School beyond COVID-19

Accelerating the changes that matter for K to 12 learners in Canada



©C21 Canada, 2021

All rights reserved. Permission is granted to reproduce all or part of this publication for non-commercial purposes, as long as you cite the source:

Wise, J., K. Yamada, and P. Milton. 2021. School Beyond COVID-19: Accelerating the changes that matter for K to 12 learners in Canada. C21 Canada.

Available at www.C21canada.org/School-Beyond-COVID-19

A message from C21 Canada

September 2021

Throughout the COVID-19 pandemic that began in March 2020, a determined group of education system leaders from across Canada met online to share strategies, to reflect, and to anticipate their next steps on an unchartable journey with an unknowable end point. Members of C21 Canada's CEO Academy built connections and coherence through cross-country check-ins, weekly email updates, and spontaneous peer support. C21 Canada captured their formative insights in a *COVID-19 Leader Playbook for Surviving and Thriving*.

This follow-up discussion paper poses the next big question: What could public education become after COVID-19? The paper connects insights from CEO Academy members to a national and global conversation about the future of education. It focuses on themes that the pandemic magnified, including the central importance of wellbeing, equity and inclusion, and the growing use of technology to support learning.

We thank the dedicated members of the CEO Academy, the CIO Alliance, and our board of advisors for sharing their expertise and new learning in the pandemic crisis and beyond. Your leadership is inspiring.

We offer this discussion paper to all district leaders and policy makers to support their ongoing critical inquiries. We invite you to connect with us via Twitter or our website (c21canada.org) to share your comments and your work to transform Kindergarten to Grade 12 education at this pivotal moment in history.



Robert MartellacciCEO and Co-founder

Karen YamadaChief Learning Officer

David Roberts

President and Co-founder

About the writing team:

Joanne Wise is a writer, editor, and plain-language coach (letsbeclear.ca/joanne-wise).

Karen Yamada is the initiator and guide for this writing team, representing C21 Canada.

Penny Milton is a former long-serving Chief Executive Officer of the Canadian Education Association.

"There is something hugely powerful about human collaboration. I think it's our superpower as a species."

Dr. Michael Ryan, Executive Director, Health Emergencies Programme, World Health Organization

Contents

The story so far
Some foundations for learning
Global competencies (the 7Cs)
Indigenous ways of knowing3
Social and emotional learning (SEL)4
Priorities5
Wellbeing for learning and living5
Equity and inclusion now8
Technology integration11
What's happening13
Rethinking pedagogy
Trusting teachers' professionalism16
Collaborating and networking17
Engaging with parents and communities19
Leading forward20
Appendices • Learn more
APPENDIX A • Global competencies and the 7Cs
APPENDIX B • Some Indigenous ways of knowing24
APPENDIX C • OECD Learning Compass 203026
APPENDIX D • 17 Sustainable development goals to transform our world
APPENDIX E • A conversation with Dr. Michael Ryan, World Health Organization (WHO)
About C21 Canada

The story so far

COVID-19 changed everything that was familiar about schooling in

Canada. It's hard to imagine a more congregate setting than a typical elementary or secondary school before 2020. Bustling hallways, classroom rotations on the bell, lunch in the gym or cafeteria, outdoor play and childhood chatter in the playgrounds, conversations among parents and caregivers arriving to pick up kids, and many students lined up to get on school buses while others hurry off to extra-curricular activities. Suddenly all this was out of bounds.

To protect the health of students and staff, districts had to quickly redesign school, following directives from their provincial or territorial government and in response to local conditions. Students were assigned to cohort groups to reduce interactions; classrooms were reorganized to maintain social distance where possible; non-essential adults were barred from school buildings. Some districts pivoted quickly to online learning or to blended online and in-person learning. Meetings moved online, too. Almost every convention at every level of the system was upend-able—the what, when, where, why, and how of learning and work. "We've never done it that way," was no longer relevant, except as a reminder that change is hard.

Change has always been hard in public education. Schools and school systems were designed for stability, not innovation. Even positive changes backed by research and broad consensus can be wickedly difficult to implement at scale. In 2015, we explored this resistance to change and how to overcome it in *Shifting Minds 3.0: Redefining the Learning Landscape in Canada.*¹

Education practice includes the tight interconnectivity of the component parts that make up a school. This interconnectivity keeps the current model intact. Some components offer more leverage for redesign than others, especially in the early grades. The arrangements for secondary education—including credit systems, academic levels, postsecondary trajectories, discipline-based curricula, school size, class scheduling, and student transportation needs—all limit the possibility of whole-system change. An innovation in any one component…lacks the power to

¹ Milton, P. 2015. Shifting Minds 3.0: Redefining the learning landscape in Canada. C21 Canada. Retrieved from www.c21canada.org/wp-content/uploads/2015/05/C21-ShiftingMinds-3.pdf.

modify the others. And so the innovation tends to be short lived. There is pressure even for successful innovations to revert to old ways that fit within the larger system. (p 13)

District leaders report that, before 2020, their systems were making progress in the shift to more holistic and relevant learning for life in the 21st century. The pandemic disruptions—harsh as they were accelerated some changes they had long sought: more collaboration, digital connectivity, and greater attention to wellbeing and equity. They note that teachers and administrators have been innovating in ways that could forever transform their practice. Going forward, the challenge will be to stay nimble and to resist what one researcher has called "the Great Snapback"—a return to the old normal.²

No one would argue that all the pandemic adaptations and innovations have been successful. Educators continue to assess and improve their practices and are sharing what they learn. Their ongoing response to the pandemic reflects what they are aiming to develop in all learners: creativity, inquiry, collaboration, calculated risk taking, reasoned problems solving, and the capacity to learn from experience and face the next challenge. (Milton, 2015, p 17).

