started a programme in ten schools in nine different communities in the Canchis region of Cusco. The programme is based on the active participation of children, teachers, parents and the older members of each community, and aims to exchange, socialize and strengthen the knowledge of all

participants by building on indigenous culture and knowledge with particular attention to agriculture and biodiversity.

We, the teachers involved in the project, think it is important that boys and girls who enter school are taught in their mother tongue, in order to strengthen the process of structuring their thoughts, their way of looking at the world, their effectiveness, self-esteem and capacity to express themselves in their own language. During our own childhood, we were part of a community and our grandparents taught us to live according to their values. However, the educational system uprooted us bit by bit, prejudices were introduced and slowly we learned to reject our language and culture. In the “Niñez y Biodiversidad” programme we have started to reflect on these things, on our childhood and value of our early experiences not only for ourselves but for our society as well. We feel we can contribute to maintaining the richness of our cultural traditions and encourage a respect and understanding for the biodiversity that sustains them.

We believe that we should continue to approach the issue of education strategically. We want to ensure that children master their mother tongue and the indigenous culture and knowledge it expresses. At the same time they must also have a good command of the Spanish language so they can play an active role in present day Peruvian society. We take care that the school is open to the children’s local knowledge and that there is a balance between “traditional” and “modern” knowledge. In this process, the child is in the centre of all the activities (see Figure).



The exchanging of experiences between household, communities and schools is fundamental to the implementation of this project. Visits between schools in different communities provide children with the opportunity for mutual learning and also bring together grandparents, fathers, mothers, young people and teachers. During visits to farms, schools and archaeological sites experiences are described and compared and often products such as food or seeds are exchanged. We recognize that the farm

is an important meeting place where knowledge is transferred from generation to generation. This knowledge is embedded in the activities associated with religious rituals, innovating practices, the tasks traditionally assigned to children, seed and food diversity fairs, and the reflection and exchange of experiences between household members.

Training of teachers

The attitudes and prejudices of teachers are a serious obstacle to establishing “schools with a difference”. This is why the project “Niñez y Biodiversidad” has a teacher training component which aims to encourage new and creative relations within the school. We try to develop attitudes that are open and supportive and help us build upon the knowledge the children bring with them from home. This can be difficult because many teachers do not have much respect for traditional knowledge and see it as less important than “modern” knowledge. We try to get teachers to understand and support the agro-centric knowledge of the communities and get them to establish an intercultural environment in school. This training provides opportunities for reflection and learning. We work together to find the best ways of facilitating the exchange of knowledge between children and parents, develop a curriculum for teaching local knowledge in the classroom as well as preparing teaching materials such as ritual agro-astronomical calendars and booklets based on children’s knowledge. We also make visits to ritual centres, learn about traditional authority structures and practices like *ayni* (mutual help). We also try and ensure that the teachers themselves understand their own culture and are able to ask people in the community to share their knowledge with them. Once a month we hold workshops so we can discuss and reflect on our work.

activities to make sure they support and develop the local culture, recognize the plurality of traditions and contribute to a balanced approach to “modern” and Andean traditions. We have concluded that our activities in school and in the community have changed teachers’ attitudes. During local exchange visits all participants communicate well with each other, develop friendships and knowledge is exchanged freely as we rediscover, learn and remember what our grandparents used to do.

Results

Reversing the trend of “cultural uprooting” in conventional education has not been easy, but some changes are now taking place in the communities where the project is active. The project does not reject the knowledge of the regular curriculum normally taught at school, but we try to put intercultural, bilingual education in a real context. This means that teachers have to reaffirm their own culture before they can introduce it into the classroom. Intercultural, bilingual education is the tool that helps to build bridges between rural schools and the everyday life of the boys and girls.

Results so far have been promising. The role of children in regenerating biodiversity is clearly visible both in the school fields and family farms. Teachers have learnt to understand the diverse and vivid worldview of the local communities. Parents are proud to be invited into the schools as teachers and they are increasingly coming forward to ask us to teach subjects that related to both farm and city life. They tell us they are pleased with our approach because it encourages their children to respect traditional knowledge and culture and the way of life their parents lead. The teachers - both male and female - have reoriented their professional practice. Many of them had broken the links with their own culture and have found that this project has enabled them to rediscover and appreciate the value of their own roots.

Andean children have their own view of the world and the cosmos, and these perceptions are an integral part of their identity. Our next challenge as teachers will be to gain a better understanding of the type of learning process that is best suited to a child brought up in the Andean culture, where knowledge is transmitted through oral tradition and not through the written word.

The Ministry of Education’s “*Dirección Nacional de Educación Bilingüe Intercultural*” has shown interest in our project. Some of our project activities such as the exchange of knowledge between children and parents, participatory investigation of the rituals accompanying the agricultural production cycles of the communities, and the publication of a booklet on the knowledge of the communities written by teachers and children, have been incorporated into its activities.

Many people have shown interest in our project and have visited us. They tell us that our project is important because it encourages a wider understanding of the fact that in the communities of the high Andes, biodiversity is the bases of cultural vitality. This has produced a vision of the world and cosmos that emphasizes creating life through care, affection and respect for nature and its diverse resources. Others explain that this project has shown that true interculturality can only be achieved in the Peruvian education system if the indigenous culture and identity are strengthened by ensuring that children have the right not only to learn their mother tongue, but are also taught how to conserve and develop their own culture. ■

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At school we involve children in many practical activities. Each school has its own fields where children cultivate a wide diversity of crops. They also carry out small cultural projects and work with textiles, ceramics, music, dance and food. In these activities grandparents, fathers and mothers often take over the role of teacher and the official schoolteacher becomes just another pupil.

We make regular visits to the families of our pupils and take part in the agricultural activities of their communities. We hold monthly meetings to produce teaching materials, and evaluate the activities carried out at school. We also evaluate our