

21st Century Learner: Schools for the Future

Executive Summary

"As a school district, we recognize the importance of our role in ensuring the best education for our students. We appreciate that the needs of our students are changing, both individually and collectively. As educators, we recognize our own need for lifelong learning and are committed to the continuous improvement of our organization and the programs and services that we offer to the benefit of all students. As leaders in education, our role is to help build the leaders of the future." (OCDSB Strategic Plan, 2007)

In June 2008, the OCDSB adopted an overarching goal to realize a 90 per cent graduation rate by 2020. In order to achieve this goal, it is imperative that the District look carefully at the way our schools, programs, and services are structured to ensure that all aspects of our learning environments are aligned.

21st Century Learners

Information and communication technologies are raising the bar on the competencies needed to succeed in the 21st century. (21st Century Literacy Summit, 2002)

The students of today are 21st century learners. They live in a digital age where they have access to vast amounts of information at their fingertips. Our challenge as educators is not simply to give students information, but to teach them how to use it. Critical thinkers are creative, inquiring, reflective, analytical, and committed to using new information to find solutions. To develop critical thinkers, our classrooms must inspire learning through a solid foundation in literacy and numeracy. Our students must be literate, but not only in books; they must be literate in music and art, in science and technology, in culture and diversity, in character and communication.

We recognize that we must develop a broad education system – curricula, subject matter, and teaching styles – that encourages creativity and cultivates both the analytical and social intelligence skills we need to compete at the frontier of the creative age. (Florida & Martin, 2009)

Indeed, the OCDSB's mission is "Educating for Success – Inspiring Learning and Building Citizenship". In order to achieve this mission, we must have a clear and collective understanding about how we organize our learning environments.

School Organization

Every classroom has the potential to inspire learning. As a school district, our challenge is to create a system with the best possible learning environment for all students. The opportunity is infinite, but our resources are finite. Effective organizations find ways to develop parameters that maximize opportunity and resources. The way that we organize our schools and programs is critical to ensuring equity of access and opportunity for all of our students.

School and Community Connections

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A strong sense of community and citizenship is at the heart of “public” education.... Our community is very diverse and is a wonderful resource that can contribute to the learning experiences of our students. We must work with our community partners to identify and access resources and to build connections that enhance learning opportunities, facilitate inclusiveness and create value for our partners in the community. (OCDSB Strategic Plan, 2007)

We believe that education is built on learning, leadership, and community. Schools are important community assets and should be able to support full day learning opportunities for all children. However, schools must also be supported by the community.

Educational achievement and academic success demand resources beyond the scope of the school and of most families. (Heath & McLaughlin, 1987)

Children should have the opportunity to go to school in the community where they live. Our partners in the city, the business, and social services sectors should be able to work together to support learning opportunities for students and families in their community.

Program Choice

Our community places a high value on choice. We appreciate that the diversity of our student population, the expectations of our community, and the demands of the curriculum create endless opportunity for programs and services. We continue to support choice in programs for our students. However, that commitment cannot be unlimited choices: it must be to choices that positively impact student learning.



We believe that every student should have equitable access to programs, and we believe that quality programming is essential. We understand the importance of balancing program choice and viability. It is not enough to offer a program because we can or because we have offered it in the past. We must remain committed to offering programs that meet the learning needs of the students of today, and prepare them for tomorrow. Our commitment to offering quality programs is based on maintaining a cyclical, research-based program review process.



Choice and Community Schools

Bridging the concepts of community schools and program choice is

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complicated. We want students enrolled in the best program for their learning needs and able to go to school in their community. However, we know that we cannot offer every program in every school.

Our Schools for the Future diagram visually connects the idea of a community school, a family of schools, and a school superintendency. A school superintendency is a geographic area comprising a number of “families of schools”. Ensuring equitable access to program choice at the superintendency level is an effective way of managing choice and community schools.

At the elementary level, we believe that every child should have access to the following programs within the geographic area/superintendency in which they reside:

- English
- Early French Immersion
- Middle French Immersion

At the elementary level, wherever possible these programs will be offered in dual track schools working on a balanced school day. (A glossary of terms is included at the end of this document.) A dual track program model ensures that our schools are community based and more inclusive of the learning needs of all of our students. The balanced school day maximizes the learning opportunities of students and our time allocation model provides for consistency in curriculum delivery across the district.

At the secondary level, we believe in composite schools with the

understanding that the number of students influences the breadth of programming a school can offer. Most of our secondary schools offer semestered programming which supports learning needs and allows for effective distribution of resources.

At the secondary level, every student can choose one of four program pathways:

- Workplace
- Apprenticeship
- College
- University

Specialized Schools & Programs



(The New Media Consortium, 2005)

The beauty of public education is the richness in learning opportunities that result from bringing together students with different needs, backgrounds, and abilities. We believe that every student can learn and that education should be delivered in the home classroom or home school when it meets a student’s needs.

We also understand that specialized learning opportunities can be beneficial to certain populations of students.