² Prof. Steve Joordens, University of Toronto Scarborough.

Some foundations for learning

Each school district has its own priorities and learning framework.

Overall, they align in key ways. CEO Academy members agree that global competencies will matter more than ever in school after COVID-19. Indigenous ways of knowing will enrich learning. And social and emotional learning (SEL) must be infused everywhere.

Global competencies (the 7Cs)

C21 Canada calls them the **7Cs:** *creativity and innovation; critical thinking; collaboration; communication; character; culture and ethical citizenship; and computer and digital technologies.* The Council of Ministers of Education, Canada (CMEC) endorsed six **global competencies** in 2016, based on the 7Cs and related sources. (Go to <u>Appendix A</u> for a video of the 7Cs in action and to learn more about the CMEC variation.)

The pandemic has dramatically demonstrated the importance of the 7Cs for learning and teaching. These competencies have been a part of the professional conversation for years, but educators are applying them more consciously in student learning and in their own professional development.

Indigenous ways of knowing

All students need the knowledge, skills, and values to live sustainably in an equitable and intercultural world. Indigenous students need to see themselves and their cultures valued in school. Learning through Indigenous ways of knowing involves students in restorative justice and connects Indigenous and settler people to each other and to the land we share (Appendix B). Many Indigenous ways of knowing emphasize wellbeing and strong, reciprocal relationships—themes that the pandemic has amplified and that will continue to matter deeply.

Social and emotional learning (SEL)

The learning sciences, including neuroscience, point to the central importance of social and emotional skills for learning, wellbeing, and equity. As one district leader has said, "SEL is not another thing to add to the plate; it IS the plate." The CASEL SEL framework has helped some schools and school districts to integrate SEL more comprehensively (www.casel.org/what-is-SEL).

All staff need social and emotional skills and cultural competencies to build partnerships with the people they work with and influence, including students, colleagues, specialists, community partners, and families. These skills and competencies grow in professional learning communities where SEL is modeled by leaders and mentors. Explicit practices to support self-regulation and co-regulation have been important for teachers and students during the pandemic, and they will continue to be important.

Priorities

Wellbeing for learning and living

The global pandemic pushed wellbeing to the top of the education agenda, which is where it belongs. Wellbeing starts with basic needs, grounded in the need for safety. It encompasses the conditions for physical, mental, and emotional health and growth, including a sense of identity and belonging.

As the pandemic stretched from weeks to months, health experts warned that more screen time, less physical activity, and the loss of wrap-around supports at school would have huge impacts on learning and mental health, especially for students at risk.³ School districts that were already prioritizing wellbeing and equity before the pandemic were quick to respond with strategies to meet basic needs and build resilience for their students, families, and staff. "We must Maslow before we Bloom" was a rallying cry.⁴ In some communities, this meant food aid first. In all communities, attention to social and emotional learning (SEL) was key.

A global perspective: OECD Learning Compass 2030

The pedagogical case for wellbeing is solid. In 2015, the OECD launched The Future of Education and Skills 2030, an international project to set goals and develop a common language for teaching and learning. Contributors identified wellbeing as a central theme. The OECD Learning Compass 2030 was released in June 2019. It defines the knowledge, skills, attitudes, and values that learners need to fulfill their potential and contribute to the wellbeing of their communities and the planet (Appendix C).

The OECD Learning Compass 2030 does not prescribe a model of education; it promotes a philosophy of education that is "globally informed and locally contextualized," linking education to other vital global initiatives, including the United Nations' 17 Sustainable Development Goals (Appendix D).

³ In a 2020 study conducted by the Hospital for Sick Children in Toronto, 70 percent of school-aged children and youth reported that they had suffered depression, anxiety, irritability, low attention, or obsessions and compulsions in the first wave of the pandemic (www.sickkids.ca/en/news/archive/2021/impact-of-covid-19-pandemic-on-child-youth-mental-health).

⁴ Referring to Maslow's Hierarchy of Needs and Bloom's Taxonomy of Learning.

