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NETWORK

Final Report

“Green, Screen, Machine” – Building a Post-Covid national movement for Learning Through Play in Canada focused on student wellbeing for marginalized populations.

Canadian Playful Schools Network (CPSN/RCÉL)

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Table of Contents

Summary of Progress: Key Grant Activities and Achievements	5
Project Summary	5
Overall Project Progress.....	7
An Overview of Key Project Achievements	7
Summary of Project Progress	9
Phase I. Initiation & launch	9
Phase II. Implementation.....	10
Phase III. Sustainability & Knowledge Circulation	11
Knowledge Circulation	11
Media Coverage	11
Publications and Communication Material	12
Conference and Workshop Presentations	13
Summary of Progress: Reach and Specific Results	16
Reach	16
Key Project Outcomes.....	16
Development Results	17
School-by-School Comparisons	17
Social Network Analysis	19
Sustainability Issues	21
Learnings from the Project.....	23
Financial Progress: Actual Expenditure to-Date	32
Reported Expenditure.....	32
Financial Report Narrative	32
Appendix A.....	35
Appendix B	36
Appendix C	37
Appendix D.....	38
Appendix E	41
Appendix F	42
Appendix G.....	43
Appendix H.....	44
Appendix I.....	45
Appendix J.....	46

Appendix K46
Appendix L47
Appendix M48
Appendix N49



Summary of Progress: Key Grant Activities and Achievements

Project Summary

In response to the challenges facing schools post-COVID-19, the Canadian Playful Schools Network (CPSN) was designed to bring together 41 school teams (30 English language and 11 French language) from across 7 provinces: British Columbia, Saskatchewan, Ontario, Quebec, New Brunswick, Nova Scotia, Newfoundland and Labrador. Together, the CPSN members explored and implemented learning through play across four modes (green, screen, machine, and everything in between) in ways which were designed to be significant and sustainable. The participating school teams were selected because they had demonstrated commitment and experience with learning through play in the middle years (grades 4-8) where pressures of top-down accountability and content-based curricula make play-based approaches harder to establish. As a network, the CPSN aimed to explore and advance the relationship between play, engagement with learning, and wellbeing. It also sought to push the limits of play-based and play-enriched learning systemwide beyond very young age groups, local innovations, and privileged enclaves into the mainstream of large education systems.

This project had an impact locally, provincially, nationally, and globally. The CPSN deepened mutual learning and action among the 41 participating schools serving an estimated total of 12,000 students. It embedded practices in broader provincial policy-systems serving around 1.3 million students in the targeted grade range through the involvement of high-level policy-leads. It also developed and showcased globally transferable examples of how to build more play-based aspects to learning in grades and contexts where content demands, and accountability requirements typically impede sustainability efforts.

Guiding questions:

- How can we connect, empower, and enrich playful schools in Canada?
- How can we build wider capacity for playful learning and well-being across Canada?
- How can we expand playful learning beyond scattered innovative schools?
- How can playful learning and well-being be developed in schools and communities with diverse populations that have high-needs characteristics?
- What are the relative benefits and risks entailed in playful learning in different modes?
- What tools and protocols can be created to maximize benefits and minimize risks?
- How can we embrace, extend, and sustain playful learning into the middle years (grades 4-8) as accountability, selection, and content-based concerns increase?
- How can we help participating schools to represent their trajectories, progress, and impact of playful learning through creative and collaborative tools?
- How can we make a Canadian contribution to the Global Playful Schools Network?
- How can we measure progress and impact in relation to goals identified with participants at the outset of the project?

- How can we model playful tools and processes in our own project methodologies of development and facilitation?
- How can we strengthen the connection between playful learning and benefits for parents, the community and society?

Information on the CPSN is on the project [website](#) and in this [video](#).

Overall Project Progress

This is the final progress report for the Lego Foundation-funded project and includes a comprehensive capture of all the activities and learning of the Canadian Playful Schools Network (CPSN) since its initiation on January 18, 2022. This report includes some information that was shared in the March 2023 progress report and extends its focus to the final phase of the project from March 2023 until January 2024. Each of the required sections for this report are addressed. However, some sections have been moved to enhance readability. All required template questions are written in blue.

Based on the agreed implementation plan, what progress have you made in terms of key activities and achievements during this reporting period?

