Creating Learning Spaces: South Africa's Vele High School and its Success in Promoting Lifelong Learning

The school infrastructure from local resources, Vele and Vryheid, South Africa

Project data

Type of project: Architecture (education)
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Comment of the Holcim Awards jury Africa Middle East

Education is a key prerequisite of sustainable development. The goal of the project is to develop schools as community hubs and centers for lifelong learning. The Creating Learning Spaces Programme conceptualizes the school becoming a community resource center which facilitates the revitalization and development of communities through training as well as demonstrations of sustainable livelihoods through energy efficiency, renewable-energy use, rainwater harvesting and local food production.

The training program aims at self-reliance through ownership and responsibility. In addition to the theoretical programmatic background, the project also proposes standardized layouts, schemes, materials and construction technology for the design and realization of such learning spaces. The project has been commended because of its comprehensive approach to lifelong learning in rural areas and due to the stringent involvement of the population.

Project description by author

Creating Learning Spaces: Schools play a critical role in the life of communities, especially those situated in remote and impoverished areas. These areas are typically under-served by other public or private institutions and, consequently, offer few opportunities for social, cultural or economic growth. In these under-resourced areas, schools have a vital potential to serve, not only as educational institutions, but also as centers of the community. Vibrant hubs that radiate opportunities for learning and growth outward to all members of the surrounding community. However, this cannot happen on its own. The full potential of schools can only be realized through innovative partnerships that extend beyond the roles traditionally established between government and society, or between donors and recipients. Instead, a new approach should be taken, one that builds on the skills, resources, and commitment of a range of partners, including governmental and NGO stakeholders, the private sector, and local communities.

In that spirit, the Creating Learning Spaces Programme provides an opportunity for Oprah’s Angel Network in partnership with East Coast Architects to lead the way by drawing on the success of their collaboration on the Seven Fountains School project and developing new partnerships to replicate that success. The accomplishments of the Seven Fountains project were achieved through innovative architectural design, the use of local environmental resources to develop the school infrastructure, attention to the environment in the operations of the school, and a particular focus on skills enhancement and social development of the surrounding community. By explicating the process of engaging the entire community (teachers, learners, parents, etc.) into the decision-making and development process, the Creating Learning Spaces Programme contributes to the education of South African youth and the strengthening of some of its most vulnerable and under-developed communities.

The first phase of the project started in 2008 with the commission to design two new schools: Vele High School is in the northern region of the Limpopo Province and, despite inadequate infrastructure and a lack of basic resources, the school has excelled academically for the past 10 years. In keeping with the project theme of “rewarding excellence,” the Creating Learning Spaces Programme will partner with the Limpopo Education Department to build a new school at Vule. Lakeside School is a new school planned for a low-income housing estate in the northern KwaZulu-Natal town of Vryheid. Families will be relocated from informal settlements to occupy the new township and the process of designing and building a new school has the potential to be a unifying force in this new community.

Relevance to target issues by author

Quantum change and transferability
The primary goal of the Creating Learning Spaces Programme is to develop schools as community hubs and centers of lifelong learning. Through carefully considered site planning the schools are designed to accommodate community use, whilst at the same time respecting the operational requirements of the school. Innovative design of learning spaces optimizes the comfort levels of the learners and teachers and the classroom layouts respond to the needs of the new outcomes-based educational curriculum. The program is founded on the success of the recently completed Seven Fountains Primary School. Lessons learnt from that project and the feedback from a comprehensive post-occupancy measurement system have, and will continue to, inform this new program as launched at two new school sites in Vele and Vryheid.

Ethical standards and social equity
The Creating Learning Spaces Programme empowers communities through a series of collaborative workshops and inclusive, transparent processes. The program recognizes that the long-term sustainability of a community project is derived from partnerships with the stakeholders and the social benefits that can be derived. The program holds local beneficiaries, particularly learners, teachers, parents and neighboring communities, as the primary stakeholders in each school project. Particular emphasis is placed on design, construction and operational activities that maximize the skills enhancement and social development of the participants. The school facilities and infrastructure provide learning opportunities in life skills such as food production, energy efficient building and water harvesting.

Ecological quality and energy conservation
Every school in the Creating Learning Spaces Programme strives to meet best practice standards for ecologically sustainable construction. Energy conservation and water management are important themes and the use of local resources reduces the carbon footprint. Passive low energy design is integrated into the design process from site planning and orientation through to detailing and finishing.

Economic performance and compatibility
Through an innovative funding model the Creating Learning Spaces Programme enters into partnerships with provincial departments of education. Further partnerships with local communities present sustainable management and use of the schools. Energy efficient design and water conservation strategies reduce the running costs of the school. Robust materials and detailing reduce the maintenance costs.

Contextual and aesthetic impact
Through engagement with local communities the place-making skills of local cultures and the building vernaculars are respected and acknowledged. The buildings respond to the local climate by the way of solar orientation, natural ventilation strategies and shelter from inclement weather. The use of local materials and skills validates local culture and grounds the schools in a specific region.