Escuela Rural Productiva

This rural school is a social production of habitat—a self-managed and participative project with spaces suited to the learning needs and cultural context of a community in a mountainous region of Puebla.

Start date 2017
Location Tepetzintan, Puebla
Organization Bachillerato Rural Digital 186 + Comunal: Taller de Arquitectura
**Background**

The Bachillerato Rural Digital is an official high-school level program that uses digital, internet-based learning platforms and existing educational infrastructure in rural areas. Though designed to develop pupils' digital skills, it has proved ill-suited to areas without internet-access or telephone coverage; instead of offering alternatives for indigenous communities, it often ends up provoking a different set of problems.

The schools adapted to the Bachillerato Rural Digital system do not have physical teaching materials and lack access to infrastructure and other tools. This operational drawback places pupils at a disadvantage and makes the program unworkable for its particular context. Furthermore, the sharing of school premises between secondary school pupils (aged 12 to 15) and those studying at the Bachillerato Rural Digital (aged 15 to 18) leads to social difficulties and discontent because of the contrasting learning needs and spaces. This causes antagonisms between the pupils (as well as their parents) and the community.

The pupils also criticize the Public Education Ministry’s program as being incompatible with their culture, needs, and aspirations, leading to an increased drop-out rate from the *bachillerato*.

**Moving forward**

In 2015, five training workshops were held in Tepetzintan which showed the high-school pupils construction techniques using materials found abundantly in the region, mainly bamboo. These sessions enabled the young participants to collaborate and apply their knowledge in order to carry out the First Rural Housing Exercise in the area. This building project encouraged the involvement of local young men and women, alongside other community members, through a system of learning and knowledge-sharing between experts from Colombia and Mexico. The workshops gave those taking part the opportunity to acquire a range of skills.

During this process, the young people participating in the project reflected on the lack of purpose-built premises for their high-school and the unsuitability of sharing educational infrastructure with the secondary school; they also discussed the new techniques learned and the various ways of taking advantage of bamboo as a plentiful local resource.
The youth of Tepetzintan therefore decided to take education into their own hands, designing and self-building their own learning space.

Beginning in 2016, the participative design workshops produced a total of five spaces for dialogue and knowledge-sharing. During these sessions, the students used models and diagrams to express their aspirations, needs, and expectations. As part of their work, they developed the “Escuela Rural Productiva”—a concept for a school that was appropriate for the region, built using local materials. This initiative also took a fresh approach to learning and teaching based on the specific cultural, social, environmental, and economic context.

**Making a change**

The architectural program was born of the need, proposed by the students, to learn trades that could help them trigger local chains of production, revive ancestral knowledge in the community, avoid emigration, and strengthen family bonds. Their proposal consisted of three classrooms, a vegetable garden, and a medicinal garden. Other elements included a *milpa* (a small-scale agricultural plot), a kitchen-laboratory for the production of ointments, creams, and syrups, as well as a workshop where the pupils could continue learning about bamboo and other local materials used for building and creating other structures and furniture.

In 2017, the project was officially presented by the students and Comunal: Taller de Arquitectura to the parents, who held an assembly and voted for the project to go ahead. A local committee was formed to track progress and organize the participation of parents who would provide bamboo, stone, transport of material, and labor, as well as join *faenas*—local teams providing physical labor for the benefit of all. The community’s general assembly donated the 1,530-square-meter (16,500-sq.ft) plot of land for the construction of the learning space, which helped put the project on a firm footing.

Construction work on the first stage began in July 2017 with the felling of 500 bamboos donated by the parents of the pupils, and the latter attended practical workshops in order to train the new generations and transfer knowledge about techniques. The work of digging and extracting stone was organized among the pupils’ families to make the project viable through mutual assistance, collaboration, and collectivity.
Social impact

From an educational perspective, the project counters public policies that tend to homogenize education across the country, replicating architectural spaces and curriculums. Inspired by the particular context of each community, it also seeks to create a personalized learning space, suited to the pupils’ educational needs, stemming rural flight and emigration.

In 2018, Tepetzintan’s student community completed the project’s first stage, a classroom and auxiliary spaces measuring a total of 192 square meters (2,000 sq. ft). The second stage of construction—another classroom and the kitchen-laboratory, with an area of 350 square meters (3,750 sq. ft.)—will be finished in late 2019.

The project has inspired two nearby communities (Pinahuista and Xocoyolo) to become involved in technical training workshops given by students, showing a knowledge-transfer domino effect, not only locally but also across a wider area. This has led to a series of projects in which communities help each other in a bartering system: they exchange training workshops for faenas, helping the construction process.

The Escuela Rural Productiva project has 56 enrolled pupils and the first generation—which began the construction process—graduated in June 2019. The most valuable social impact has been the stimulation of critical thinking among the young participants about the journey they embarked on back in 2015. After initially doubting their abilities to succeed, today they see themselves as change agents equipped with the tools they need to make an impact on their own future and that of the community. In this regard, through the committees women have played an essential and active role by detonating empowerment and encouraging them to continue their studies.

This first step was taken with a collective effort spearheaded by young members of the community, the construction committee, the educational committee, and Pablo López, the teacher who sought to prove that mutual assistance and working together is instrumental in achieving progress in the autonomous and community development of indigenous people.
Success factors

- Self-management process
- Community reflection
- Participative design
- Technical training workshops
- Knowledge exchange at a regional level
- Constant dialogue between participants
- Implementation strategy designed by main agents and direct users

Challenges

- Maintaining the active participation of parents throughout the process, since the steady decrease in their numbers during the construction phase has discouraged the pupils
- Ensuring support from the Public Education Ministry to help in collaborative processes in order to improve school infrastructure in rural areas
- Regulations and public policies ill-suited to the local context for the construction of learning spaces, and the refusal to use vernacular materials

Key lessons learned

- Self-management processes require a strong component of strategic alliances
- The project must be effectively publicized to achieve synergies in different contexts and to combine efforts
- A solid institutional structure must be in place to access funds; we set up a non-profit association for this purpose in 2017
- Constant dialogue is essential for reaching agreements
- A “social thermometer” is vital as a means of fine-tuning the strategy as required, in order to keep young people motivated to participate in a harmonious way
Strategic partners

- Change agents
- Micaela Francisco, president, construction committee
- Samuel Coyota, coordinator, construction work + community faenas
- Iván Martínez, local specialist, bamboo + training workshops
- Gaudencio Francisco, local specialist, ironwork
- Pablo López, director, Bachillerato Rural Digital 186 + coordinator of student faenas
- Isauro Manzano, specialist engineer, bamboo

Institutional:
- Canada Fund for Local Initiatives (CFLI)
- Ecolam
- Novaceramic
- Rotoplas
- Root Films

* The project has received contributions from the community, and money has also been raised by Comunal's fundraising campaigns.

Further information

- comunaltaller.com