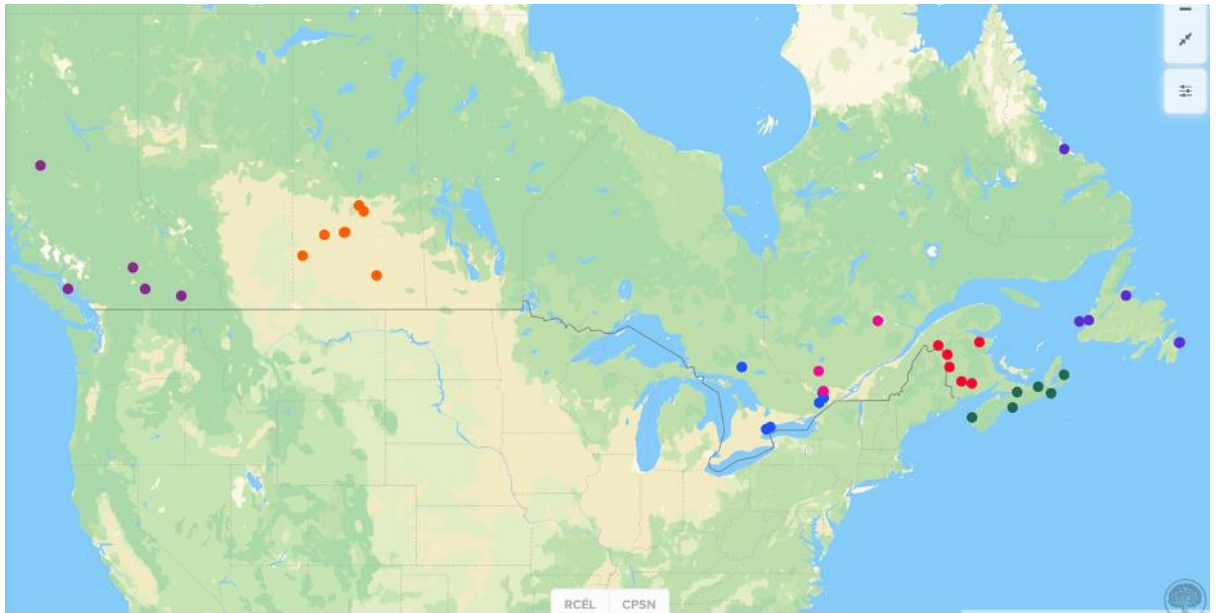
In the highly compressed timeframe from receiving funding for the project on January 18, 2022, until the end of the project on January 31, 2024, the CPSN successfully established a national network of 41 schools in 7 provinces. The participating school teams were from English and French communities across varied locations who engaged in learning through play using different modes of play. Each school team was comprised of 3-4 teachers and a school leader who worked together to design and implement a bespoke learning through play project that would support students traditionally marginalized from systems of schooling in their care. Information about each of the participating school teams and their projects can be found on the [project](#) website.

As outlined in the initial project proposal and revised implementation plan, the CPSN project was divided into the 3 distinct and dynamic phases: **Initiation & Launch** [January 2022-August 2022] – **Implementation** [September 2022-June 2023] – **Sustainability & Knowledge Circulation** [July 2023-January 2024]. Each of the phases elicited successes and challenges. However, overall project targets were met in each phase. The following list sets out key achievements of the project. A summary of the project progress by phase is provided after the key achievements. The challenges encountered at each phase are discussed in more detail in the final “learnings from implementation” section.

An Overview of Key Project Achievements

Recruitment

- Recruitment and selection of 41 school teams with inspiring learning through play projects shown in this [video](#).
- Representation of school teams from different communities and contexts across 7 provinces shown below and by clicking on each school dot [here](#).



- Involvement, interest and impact at school, district, and provincial government level.
- Collection and curation of short descriptions and videos from each school team about their CPSN projects as indicated above.

Preparation and Launch Activities

- Five [scoping reviews](#) of modes of play.
- [Onboarding coaching](#) sessions for each school team.
- A [virtual launch](#) for English and French streams.
- Creation of a [website and virtual platform](#) for school participation.
- Appointment of 13 [International Advisors](#).

Virtual Network Activities

- Seven thematic playgroups established that shared ideas and activities three times each.
- Playdates organized by and among some school teams.
- Establishment of [national and international partnerships](#).
- Professional learning series comprising 13 [virtual workshops](#) using advisors & other experts.
- Virtual gathering of all Francophone schools.

In-Person Engagements

- 41 [inspiring projects](#) on learning through play.
- [National Showcase](#) Conference in Ottawa.
- Three regional gatherings from November 2023-January 2024 to spark ongoing sustainability efforts.
- Opening of University of Ottawa [edstudio](#).
- In-person visits to 50% of participating schools.
- [Local partnerships](#) established.