In discussions on wellbeing, DISTRICT LEADERS have said:

- We know that a meaningful connection with at least one adult at school is essential for the wellbeing of every student. Although pandemic measures reduced the number of contacts students had, there was potential to maintain or even improve meaningful connections if the measure was designed with connection in mind. For example, online learning can increase isolation, but the technology can also be used to connect students with a trusted adult if the learning is designed with that need in mind.
- The pandemic disrupted the close friendships, social connections, and ways of working together that are central to the development and wellbeing of young people. They may need support to reestablish healthy relationships.
- It's important to take care of the adults, too. For the kids to be well, their teachers need to be calm and self-regulated. School districts can help by respecting healthy boundaries on the workday.
- More school districts are embedding wellbeing into their mission statements and strategic commitments and are providing information and supports for the wellbeing of students, staff, and parents.
- The goals to address wellbeing for learning must be explicit for every school; connected directly to the school improvement plan; monitored; and shared widely.
- Educators have forged stronger partnerships and new ways of working with specialists in health, justice, and social services. More specialists brought their expertise into schools and into homes, mainly through online connections. District leaders want to continue developing these partnerships and ways of working. The Pan-Canadian Joint Consortium for School Health offers examples and resources (www.jcsh-cces.ca). For a global perspective on education and public health partnerships, go to Appendix E, "A conversation with Dr. Michael Ryan, World Health Organization."

WATCH

CEO Academy members share insights on creating a culture of wellbeing that supports mental health.

C21 Canada 10th Anniversary Webinar Series, May 19, 2021, 55 minutes

c21canada.org/well-being-and-mental-health

Equity and inclusion now

Equity and inclusion in education mean that all students will be able to participate to their full potential, and each person's identity and culture will be valued—not ideally or someday, but now. The brutal reality is that children continue to be marginalized by racism, poverty, childhood experiences, social isolation, visible and invisible disabilities, and other factors beyond their control. And in the vicious cycle of inequities, if they don't succeed in school, their lack of education becomes a major risk factor throughout life.⁵

The pandemic period has been particularly hard on students who were already struggling. We don't know what the long-term effects will be on their learning—yet.

Three big-picture questions

The Spiral of Inquiry reminds educators to continually return to three core questions:

- Learn more in *The Spiral Playbook* (c21canada.org/playbook).
- What is going on for our learners?
- How do we know?
- Why does it matter?

Formative assessment practices will be essential in identifying gaps in student learning; externally imposed standardized tests will not. Measuring student learning in relation to pre-pandemic benchmarks misses the point that the pandemic has created new realities for everyone. Some students made less progress in learning while others made greater gains than would have been predicted in a pre-pandemic school year. Teachers need to know for each student what the student knows and can do now, and how to transition to the next steps in their learning. Some students will need targeted instruction, especially in the foundations of

⁵ Government of Canada. 2020. "The social determinants of health and health inequalities." Retrieved at www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html.

literacy and math. Others might have unmet physical, social, or emotional needs that are interfering with their learning.

Strategies to close the equity and achievement gaps must be culturally responsive and trauma informed. They must also be persistent. The underlying causes of inequity and exclusion are systemic and run deep; addressing these issues is deeply uncomfortable work. Educators have to stay in the discomfort—to acknowledge it and work with it. More training or policies won't change results. Results change when educators engage purposefully in collaborative practices that pay attention to the students' own experiences.

An explicit commitment to equity and inclusion is a firm stand against the argument that *more for you means less for me*. Equity must be understood as fundamental for healthy schools and a healthy society. Inclusion does not crowd the room; it expands the whole space for everyone. Equity and inclusion increase social capital, "the networks of relationships among people who live and work in a particular society, enabling that society to function effectively." In equitable and inclusive learning environments, the whole becomes greater than the sum of its parts.

Equity and inclusion grow through explicit intentions, collaboration, and the building of relationships. The CASEL SEL Framework helps to set explicit intentions. Collaborative processes like the Spiral of Inquiry bring those intentions into focus and into practice.

⁶ www.lexico.com/definition/social_capital.

In discussions on equity and inclusion, DISTRICT LEADERS have said:

- Relationships are key. Students won't show up unless they want to. And they won't want to unless a teacher cares about them and believes in them. It's important to ask "What relationships are missing? Who is not being heard?"
- Students need to see themselves represented in classroom resources and have role models they can relate to. This is more than a truism: it requires educators to check their biases and the biases of the education system.
- Networks, affinity groups, alliances, and advisory groups all have a role in making learning environments more equitable and inclusive. They must be safe spaces for people to speak up, advocate, and agitate for change.
- Teachers need support to build their capacity to help vulnerable students, including students with exceptional needs. School resource teams, district consultants, and specialists in speech, language, psychology, and occupational therapy work with teachers to determine targeted supports.
- Universal Design for Learning (UDL) makes learning strategies and resources more accessible for all students, which is especially important for students with specialized needs (www.cast.org/impact/ universal-design-for-learning-udl).
- Every child needs their own digital device and access to the Internet, in and out of school, all year round. This is a fundamental equity issue. School districts managed to get a digital device into the hands of almost every student in record time at the height of the pandemic. We know we can do it. We need the resolve to keep doing it.

WATCH

CEO Academy members share insights on equity and inclusion

C21 Canada 10th Anniversary Webinar Series, April 21, 2021 (62 minutes)

c21canada.org/equity-and-inclusion

Technology integration

Technology was the super glue that districts used to hold school together when pandemic restrictions broke the mold. Some people struggled to stay connected and engaged; others thrived. Individuals and systems continue to adapt. These are some achievements, priorities, and aspirations that district leaders and technology experts envision for school after COVID-19.