Our special education services are designed to support students in the classroom. Where the learning needs

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of students are best addressed through a more specialized program, students may qualify for a specialized program within the district.

In special education, we continue to work toward distributing programs geographically across the system based on need. We also continue to focus on stability in program location. Our quality program indicators are critical to ensuring consistency in program delivery. We understand our responsibility to measure effectiveness, to continue to monitor needs, and to engage in dialogue about the variety, quality, and relevancy of our programs.

Grade Span Configuration

The debate over which grade configuration is best, especially for young adolescents, has long been a controversial issue.

(The National Forum to Accelerate Middle Grades Reform, 2008)

Educationally, there are many ways to configure schools to support student learning. The most common grade span configurations are K to 8 and 9 to 12 or alternatively, K to 6, 7 to 8, and 9 to 12. The research supports a variety of grade span configurations, but it consistently highlights the importance of the quality of instruction and the need to minimize the number of transitions for students. Minimizing transitions ensures that students have stability in their learning environment and encourages relationship-building and a sense of community in a school. Together, these things can positively influence teaching and learning, leading to improved program quality, and most importantly improved student achievement.

Looking forward, we believe that the best way to minimize transitions is to reduce the number of grade span configuration models. To better meet the needs of our students, we will move toward school configurations that support K-8 and 9-12 schools or K-6 and 7-12 schools. Both of these models are aligned with the divisional organization of the curriculum as provided by the Ministry of Education.

A shift in school configuration models is a long term objective which will support our ongoing efforts to improve instructional practice.

Debating School Size

Research offers evidence to support small, medium, and large sized schools. While the debate continues, the reality is that our student population is declining in total number and increasing in diversity. Demographics in the City of Ottawa will continue to dictate student population in schools, both in terms of number and needs. The question is not "What is the optimal school size?" but rather "How do you optimize learning?"

Without a doubt, numbers matter in terms of resource allocation and learning opportunity, but they matter most in terms of the breadth of programming that can be offered and how the students learn.

The Ontario curriculum provides for four program pathways for students which are further enhanced by the choice of programs we offer at the district level. When the student population is

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distributed across those pathways and programs, it becomes increasingly difficult to establish parameters on ideal school size. Ultimately, quality of instruction, not size, is the important issue in education. However, size does matter because it influences the allocation of resources; when there are too few students and teachers, instructional quality can be adversely affected.

School Design

New ways of planning space must be developed. And these methods must not be based on the traditional standard of student per square foot, but on learning per square foot.
(Bickford, Dittoe, & Wright, 2007)

Schools are more than just buildings and research shows that the environment does influence learning. We believe in the importance of design in new school construction and in school renovations.

Technology plays a growing role in education, and the evolutionary impact of technology on education must be carefully considered in school design. The classrooms of tomorrow will look very different. As a school district we must be conscious of the changing demands of technology on the classroom.

As much as design influences learning, buildings influence cost. Schools are important capital assets and must be designed and maintained to ensure safety and allow flexibility in use if we are to meet the changing needs of students and teachers.

Technology: The Multi-Media Message



(The New Media Consortium, 2005)

The influence of technology touches every part of education – building design, classroom layout, resources, instructional strategy, curriculum content, assessment, and the list goes on.

The 21st century learner has grown up in a multi-media world where access to infinite amounts of information from multiple sources is possible in seconds.

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(The New Media Consortium, 2005)

Looking forward, communication skills will be critical:

In the classroom, as students find themselves engaged on multiple levels, it is easier for teachers to focus on critical thinking and problem-based learning. Communication skills are highly valued by students and teachers alike — both in traditional forms like print and public speaking, and also in forms like multimedia, the visual arts, music, and cinema. Assessment methods focus on performance and use blended modes that take into account the various facets of the skills imbedded in 21st century literacy.

(The New Media Consortium, 2005)

Graduation Starts in Kindergarten

Early childhood development is key to the full development of human capabilities and talents.

(Florida & Martin, 2009)

Secondary school graduation is the culmination of a 14-year journey of schooling. If we want our students to be successful, we must start at the beginning and continue throughout the journey. Student success begins with early childhood learning – that is why communities and families are such important partners in education. Our students must start in a safe and welcoming learning environment. They must be introduced to new ideas and experiences in age appropriate ways. They must be encouraged to explore and to question the world

around them. They must be inspired by what the world has to offer them and what they have to offer the world.

As educators, we understand the potential of every student, the opportunity in every classroom, and the promise that today's students hold for our future. As administrators, we know the challenges of putting parameters on education. As leaders, we understand that is what we have to do.

To the community, we note that our collective and collaborative creativity is essential to ensuring that our school district is the best that it can be.

Creativity is not a separate faculty that some people and others do not. It is a function of intelligence: it takes many forms, it draws from many different capacities and we all have different creative capabilities. Creativity is possible in any activity in which human intelligence is actively engaged.

(Robinson, 2001)

The 2020 90% graduation rate goal is our promise. Our 21st Century Learner: Schools for Future paper is the next step on our path to encourage critical thinking in planning for the 21st century learner.

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