Knowledge Circulation

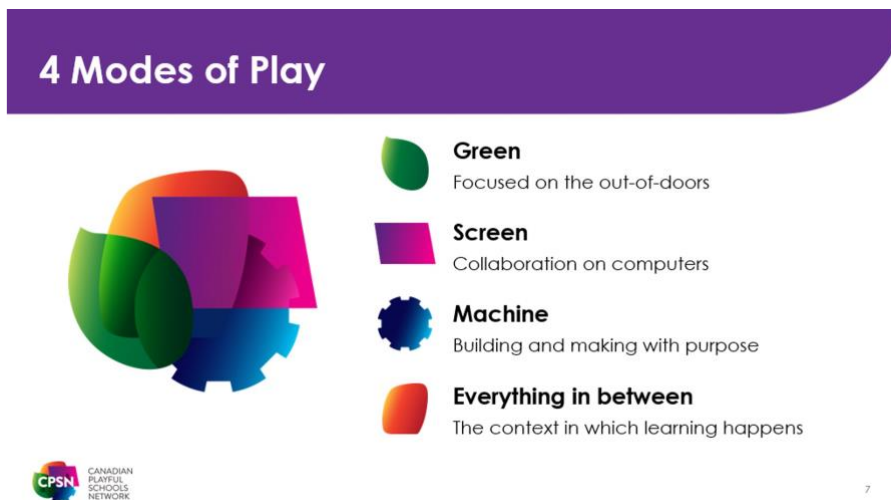
- Publication of CPSN activities in Canadian National Press, two professional educator magazines, two books, University of Ottawa Communications media, and several online blogs.
- Media interviews in English and French for CBC Radio, Global TV.
- Presentations by faculty, graduate students, and school and system participants focused on or including reference to CPSN activities, accomplishments, and emerging research findings at academic and professional conferences in Canada, the United States and Europe.
- School-driven presentations of their CPSN work to their school boards and on social media.

Summary of Project Progress

Phase I. Initiation & launch

January 2022-August 2022

- Canadian Playful Schools Network (CPSN) was established at the University of Ottawa led by a research team comprised of 4 English-language and 3 French-language researchers and involving two project managers and 8 graduate research assistants.
- Strategic Planning process was conducted with support of external facilitators.
- CPSN logo, branding, and social media platform were created.



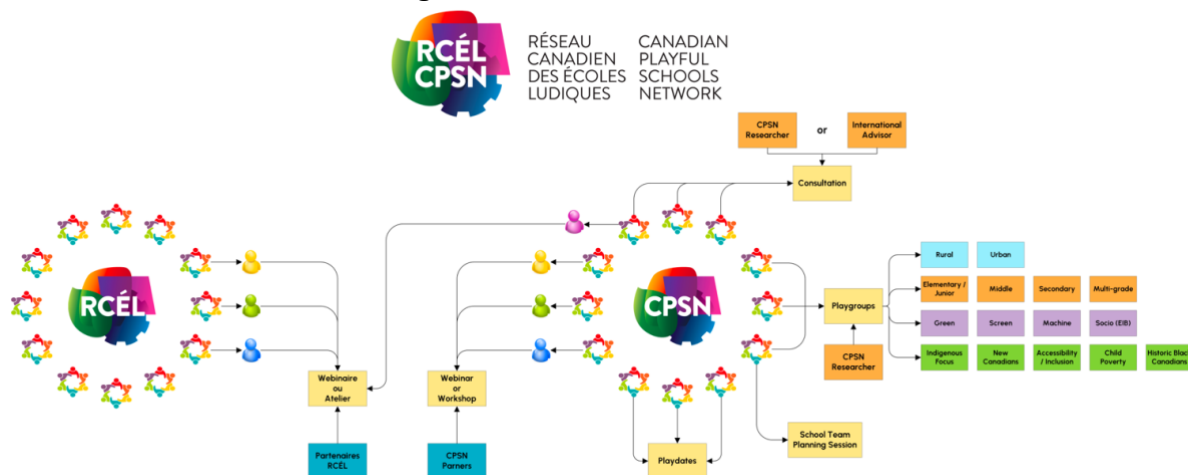
- Website was launched.
- Project infrastructure was created, including a secure University of Ottawa Information and Archives Management (IAM) SharePoint site, an organizational chart (Appendix A), and a project Microsoft Teams Channel.

- Meetings with system leaders (Ministers of Education, Deputy and Assistant Deputy Ministers, Directors, and Superintendents) were held by the project co-directors across all 7 provinces to promote CPSN recruitment.
- The 13-member International Advisory Board was established.
- Scoping Reviews on green-play, screen-play, machine-play; play and language; and play and accessibility were initiated.
- Recruitment criteria were developed and launched on the website, and final reviews and selections of applicants were conducted by the project team in June.
- Research ethics approval was applied for and then received from University of Ottawa Research Ethics Board.
- A Ministerial and University grant was awarded to partner with the investment enabled by the CPSN LEGO Foundation grant, to support the design and development of the edstudiO in the Faculty of Education.
- Knowledge circulation to local, national, and international press and other media commenced as outlined above.

Phase II. Implementation

September 2022- June 2023

CPSN organization and streams



The following activities and processes were initiated and constructed during the implementation phase.

Virtual

- [Onboarding](#) sessions for all 41 school teams.
- [CPSN launch event](#) in English and French streams.
- Three virtual gatherings for each of 7 playgroups.
- Playdates between and among some of the school teams.
- International Advisory Board meeting.
- A CPSN timeline to share with participating schools (Appendix B).
- Establishment of [project partners](#) (Appendix C).

- The [Playjouer Professional Learning \(PPL\) Series](#) featuring virtual 90-minute workshops and webinars led by the UOttawa team, the International Advisors and CPSN partners (Appendix D).
- Established travel proposal process for school teams to attend the June Showcase Conference.
- Lego Foundation Conference involving school teams preparing ‘lightening’ presentations.
- [School spotlight](#) series.