An open education ecosystem

- Every student has a dedicated digital device (1 student : 1 device).
- Every student has anytime/anywhere access to the Internet, within and beyond school.
- The technology is barrier free accessible and easy to use.
- Digital resources are available to students, staff, and others beyond the district - even worldwide.
- Systems are integrated, support collaboration, and provide optimal security for students.

Embedded professional learning and supports

- Tech support goes beyond setup and repair. The old Help Desk is now a Pedagogy Help Desk.
- Educators learn by doing, supported by technology mentors and curriculum integration coaches. They dive in, try new things, and take risks together. Their professional learning often happens right in the classroom, with experts applying the technology with students, virtually or in person.
- Educators share ideas and support one another—in organized collaborations and in informal peer networks. Students and parents also participate in a circle of mutual support.
- The SAMR model (substitute/augment/modify/redefine) guides educators to use technology strategically for learning.
- Online resources are organized, easy to use, and annotated to describe what they offer.
- On-demand videos, presentations, and podcasts offer targeted instruction and information in manageable bites for students, teachers, and parents.

Robust infrastructure

- Systems are secure. Data is protected. Users are safe.
- Systems and tools are designed for compatibility.
- Systems are future-ready, built to support exponential growth.

WATCH

CIO Alliance members share insights on digital equity, the technology ecosystem, and user support

C21 Canada 10th Anniversary Webinar Series, June 11, 2021 (63 minutes)

c21canada.org/digital-equity-and-technology-ecosystem

What's happening

Rethinking pedagogy

In the whirl of adaptations that the pandemic forced, teachers were compelled to rethink how their students were learning, how to deepen the learning, and how to develop their own adaptive expertise—the ability to apply their knowledge and skills flexibly and creatively in different situations. The pandemic catapulted more teachers into online learning; it altered schedules, creating longer or shorter blocks of learning time; and it inspired teachers to move more learning outdoors. Following is a brief look at these three aspects of pedagogy and the learning environment.

Blended online and in-person learning

Online learning is not new, particularly for secondary school students. Virtual education is well established in some districts for students in competitive sports and performing arts programs, for some students with special needs, and for students who live in remote locations. But the widespread shift to online learning in 2020 was unprecedented. Many districts and some families want to keep online learning as a flexible option.

Most child development and education experts stress the importance of in-school learning, especially for young children and those still needing to acquire the attributes of self-motivation, time management, and social-emotional competence. Blended learning that combines online and in-person experiences can offer flexibility, connection, and a world of possibilities *if* it is designed with careful attention to the social nature of learning.

Some teachers and students are using digital technologies effectively while others are struggling. Targeted professional development for teachers and excellent online resources for everyone can level the playing field and create richer, more meaningful learning opportunities for all students—online and in person. (Refer back to "Technology integration.")

⁷ Dumont, H., D. Istance and F. Benavides (eds). 2012. Practitioner Guide to The Nature of Learning: Using Research to Inspire Practice. OECD Publications. Retrieved from www.oecd.org/education/ceri/50300814.pdf

Ways to support learning

	Online learning (Virtual school)	In-person learning	Blended online and in-person learning (also called hybrid learning)
Synchronous	Students sign in at scheduled times and participate in a group – for example, using Zoom or Google Hangouts	Students learn together in an indoor or outdoor setting, in school or in the community	Students learn in a combination of contexts: online and in person; sometimes in sync with their peers and sometimes asynchronously at their own pace. For example, students might switch between in-person and online learning on alternate days or alternate weeks; or learn in person for half of the day and online for the other half.
Asynchronous	Students may set their own schedule for independent online learning	Students learn at their own pace in a school setting—for example, during a study period or in a hands-on studio or workshop	

Alternative scheduling

In school before COVID-19, timetables were set well in advance and changes were difficult if not impossible to make, especially in the higher grades. Many high schools were organized into two semesters per year; some into trimesters; and a few into four quarters (quadmesters). As the pandemic stretched on, the need to organize students into small cohorts with fewer interactions in the school day prompted some school districts to shift quickly to quadmesters, with students taking only two subjects at a time. This required teachers to rethink their pedagogy to keep students engaged and to help them develop independent and collaborative learning skills.

The pros and cons of each approach to scheduling are complex. A case can be made for one approach or another, depending on many factors. The point that district leaders have emphasized is that more scheduling options are possible for school after COVID-19, thanks to technology integration and better collaboration among teachers. This might be particularly helpful for families that choose to shift some schooling to the home.

Outdoor learning

COVID-19 has permanently changed how educators view learning outdoors. Teachers are now more likely to take their students outside for any subject, not only for sports or traditional outdoor education. And once outside, they are more likely to offer experiential learning that connects the students with their environment. Teachers with expertise in outdoor learning are collaborating more intentionally with school teams. More resources are coming online to support land-based learning. Funding has been allocated in some districts to create outdoor learning spaces that serve a variety of purposes.

School districts that have established respectful protocols with Indigenous knowledge keepers are including Indigenous ways of knowing in land-based learning at all grade levels. Generic experiences created by settlers and branded as Indigenous are not respectful; nor is it respectful to rely on unpaid community volunteers to provide what is becoming essential learning for all students. School districts have a vital role in forging right relations between Indigenous and settler peoples, and inquiry-oriented land-based learning is one authentic pathway for this.

