

Co-creation and collaboration to create social value: A case of the restoration and retrofitting of Woodstock School Mussoorie, India

Reimagining Woodstock School's campus, infrastructure and learning spaces to celebrate its 168-year legacy and heritage while providing a modern, flexible teaching and learning environment for the 21st Century to support their pedagogy, as well as vision, for the future. The project has adopted a community-led, people-centric design approach reflecting the school's values of inclusivity, collaboration and treading lightly on Earth. The careful implementation of the project has been achieved through the integration of low-technology, recycling and upcycling of materials within the site, as well as the application of traditional materials and craftsmanship during the COVID 19 pandemic. The entire restoration has been a fully private sector initiative, funded by 250 individual donors from North America (Canada and the U.S.), Australia, New Zealand, Thailand, Singapore, India, Northern Ireland, Denmark, and the UK through the Friends of Woodstock School (FWS), Canadian Friends of Woodstock School, and Lyre Tree Society.

Woodstock School, established in 1854, is a premier non-profit, co-educational boarding school set in 258 acres of wooded landscape in Landour, Mussoorie, India. Although it is not legally protected as a heritage building, it is considered to be a local-level landmark. Recognized as an institution rich in history and tradition by current and former students, staff, administrators and visitors, its heritage environment provides a tangible link to its distinctive identity.

Having grown incrementally over the years to adapt to the changing academic requirements, the individual internal and external changes have had a detrimental impact on the overall architectural heritage value of the school's academic buildings. It recognizes that in moving towards becoming an international educational leader in Asia it needs to initiate change to foster a sense of community as well as impact student learning.

An example of participatory heritage conservation, this project has been entirely driven by the community for the love of their heritage. The articulation of the community's values was achieved through bottom-up engagements with the students, teaching staff, administration and alumni through hybrid modes. In keeping with Woodstock School's ethos of treading on the planet lightly, the project has been guided by the vision of celebrating the rich heritage of the building while providing a modern flexible environment that supports its vision to be a global institution. The core values of the school of encouraging holistic learning, caring for the planet and sustainability have been the guiding force for the project. The heritage values are vested not only in the material fabric, but also in the largely intangible; the legacy of the past as well as the vision for the future.

Sustaining identity is not just about returning a place to its glorious past, it is about endurance and empowering a community to adapt to changing circumstances. The fund-raising campaign for the project has been built around the idea of honouring Woodstock's past by giving towards its future, co-creating and sustaining a collective identity for the institution. Adopting a participatory design approach, the brief of the project was outlined through collaboration and co-creation with all stakeholders.

The objective was to make the 168-year-old buildings future ready, adapting to teaching and learning in the 21st Century while respecting their heritage and improve resilience of the buildings to disasters such as fire and earthquakes. The primary challenges were the structural retrofitting of the building

to increase resistance to seismic threats, upgrading the mechanical engineering services and integrating new heating and ventilation systems for the classrooms and science labs. The architectural interventions included recovering the original spatial configuration of the 1929 building by reorganizing the spatial uses. This included careful removal of incongruous walls and partitions, designing spaces that were collaborative, flexible, student centered and efficient. Original architectural features and fenestration patterns were recovered, original timber windows were repaired and refurbished, and those which were heavily damaged were replaced to match the original design in like-for-like material. The key design elements were recovering the original spatial design of the building, creating spaces with ample natural light and ventilation that facilitated collaboration, enhanced the mood and supported learning and remained a solution that was specific to this site.

Interaction spaces outside the classrooms were created with the refurbishment of the hallways as well as creating a centrally located lounge for teachers and students. The disused open space to the front of the High School was re-imaged as a student interaction space. The landscape design was chosen to be practical, the existing material available on site was reused, the overall drainage of the site was managed and new benches made from leftover materials were designed around the existing trees, enhancing the biophilic qualities of the space. The main entry was re-imaged to create a more visually permeable entrance while maintaining the security, highlighting the original entrance gate which was faithfully restored based on archival references. The security and reception area were designed to merge into the surroundings and built with material already available on site, in keeping with the recycle, reuse and repurposing principle. All new interventions were chosen to be contemporary in the choice of material, colour and expression. The project has created flexible working spaces with the creation of open-plan and collaborative working spaces, centrally shared social and informal meeting areas for teachers and students. The spaces are enhanced by the choice of flexible furniture.

Adopting a community-led design approach, through an iterative process, the project was undertaken on a tight budget using low technology and relying more on human action. As the project was implemented during the COVID 19 pandemic, several new ways of working in collaboration with the local teams emerged for co-creating solutions that helped in successfully overcoming the various challenges that were encountered. Learning from this experience we have co-created an online open-source platform called the Restoration Toolbox that brings together all stakeholders in the design process and empowers local communities to restore their own buildings in a participatory way.