In-Person

- Visits to 50% sample of school teams across all provinces to deepen understanding of school-based and local issues, identify connections schools could make with network peers, and collect interview data.
- [National Showcase](#) Conference in Ottawa.
- [41 Inspiring school learning through play projects](#).

Research

- Data collection and analysis processes in the form of monthly reports, activities trackers, social network analysis, and in-person interview protocols.

Phase III. Sustainability & Knowledge Circulation

September 2023- January 2024

- Data analysis: in-person interviews, CPSN monthly reports, trackers & social network analysis.
- Submission of scoping reviews for publication.
- Knowledge circulation: conference presentations, posters, publications (See Outputs).
- Three in-person regional gatherings (See sample agendas in Appendix E).
- Planning for a fourth national French language virtual gathering.
- Development and presentation of draft sustainability tool in partnership with a CPSN district (Appendix F).

Knowledge Circulation

Note: All bullet points are hyperlinked

Media Coverage

Article / Press Release

- The Globe and Mail
- University of Ottawa News
- New Brunswick Anglophone School District West

Interviews

- Ici Radio-Canada : Les matins d'ici
- CBC (Ottawa Morning)
- Ici Radio-Canada : L'heure de pointe Acadie
- Ici Radio-Canada : Dans la mosaïque
- Global TV
- Ici Radio-Canada : Dans la mosaïque
- Ici Radio-Canada : Y a pas deux matins pareils

From Participating Schools

- The Sudbury Star : St. David Catholic Elementary School joins the CPSN
- St. David school joins 'playful schools' group
- CTV News (Northern Ontario): St. David Catholic Elementary School and their cardboard sled challenge
- Duncan J. Schoular Public School Receives Funding from the Canadian Playful Schools Network to Foster Real-World Learning Opportunities
- Eaton School's Outdoor Learning Space Grabs National Attention
- Sun West students benefit from Canadian Playful Schools Network
- Nelson's K-9 Francophone school embodies values of kindness, courage, and connection
- West Kelowna school adopts play concept as teaching tool
- Annual NOIIE Symposium: Babine Elementary Secondary School
- Trail offers living and learning experiences for Bath students and community
- St. George Catholic School Crowned Minecraft Provincial eSports Champions!
- Looking Back at a Year of School News: Where Are They Now? (North Gower)

Publications and Communication Material

Articles / Posters / Book Chapters

- Shirley, D. & Hargreaves, A. (2024), *The Age of Identity: Who Do Our Kids Think They Are...and How We Can Help Them Belong* (Chapters 4 and 5), Corwin Press
- Hargreaves, A. (2023), *Leadership from the Middle: The Beating Heart of Educational Transformation*, (Chapter 6), Routledge, NY
- Baultif, A. & Crettenand Pecorini, B. (2023), *A Scoping Review on Language Learning Through Play*, ICERI 2023, Proceedings, pp. 6806-6809.
<https://library.iated.org/view/BOULTIF2023ASC>

- Hargreaves, A. (2023). *Teachers need More Innovation, not More Innovations*, Worlds of Education, Education International, <https://www.ei-ie.org/en/item/28147:teachers-need-more-innovation-not-more-innovations>
- Hollweck, T., Cotnam-Kappel, M., Hargreaves, A. & Boultif, A. (2023). *Playing out the Pandemic*. EdCan Online, <https://www.edcan.ca/articles/playing-out-of-the-pandemic/>
- Hollweck, T. (2023). *Learning through Play in the Middle Years*. Principal Connections: The magazine of Catholic Principals Council/Ontario (27), 3, available [here](#)

Conference and Workshop Presentations

- Hargreaves, A. (2024). *The Age of Identity*, Ottawa Catholic School Board Leaders, Ottawa, ON.
- Boultif, A. & Lebel, J. (2024). *Témoignages: Création d'un réseau canadien d'écoles ludiques*, CLAIR 2024, Clair, Edmundston, Canada.
- Schira Hagerman, M. (2024). *Making as a modality within the CPSN*. Meeting of the CRAFT Network, Children's Creativity Museum, San Francisco, CA.
- Hollweck, T. (2024). *The 5 Dynamic Phases of Educational Change*, CPSN Regional Gathering, Prince Albert, Saskatchewan, Prince Albert, SK.
- Hargreaves, A. (2024). *Leadership from the Middle*, Ohio Leadership Advisory Council, Ohio.
- Hargreaves, A. (2024). *The Age of Identity*, Association of Education Advisors, Westminster, London.
- Hargreaves, A. (2024). *The Age of Identity*, South & West Wales Regional Collaborative, Wales.
- Hargreaves, A. (2024). *The Age of Identity*, Cardiff Metropolitan University, Cardiff, Wales.
- Hargreaves, A. (2024). *The Age of Identity*, Newcastle System Leaders, England.
- Hargreaves, A. (2024). *Identity & Leadership from the Middle*, Glasgow, Local Authority, Scotland.
- Hargreaves, A. (2024). *The Age of Identity*, Glasgow University, Scotland.
- Hargreaves, A. (2024). *The Age of Identity*, Northern Ireland School Leaders, Cookstown, Northern Ireland.
- Hargreaves, A. & Shirley, D. (2024). *The Age of Identity*, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland
- Hargreaves, A. & Jones, C. (2024). *Developing a Reflective Framework for Sustainable Collaborative Professionalism*, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland.
- Hargreaves, A. & Jones, C. (2024). *The Sustainability and Non-Sustainability of Inter-School Innovation Networks: A Tool To Ascertain Possibilities And Progress*, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland.
- Harper, A., Hollweck, T., Mason-Sesay, M., Parsley, D., & Whittaker, R. (2024). *Curious And Curiouser: The Lived Experience Of Women Who Have Opened The*