WATCH

CEO Academy members share insights on high school programming and other shifts in pedagogy

C21 Canada 10th Anniversary Webinar Series, April 7, 2021 (64 minutes)

c21canada.org/covid-19-a-catalyst-for-shifting-pedagogy

Trusting teachers' professionalism

Teachers are trained, accredited professionals who are continually learning as they support the learning of their students. Their work requires them to be masters of the 7Cs: creativity and innovation; critical thinking; collaboration; communication; character; culture and ethical citizenship; and computer and digital technologies. Because K to 12 learning is a continuum, teachers must adhere to curriculum expectations that will prepare students for their next steps, which include the next unit, but also other subjects and the grade levels ahead. It's a complicated business.

Too often, teachers get mixed signals about what they are expected to achieve in a school year. Raising test scores and covering the curriculum compete with expectations for student wellbeing and time for deeper learning. An emphasis on standardized testing and tight adherence to the curriculum holds the system to account, but it can also favour conformity at the expense of the deeper knowledge, skills, attitudes, and values that students need to succeed beyond school. To be clear: conformity is not one of the 7Cs; it is a poor predictor for success in an ever-changing world.

With that tension in mind, **DISTRICT LEADERS have noted the following:**

- Teachers need explicit permission to prioritize. They need to work as a team to identify and develop the essential knowledge and skills that will enable their students to progress in their learning.
- Rules don't inspire a culture of learning; shared principles do. By emphasizing principles, leaders empower school teams to co-design solutions that meet their students' needs.
- Some holdovers from the past, like line-ups and bells to control the movement of students, might no longer serve a purpose in school after COVID-19. Teachers and principals can be trusted to question old habits and try other ways to organize school to support student learning.

It's important to also recognize that some teachers struggled in the transition to online learning and are hesitating to integrate technology into their teaching practice. Principals need to work with these teachers and ensure that all students have the opportunities they need to succeed.

Collaborating and networking

The era of the solo teacher is long past. And "lone leader" is a clear contradiction in terms. The pandemic accentuated how essential it is to work together in peer networks and professional learning communities.

Isolated efforts to make a difference, no matter how well intentioned, are not enough to make a lasting difference in our complex education systems. Teamwork is essential, and so is building a wider network of inquiry-minded people to deepen and spread the learning. Research shows that big changes begin to take hold when they are supported by a rich web of networks and partnerships (OECD 2015). (p16)⁸

In the months and school years ahead, professional learning communities will be paying close attention to how their learners are adapting, struggling, and thriving in the new reality—whatever that reality might be. A disciplined approach to collaborative inquiry, such as the Spiral of Inquiry, challenges educators to be persistently curious about what's really happening for their learners and about what the whole team can do to make the biggest difference in outcomes that matter for those learners. The Spiral of Inquiry was designed with networked sharing in mind. By sharing their inquiry stories—including the false starts and failures as well as the successes—educators learn from each other and build coherence in their systems over time. They are supported in this by leaders who set hard goals for equity and quality, and who pursue those goals with a growth mindset. Find out more in *The Spiral Playbook* (c21canada.org/playbook). Also visit the Networks of Inquiry and Indigenous Education (NOIIE) at noiie.ca.

The Spiral of Inquiry

What is going on for our learners? How do we know? Why does it matter?



⁸ Kaser, L. and J. Halbert. 2017. *The Spiral Playbook: Leading with an inquiring mind in school systems and schools*. C21 Canada. Retrieved from c21canada.org/playbook.

District leaders have emphasized the importance of peer-to-peer networks in their work. They have been inspired and emboldened to innovate in their own school district by examples that their peers have shared, and by the encouragement they receive through networks such as the CEO Academy.

Meeting virtually

The pandemic forced many meetings online—a shift that is here to stay. Virtual meetings eliminate travel time, and they tend to be shorter and targeted. They also make it easier to involve critical partners in other sectors, such as health, justice, and community services. A downside to virtual meetings is that they limit casual chatter and the opportunity to pick up on the "buzz" in a live gathering, unless they are specifically designed to include a social component. To balance the pros and cons of meeting virtually and in person, some leaders favour the following:

- Hold virtual meetings for transactional agendas—for example, to report results and share regular updates and announcements.
- Hold in-person meetings for agendas that require collaboration and consensus building.
- Continue to build virtual networks and online platforms that connect professionals and expand their professional learning communities within and beyond the district.

WATCH

CEO Academy founding members share insights on the power of networking for learning and leadership

C21 Canada 10th Anniversary Webinar Series, January 13, 2021 (61 minutes)

c21canada.org/networks-for-learning-and-leading

Engaging with parents and communities

Communication and authentic engagement are keys to a healthy and thriving school system. At all times—and especially during disruptions—students, staff, and parents need coherent information and assurance. They must know that safety and wellbeing are a district priority, and that wellbeing is a foundation for learning.

Leaders need to lead with listening and respond with clear, timely, and direct communication.

