



Liberated spaces: Purposeful school design says goodbye to cells and bells.

Education think twice. measure again.

by: **Jennifer Lewington**
Courtesy of **Education Canada Magazine**

After a 30-year career as a design consultant, Ron Christie joined Regina Public Schools in 2004 as the manager of planning and maintenance. His first impressions of the system's schools took him back in time.

"As soon as you walk in the door you think my god, nothing has changed since I went to elementary school and that was a long time ago," says Mr. Christie, now general manager of educational facilities for the district.

Since his first impressions, Regina and other school districts in Canada have joined a growing international movement on school design for 21st century learners. "If you want to have students come to school and feel pleased about being there, then don't put them in a junky old school from the 1950s that really hasn't had any significant upgrade in 50 or 60 years," says Mr. Christie.

In Regina, the impetus to change came with plans to merge or close schools in some neighbourhoods and build new ones elsewhere. "It [the discussion] was interwoven in a very positive way from the beginning in terms of looking at the learning agenda and the management of facilities," says Regina Director of Education Julie MacRae, of the strategy adopted by her predecessors before her appointment last year.

This September, the board opened Douglas Park Elementary, a 50,000-square foot building that replaces an existing facility on the same suburban site and epitomizes current thinking about architecture's role in learning.

Gone is the traditional layout of long corridors with classrooms on either side – the so-called "cells and bells" model of the traditional school, replaced with flexible spaces for individual and group learning activities and plenty of natural light. A "school within a school" format divides 400 students into learning communities (K-2, grades 3-5 and 6-8), each with separate entrances to the playground and all connected to the building's central learning commons.

The open layout is a far cry from the unstructured space of "open-concept" schools in the 1960s. Douglas Park has 33 distinct learning spaces, including 11 classrooms known as "learning studios" with flexible seating and mobile carts for books and specialty rooms for special-needs children (connected to the classroom). With the school positioned on an east-west axis, sun pours through a large-windowed south wall to the central atrium. One of the most intriguing spaces is a 133-square-metre "DaVinci Studio" for science labs, fine arts, or interdisciplinary projects. The \$19.5-million project came in on budget and met Saskatchewan ministry guidelines for a Leadership in Energy and Environmental Design silver rating for sustainable construction.

No wonder, according to the Regina Leader-Post, that school board chairwoman Katherine Gagne told the opening-day audience "this is a place of innovation, creativity, expression and learning."

The reimagined school design fits today's economy, says Randall Fielding, chairman of Fielding Nair International, the educational facility planner and design architect for Douglas Park. (Regina-based Number TEN Architectural Group was the executive architect on the project.)

"In addition to the reality of collaboration, there is the reality today of what modern, successful companies are like," he says. "If we look at Apple and Google, their offices are not just a series of enclosed rooms with doors anymore."

He cites two recent peer-reviewed studies that report increased learning retention with inquiry-based teaching methods – the kind of pedagogy supported by progressive school design.

While fluid spaces at Douglas Park encourage cross-disciplinary activities, Mr. Fielding says young learners also need time to work alone.

"Good creative work is done by an individual often stimulated by interaction with others and they often work together in a team to create things," he says. "But you really need to support individual learning as much as collaborative learning."

That view is shared by Ontario-based architect Paul Sapounzi, a partner in +VG Architects, whose schools designs feature flexible classroom spaces, natural light and fewer corridors.

"We are starting to implement elements in our school so that the building itself becomes a tool for learning," says Mr. Sapounzi. At some schools, his firm has made the mechanical systems visible so students see what accounts for 30 percent of a building's costs. Like Mr. Fielding, he encourages schools to imagine space for different uses: the "work-horse" classroom, tutorial spaces for group learning and quiet places for students to work alone.



MARIO MADAU/+VG ARCHITECTS

"Doing the stuff in between [formal classroom activities] is where some of the most important learning takes place," says Mr. Sapounzi. "That means we need to create spaces in the lobby, atrium, the library and even in the classroom at times where students go off on their own."

Of half a dozen obstacles to modern school design, Mr. Fielding ranks teacher professional development at the top of his list. Without it, he warns, school will not reap the full benefits from learning-friendly architecture. ●

MARIO MADAU/+VG ARCHITECTS



+VG Architects is a full-service architectural firm offering new design, expansions and heritage restorations for cultural, educational, municipal, justice, healthcare, residential and recreational facilities. Our staff of 50+ operates in four offices in Ontario, in Brantford, Kitchener, Toronto and Belleville. See www.plusvg.com for more information.