Pandora's Box Of Network Leadership, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland.

- Ayson, G. & Hargreaves, A. (2024). *Innovation, Inclusion, & Belonging: Multiple pathways to play-based innovation for marginalized children after COVID-19*, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland.
- Hollweck, T. (2024). *Sparking A Movement?: An Exploration Of The Impact Of Deliberately Designed Professional Learning Encounters In A National Network*, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland.
- Hargreaves, A. & Parsley, P. (2024). *Designing & Leading Professional Learning Networks*, International Congress of School Effectiveness and Improvement (ICSEI), Dublin, Ireland.
- Hargreaves, A. (2023). *Inclusion & Wellbeing*, Association of Psychologists, Lisbon, Portugal.
- Hargreaves, A. (2023). *Identity & Innovation*, CPSN Regional Gathering, Fredericton, NB.
- Boultif, A., & Crettenand Pecorini, B. (2023). *A Scoping Review On Language Learning Through Play*, ICERI 2023: 16th annual International Conference of Education, Research and Innovation, Seville, Spain.
- Hargreaves, A. & Jones, C. (2023). *Sustainability*, CPSN regional Gathering (OCDSB), Ottawa, ON.
- Hargreaves, A. (2023). *Wellbeing, Engagement & Identity*, UNISINOS University, Brazil.
- Hargreaves, A. (2023). *Identity*, Laurentian University, Leadership Masters, Ontario.
- Hargreaves, A. (2023). *Wellbeing*, North Cook School District, Illinois.
- Hargreaves, A. (2023). *Leadership from the Middle*, Middle Leaders Program, NSW, Australia
- Boultif, A., & Crettenand Pecorini, B. (2023). *Recherche exploratoire sur la ludification de l'enseignement-apprentissage du français (FL1/FLS) Revue de la portée et retombées du réseau*, Ottawa, ON.
- Hollweck, T. (2023). *Leveraging expertise to create a professional growth culture in high quality systems*, New Brunswick Education Division (Ministry of Education), Fredericton, NB.
- Hollweck, T. (2023). *Leveraging expertise in learning networks: An ARC Talk*, ARC Summit, Oslo, Norway, https://www.youtube.com/watch?v=rB9ER_LxLqE.
- Hargreaves, A. (2023). *Identity & Change*, ARC International Summit, Oslo, Norway.
- Hollweck, T. (2023). *Reimagining the Future of Education: A CollectivED Gathering Provocation*, CollectivED, Harrogate, England.
- Hollweck, T. Castanheira, P. & Gadegaard Espersen, M. (2023). *Networks for Educational Improvement in Education: Using Social Network Analysis to Support Network Development and Design*, Comparative & International Education Society (CIES). Virtual conference.
- Hollweck, T. (2023). *How to Design, Implement & Sustain Networks*, Teaching, Leading & Coaching (TLC) Conference, Orlando, Florida.