Parents need to hear regularly from trusted school leaders through many different channels. Social media platforms are important but so are other ways to connect—online, in print, and in person.

Teachers have found that phone calls and videoconferencing can reach many parents more effectively than in-person parent-teacher conferences. They are personal, require no travel time or babysitters, and can be scheduled to accommodate the parents' workday and family responsibilities. Video conferencing has also vastly increased participation by parents and community members in Board meetings, "town hall" sessions, and family learning opportunities.

The use of prerecorded and live videos for many purposes has surged and people are getting better at producing and using them. Recorded video messages (for example, on Youtube) are an effective way to support remote learning for students, parents, and staff. District leaders can also use video posts to share information with stakeholders, such as health experts and employee groups.

DISTRICT LEADERS are aware that remote communication technologies and social media require new literacies. Leaders at all levels should

- Seek direct feedback and use data analytics to better understand what the audience needs and how to connect with them.
- Consider what the audience knows and can do. Don't assume that everyone has the technology and is comfortable using it. Reach out in a variety of ways.

Leading forward

Dr. Michael Ryan of the World Health Organization has been at the forefront of global efforts to contain and treat COVID-19. He speaks passionately about the social determinants of health and health inequities.

The lack of equity in income, the lack of equity in education, the lack of equity in health access—these are the drivers of the pandemic impact. And if we're going to be strong and resilient in the next pandemic, we can't just be addressing the issues of vaccines or the issues of science and infectious diseases. We've got to address some of the fundamental inequity, some of the fundamental factors that are driving the impact of these diseases around the world.

How do we address fundamental inequities? Research shows that education is key. We have seen during the pandemic that information alone does not educate people. Misinformation and disinformation divide people and sow mistrust. Dr. Ryan points to meaningful education as the universal vaccine for a sustainable future. We all need "the ability to look, and analyze, and...assess information and its source, and make good decisions," he says. (Link to the whole conversation in Appendix E.)

The very nature of inquiry-oriented education means that learners—students and adults alike—will always be in process. The pandemic has massively disrupted the day-to-day processes of school, but it has also disrupted fixed mindsets. Leaders have had to push hard changes, but they are also cultivating risk tolerance, resiliency, collaboration, and a growth mindset throughout the system.

Leadership experts say repeatedly that change happens at the speed of trust. The Spiral of Inquiry reminds educators that trust grows from a clear and shared moral purpose, grounded in a commitment to equity and quality for all learners. What matters now, and what will continue to matter, is that every student thrives and will graduate more curious than when they arrived in school, empowered with dignity, purpose, and options. The speed of trust.

⁹ Covey, S. 2018. The Speed of Trust: The one thing that changes everything. New York: Free Press.

¹⁰ Kaser and Halbert, 2017, p. 18 (c21canada.org/playbook).

APPENDICES **Learn more**

APPENDIX A

Global competencies and the 7Cs

Global competencies promote deeper learning by equipping students with knowledge and skills to adapt to diverse situations and become lifelong learners. In 2012, C21 Canada identified seven competencies for 21st century learning and called them the 7Cs: *creativity and innovation; critical thinking; collaboration; communication; character; culture and ethical citizenship; and computer and digital technologies*.

WATCH

students bring the 7Cs to life in this short video (3+ minutes).



c21canada.org/c21-shifting-minds-7cs

In 2016, the Council of Ministers of Education, Canada (CMEC) reviewed C21 Canada's 7Cs for 21st century learning, along with similar frameworks, and endorsed these six global competencies for education systems across Canada.

Critical thinking and problem solving	Addressing complex issues and problems by acquiring, processing, analyzing and interpreting information to make informed judgements and decisions.
Innovation, creativity, and entrepreneurship	Turning ideas into action to meet the needs of a community. This involves leadership, risk taking, independent and unconventional thinking, and inquiry research.
Learning to learn and be self-aware and self-directed	Becoming aware and demonstrating agency in one's process of learning, including the development of dispositions that support motivation, perseverance, resilience, and self-regulation.

Collaboration The interplay of the cognitive (including thinking and reasoning), interpersonal and intrapersonal competencies necessary to participate effectively and ethically in teams. Receiving and expressing meaning (e.g., reading **Communication** and writing, viewing and creating, listening and speaking) in different contexts and with different audiences and purposes. **Global citizenship** Reflecting on diverse world views and and sustainable perspectives and understanding and addressing development ecological, social, and economic issues that are crucial to living in a contemporary, connected, interdependent, and sustainable world.

Source: www.globalcompetencies.cmec.ca/global-competencies

APPENDIX B

Some Indigenous ways of knowing

Following are two practices that school systems in Canada are using to build relationships with Indigenous knowledge keepers in their territory and learn from Indigenous ways of knowing.

First Peoples Principles of Learning

The First Peoples Principles of Learning are nine insights gathered from the wisdom traditions of the First Peoples of present-day British Columbia. These principles were identified by BC's First Nations Education Steering Committee (FNESC), originally for use in the English First Peoples curriculum. They are now widely shared in classrooms and schools across the province. Learn more at firstpeoplesprinciplesoflearning.wordpress. com and at curriculum.gov.bc.ca/instructional-samples/first-peoplesprinciples-learning.