- Hollweck, T. & Gourde, N. (2023), *It's not easy being (playfully) green: Research & Practice*, Breath of Fresh Air Conference (Outdoor Play Canada), Ottawa, ON.
- Cotnam-Kappel, M. (2023). *Maker Multiliteracies: Embracing cultural and linguistic plurality through digital and physical making in primary schools*, ECER (by the Educational European Research Association), Glasgow, Scotland.
- Boultif, A., & Crettenand Pecorini, B. (2023). *Gamification of French Teaching & Learning (FFL/FSL): A Scoping Review*, 92e Congrès de la fédération des sciences humaines (CSÉÉ-CSSE), Toronto, ON
- Cotnam-Kappel, M., Boultif, A., Dalley, P., Hollweck, T. Schira Hagerman, M., Whitley, J., Labelle, P., Cattani, Al, Crettenand Pecorini, B., Gourde, N., Karunaweera, S., Neiley, A., Neisary, S. & May, A. (2023). *Green, Screen, Machine, and Everything in Between: Five Scoping Reviews on Learning Through Play / Enviro, techno, bricolo et tout ce qui est socio: Cinq revues de la portée sur l'apprentissage et le jeu*, 92e Congrès de la fédération des sciences humaines (CSÉÉ-CSSE), Toronto, ON.
- Hargreaves, A. (2023). *Collaborative Professionalism*, Ohio Deans Compact, Columbus, Ohio.
- Hargreaves, A. (2023). *Middle Leadership*, Connect Ed, Hunter Valley, NSW, Australia.
- Hargreaves, A. (2023). *Leadership from the Middle*, Australian Catholic Principals, Wollongong, Australia.
- Hargreaves, A. (2023). *Leadership*, Victoria Academy of Teaching, Australia.
- Hollweck, T. (2023). *Accompaniment: Leveraging support and expertise within school and system networks*. Saskatchewan Teachers Federation Leadership Symposium, Saskatoon, SK.
- Hollweck, T. (2023). *Designing & Leading Professional Learning Networks in Schools, Systems and Beyond: Findings from the Canadian Playful Schools Network and the New Brunswick School Teams*, New Brunswick Education Symposium at St. Thomas University, Fredericton, NB.
- Hargreaves, A. (2023). *Leadership*, National Council for Ed Research & Tech, New Orleans.
- Hargreaves, A. & Shirley, D. (2023). *Age of Identity*, Education Summit, Virtual Conference.
- Hargreaves, A. (2023). *Where the World is Headed*, Rocky View School District, AB.
- Hargreaves, A. (2023). *Leadership from the Middle*, Surrey Schools, UK.
- Hargreaves, A. & Shirley, D. (2023). *Student Engagement*. PILU, Norway.
- Hargreaves, A. & Hollweck, T. (2022). *Coaching for Wellbeing*, Learning Forward, Nashville, Tennessee.
- Hargreaves, A. (2022). *Teaching a Pandemic Generation*, Learning & the Brain, Boston, Mass.
- Hargreaves, A. (2022). *Wellbeing in Schools*, Fundacion Chile, Chile.
- Hargreaves, A. (2022). *Engagement & collaboration*, Rochester Michigan School District, Rochester, Michigan.
- Hargreaves, A. (2022). *Wellbeing in Schools*, PSAANS School Leaders, Halifax, NS.
- Hollweck, T. (2022). *The CPSN: A National Network*, LEAP study tour for Australian principals and superintendents, University of Ottawa, Ottawa, ON.

- Hollweck, T. (2022). *Coaching for your school, your system and international networks*, ULEAD The Summit of Educational Leadership, Banff, Alberta.
- Hollweck, T. (2022). *Preparing Women for the School Leadership Journey*, ULEAD The Summit of Educational Leadership, Banff, Alberta.

Summary of Progress: Reach and Specific Results

Reach

The table below is based on the latest approved Monitoring, Evaluation and Learning plan for the project.

Target groups	#		Context
	Target	Actual	
Children	~12,000	~12,000	Based on the number of students in the 41 participating school teams
Parents	~20,000	~20,000	Based on an approximate number of parents of students involved in the project
Teachers	250	250	The number of participating teachers in the project
System Leaders	40	38	Most of the school teams represented different school districts- expect for Saskatchewan and New Brunswick that had 2 and 3 schools respectively from the same district
Government systems	7	5	Approval received by 5 of the participating provincial Ministries of education
International & national partners	25	20	International advisors and partners who shared the project within their networks

Key Project Outcomes

The outcomes of the project are presented in four sections: development results, school-level issues, social network analysis and sustainability issues. Overall, the project was driven by preparation and development work, along with data collection from its inception on the arrival of funding in February 2022, until the National Showcase in June 2023. Development activities continued with the three Regional Gatherings in November-December 2023, but the focus from September 2023 shifted to data analysis in terms of school-by-school comparisons for issues and themes, and social network analysis of interactions among schools across the whole network, within provinces, and with the university of Ottawa network hub.

Within this schedule, research findings about the project and what can be learned from it are necessarily emergent and provisional, but analysis will continue beyond this project report and be shared with the LEGO Foundation in due course.

Development Results

The primary aim of the CPSN project was to create a national network of school teams engaged with learning through play.

This goal was achieved, and, in some ways, exceeded through the recruitment and selection of 41 schools across 7 provinces, that networked with each other virtually in three scheduled playgroup meetings, in playdate opportunities, in multiple interactions with the University of Ottawa network hub in onboarding sessions and other meetings, and in professional learning opportunities with a world renowned slate of international advisory board members along with other external experts, including from the University of Ottawa project team.

Network participants also interacted in person in a National Showcase at which almost every school presented, in three Regional Gatherings, and, with University of Ottawa project staff, through individual school visits in a 50% sample of the schools.

School-by-School Comparisons

School visits were conducted in 50% of the schools, and recorded interviews were undertaken with individuals and focus groups of teachers, administrators, and education support workers in 13 schools (slightly lower than the projected number of 18-20 due to the lead researcher contracting COVID-19 on one of the provincial site visit tours).