Learning ultimately supports the wellbeing of the self, the family, the community, the land, the spirits, and the ancestors.

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).

Learning involves recognizing the consequences of one's actions.

Learning involves generational roles and responsibilities.

Learning involves patience and time.

Learning recognizes the role of Indigenous knowledge.

Learning is embedded in memory, history, and story.

Learning requires exploration of one's identity.

Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations

Source: First Nations Education Steering Committee, British Columbia (fnesc.ca/learningfirstpeoples)

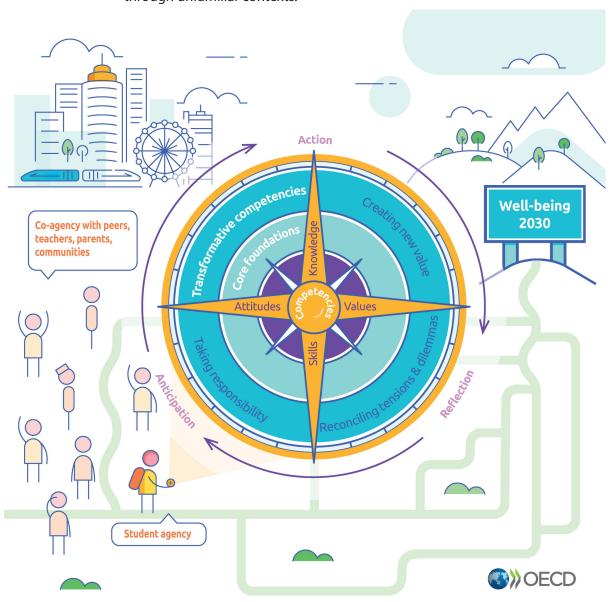
Indigenous Council of Grandmothers and Grandfathers

The Louis Riel School Division in Manitoba has an Indigenous Council of Grandmothers and Grandfathers. As of 2021, the council had grown to include eight members who reflect five different nations, including Métis, Cree, Lakota, Ojibwe, Ojibwe-Cree, and Dakota First Nations. The council works with students and teachers across the division to share traditional Indigenous knowledge in schools and classrooms. They also support the Indigenous Education Team and divisional leadership by helping to guide programming. Learn more in Celebrating Indigenous Culture and Community in the Louis Riel School Division, 2020-2021, available at www.lrsd.net/News/Documents/LRSD-Indigenous-booklet_final.pdf.

APPENDIX C

OECD Learning Compass 2030

The OECD Learning Compass 2030 is an evolving learning framework that sets out an aspirational vision for the future of education. It provides points of orientation towards the future we want: individual and collective well-being. The metaphor of a learning compass was adopted to emphasise the need for students to learn to navigate by themselves through unfamiliar contexts.



Source:www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/

APPENDIX D

17 Sustainable development goals to transform our world

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

These are the 17 goals:

- 1 No Poverty
- 2 Zero Hunger
- 3 Good Health and Well-being
- 4 **Quality Education**
- **Gender Equality** 5
- 6 Clean Water and Sanitation
- 7 Affordable and Clean Energy
- 8 Decent Work and Economic Growth
- 9 Industry, Innovation and Infrastructure
- 10 Reduced Inequality
- Sustainable Cities and Communities 11
- 12 Responsible Consumption and Production
- Climate Action 13
- Life Below Water 14
- 15 Life on Land
- 16 Peace, Justice and Strong Institutions
- 17 Partnerships to achieve the Goals

Source: https://sdgs.un.org/goals

APPENDIX E

A conversation with Dr. Michael Ryan, World Health Organization (WHO)

Dr. Michael Ryan is Executive Director, Health Emergencies Programme, of the World Health Organization (WHO). He is responsible for leading the team for the international containment and treatment of COVID-19.

Dr. Ryan spoke with Robert Martellacci, President of C21 Canada, about the urgent need for humanity to learn from the pandemic and make fundamental changes to how we live as a society. He points to education as the key to a sustainable future.

LISTEN

to world health expert Dr. Michael Ryan

C21 Canada 10th Anniversary Webinar Series, August, 2021 (23+ minutes)

c21canada.org/dr-michael-ryan-the-world-beyond-covid-19

About C21 Canada

C21 Canada is a Pan-Canadian not-for-profit organization committed to learning and innovation in the digital era. Our network includes the CEO Academy, the Advisory Council, the Canadian Coalition for Learning @Home, and the CIO Alliance—all coordinated by the C21 Canada Secretariat.

C21 Canada leaders believe that whole-system scaling of global competencies must be accelerated through Canada's education systems to position all Canadians for economic, social, and personal success and wellness.

CEO Academy

Founded in 2015, the CEO Academy is a national professional learning network of school system superintendents and other senior leaders committed to setting Canadian standards for 21st century learning, innovation, and technology in the education system. This facilitated network is a model of collaborative inquiry. Members share a focus on creating cultures of innovation and transformation, and a moral imperative to develop global competencies that students need for their future.