The purpose of the visits was to demonstrate in-person interest and engagement on the part of the CPSN project leadership in the on-site work of the schools, to motivate the schools to initiate and advance CPSN project activities, to undertake validity checks of school activity on-the-ground compared to online applications and presentations, and to explore educators' perceptions of the project, its impact, the benefits it was yielding for them, and any struggles they had been experiencing in implementation.

An interview schedule was drawn up, University of Ottawa ethical review procedures were conducted and completed, and letters of informed consent were read and signed by all school participants. The interview schedule is documented in Appendix G.

Each school selected for data collection was visited by two members of a diverse research team to establish validity and reliability checks. School case study reports were written up within 24 hours, based on intensive discussions and documentation by team members, and these provide the basis for ensuing statements of emergent findings. These reports are now being cross referenced with interview transcriptions and with online school tracker data.

The school visit data are yielding insights that will be listed in *Lessons Learned*, into issues such as the relationships and integrations among the four elements of green/screen/machine/everything-in-between, the challenges of creating and developing play-based learning projects in a compressed timeframe in the face of issues like pursuing outdoor learning initiatives in the Canadian winter, hiring substitute teachers during a national staffing crisis, negotiating with school and system administrators who were not always sympathetic to what the teacher teams were trying to do, and managing relationships with teachers not directly or initially involved with the school's project and the network of which it was part.

The most progressed part of the analysis of this data set arises from case study data on 11 of the schools. These data were analysed in relation to the prevailing or driving purposes of play-based learning and network participation in each respective school (Appendix H). For a theme to qualify, it had to be evident in at least three of the schools. The themes were the three that were very prominent in the original project proposal and network design of engagement, wellbeing, and innovation, plus a fourth emergent theme of community.

Emergent findings on each of these four themes are that:

- Schools that prioritized student engagement as their way of approaching playful learning addressed, between them, all five paths to student engagement on which the CPSN project proposal was partly based and as outlined in Shirley and Hargreaves (2021): magic and mystery, meaning and purpose, belonging and attachment, voice and involvement, and mastery and focus.
- Schools that prioritized wellbeing tended to interpret wellbeing in terms of the lower levels of Maslow's needs hierarchy that focus on establishing calmness, safety, security, self-regulation and belonging. These things were considered as essential supports for learning after COVID-19 but were also sometimes addressed separately from parallel transformations in learning as a way of improving wellbeing. In that respect, there was less emphasis on the higher levels of Maslow's needs hierarchy of self-actualization and transcendence that, in some ways, have been positioned as more basic to indigenous knowledge, for example.
- The focus on community within the sample of 11 schools was evident in localities that were geographically clearly bounded such as rural villages and post-industrial towns. Community provided less of a focus in larger cities and metropolitan areas. The community focus sometimes capitalized on the existence of a strong surrounding community by serving its seniors with home-grown and home-cooked food for example, and in other cases, it was a way to rebuild communities that had been threatened by economic decline.
- Schools that chose innovation as their focus did not implement other people's externally imposed innovations. Rather, they created their own continuous cultures

of innovation (including external opportunities) in teaching and learning that engaged students and energized teachers.

Play is not always pursued for the same overriding purposes, but it can be activated as a resource and a focus to re-engage students who had lost their love of learning during COVID-19, to restore and enhance the wellbeing of those whose emotional and mental health had suffered during and after the pandemic, to spur innovation in schools that felt they needed to transform to meet the needs of the modern economy, and to serve and build local communities.

Social Network Analysis

The prime goal of this project was to establish a national network of schools committed to playful learning for vulnerable and marginalized students in the middle years after COVID-19. Based on the project-co-leads' experiences of designing, developing, and evaluating other provincial, national, and international networks, the CPSN network was deliberately designed to be a predominantly virtual network relying on an initial hub-and-spoke structure that characterizes the initiation stage of most educational networks. This structure involves a co-ordinating hub (the University of Ottawa), organizing communications, online resources, partnership possibilities, professional learning events, interactive platforms, tracking mechanisms, and sources of what Castells (1996) calls productive external disturbance to shake up members' thinking in terms of input from advisory board members and other external experts.

Over time, the aim of most networks is to move towards more nodal as well as hub and spoke interactions which in this project comprised the six playgroups that met online three times each, and they might have also included provincially based interactions among schools within a single province or region such as the Ottawa vicinity. Eventually, mature networks also adopt crystalline elements where school teams interconnect and interact in spontaneously initiated ways that do not necessarily involve the hub.