CEO Academy leaders are positioned to provide advice, perspective, and guidance to help shape pan-Canadian policies that support learning for all students. Seek out a CEO Academy leader in your jurisdiction to connect and collaborate. Current members are listed on the following pages. Members and alumni are also listed at C21Canada.org/CEO-Academy.

* Denotes Founding Member

British Columbia	Patricia Gartland, Superintendent/CEO, SD 43 (Coquitlam) Chris Kennedy, * Superintendent/CEO, West Vancouver School District Jordan Tinney, * Superintendent/CEO, Surrey School District
Alberta	Christopher Usih, Chief Superintendent, Calgary Board of Education Christopher Fuzessy, Superintendent, Foothills School Division Kurt Sacher, Superintendent, Chinook's Edge School Division Ken Sampson, Superintendent, Holy Spirit Roman Catholic School Division
Saskatchewan	Gwen Keith, CEO/Superintendent, Holy Family Roman Catholic School Division Randy Emmerson, CEO/Director of Education, Sun West School Division
Manitoba	Pauline Clarke,* Chief Superintendent, Winnipeg School Division Christian Michalik, Superintendent, Louis Riel School Division
Ontario	Tom D'Amico , Director of Education, Ottawa Catholic School Board Marianne Mazzorato , Director of Education, Dufferin Peel Catholic District School Board
Quebec	Cindy Finn, Director General, Lester B. Pearson School Board
New Brunswick	Monique Boudreau, Directrice Générale, District scolaire francophone sud Gregg Ingersoll, * Superintendent, Anglophone East School District

• • • • • • • • • • • • • • • • • • • •		
Nova Scotia	Gary Adams, Regional Executive Director, Chignecto-Central Regional Centre for Education Chris Boulter, Regional Executive Director, Tri-County Regional Centre	
	for Education	
	Elwin LeRoux ,* Regional Executive Director, Halifax Regional Centre for Education	
Prince Edward Island	To be confirmed	
Newfoundland and Labrador	Anthony Stack, CEO/Director of Education, Newfoundland and Labrador English School District	
Northwest Territories	Curtis Brown, Superintendent, South Slave Divisional Education Council	
Yukon	Nicole Morgan, Deputy Minister, Yukon Education	
Nunavut	To be confirmed	
International (At-Large)	Doug Prescott, * Superintendent, Canadian Schools in Beijing	
• • • • • • • • • • • • • • • • • • • •		

C21 Canada Advisory Council

C21 Canada Advisory Council of Coalition Leaders represents a unique blend of national education organizations and private sector companies sharing a moral imperative and belief that whole-system scaling of global competencies must be accelerated to position Canadians for economic, social and personal success in the knowledge and digital era.

Chris Besse, Chief Commercial Officer, Edsby Inc



Jessica Mosher, Vice-President Nelson



Michael Furdyk, Co-Founder TakinglTGlobal



Tanya Lush, Director
Centre for Ocean Ventures and
Entrepreneurship



Terry Mirza, President Compugen Systems Inc



Ron Owston, Dean Emeritus York University, Faculty of Education



Bonnie Schmidt, President Let's Talk Science



Henry Ryan, CEO Co-Founder Learning Bird, Inc



Canadian Coalition for Learning @Home (CCFLH)

Formed as a result of the sudden shift in learning delivery brought on by COVID-19, the Canadian Coalition for Learning @Home is supported by C21 Canada and expert partner organizations offering teachers, students, and families equitable and relevant options to develop learning competencies in an at-home, remote environment.

Advisory Board Members (* Denotes CCFLH Secretariat)

Steve Brown, * CEO, Nelson

Jeremy Erlick, Vice-President Sales, Central & Eastern Canada, Compugen Inc.

Alec Couros, Professor, Tech & Media, Faculty of Education, University of Regina

Tyson Johnson, CEO, CyberNB

Robert Martellacci, * Chair, MindShare Learning

Ron Owston, Dean Emeritus, York University, Faculty of Education

David Roberts, * President, C21 Canada

Marc Seaman, Vice-president, Microsoft Canada, Education Segment

Bonnie Schmidt, President, Let's Talk Science

Karen Yamada, Chief Learning Officer, C21 Canada

CIO Alliance

The CIO Alliance is a network for Senior Technology district leaders interested in addressing school system technology infrastructure and access by students and stakeholders in and out of the classroom.

Kurt Binnie, Director of Innovation and Technology, Lester B. Pearson School Board, QC

Mario Chiasson, Director of Innovation and Change, District scolaire francophone Sud, NB

Geoff Edwards, Superintendent of Learning Technologies, Ottawa Catholic School Board, ON

Peter Singh, Executive Officer IT Services, Toronto District School Board, ON Steven Whiffin, Director of Instruction CIO, SD 43 (Coquitlam), BC

C21 Canada Secretariat

Robert Martellacci, Chief Executive Officer and Co-Founder, Robert.Martellacci@C21Canada.org

Karen Yamada, Chief Learning Officer and CFO, Karen. Yamada@C21Canada.org

David Roberts, President and Co-Founder, David.Roberts@C21Canada.org

Learn more on our website

C21Canada.org

Follow C21 Canada and the CEO Academy on Twitter:



У @C21Can @C21CEO