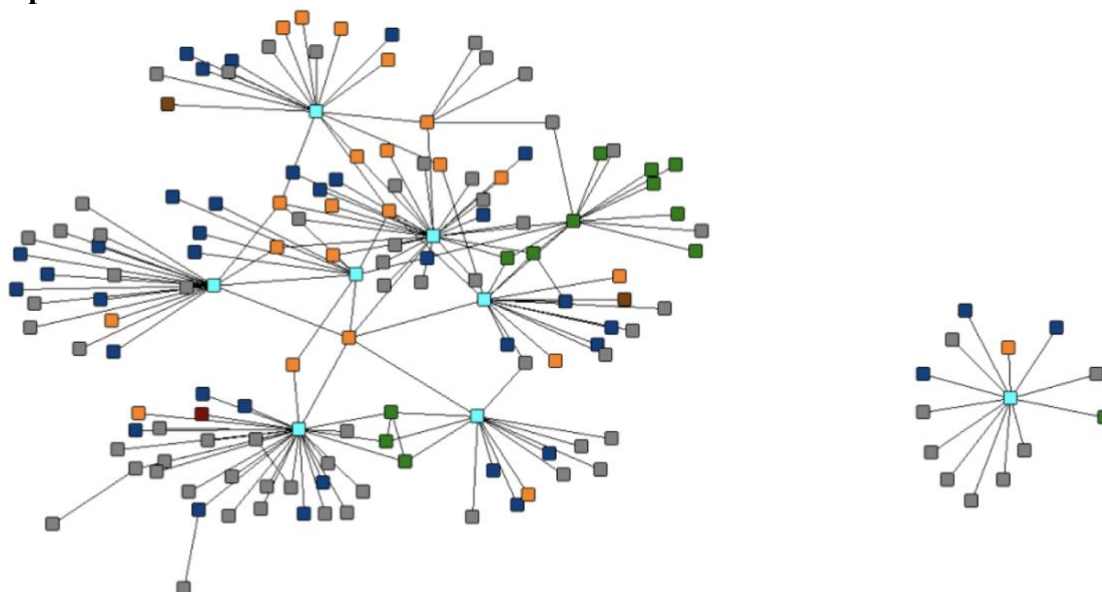
Typically, networks take several years to mature as people's own projects and activities develop until they become confident they have something to share, as they get to know the work of other members in the network and opportunities they provide, as they meet in person to deepen the trust and relationships that often underpin subsequent virtual interactions, and as the hub itself becomes more of a tracking, inquiry and feedback mechanism rather than a management and implementation device.

The CPSN network started operating with the onboarding process in October 2022. Most of the development and virtual activity within the network culminated in the National Showcase in June 2023, supplemented by regional gatherings in November-December 2023, and by research and reporting activities. A key question for this project, is what can and did a \$2.7m investment in creating and constructing a national network that was funded to operate for about 8 months reasonably achieve, and what are the mechanisms and possibilities for ensuing sustainability?

A pivotal research tool for addressing these questions is Social Network Analysis. The research team therefore used social network analysis (SNA) to examine network activity and development by collecting one key form of data - the monthly trackers completed by each school team's key contact that provided data in response to a range of questions concerning each team's uses of forms of support, resources, and professional learning events, as well as perceptions of the network's impact on educators' energy and motivation (see the Tracking Schedule in Appendix I). Provincial data sets were created by combining school data into one file, and these were combined, in turn, to form a national database, which was used to map the CPSN network (see Appendix J for the national network map, Appendix K for distribution of interactions and ties among network members compared by province, and Appendix L for a description of the raw results on numbers and distribution of ties). Some interpretations and implications of the SNA analysis are presented here.

We are continuing to create and develop network charts for each province and have begun with the province of Saskatchewan for illustrative purposes here. Saskatchewan's map stood out among the other provincial maps as it is one of more connected networks and possessed among the highest proportions of 'strong ties' or links between the participating school teams and districts. Based on these observations, this provincial network holds promise for sustainability beyond the formally funded CPSN period.

Map of the Saskatchewan Network



Note. Bright blue = CPSN member school; Dark blue = CPSN member school resources; Orange = CPSN resources; Maroon = CPSN member school outside Saskatchewan; Green = school district resource; grey = all other resources.

Some of the key interpretations and implications of the SNA analysis (Appendix J) are as follows:

- *The National CPSN network is emergent and demonstrates a typical hub-and-spoke form of establishment.* It comprises mainly singular, and thus unstable, ties. Nearly

70% of the reported ties in each province were resources that were named only once in the monthly resource trackers. On average, only 7% of resources were reported three times or more. There was very little overlap between schools and provinces. Common connections were almost exclusively related to the CPSN staff, events, and resources. If resources that were mentioned only once were removed from the network, it would be very sparse. Educators were in the early stages of building their knowledge and expertise in their areas of interest.

- *Internal development precedes external networking activity.* Discussion networks are comprised mainly of members of their own school community, who are building the *internal capacity* and the evidence of developing their own projects before engaging externally with others about them.
- *Most schools had few ties within their own districts.* Where small numbers of school in a district participate, district level investment and involvement need to be built into the design, schools need to be already well networked within their district culture, or network members need to possess the capacity and/or coaching support to “lead up” within their districts so their work can be shared with others.
- There may be an *inverse relationship between level of provincial government involvement and intensity of network relationships and activities.* The two provinces with the greatest number of ties also had the weakest levels of support (declining the opportunity to support in one case and ending support after the recruitment phase in the other). This points to a possibly inverse relationship between networks of teacher-led projects and large-scale systems of administration that we return to below.
- *School participation in network events varied.* While all schools attended CPSN events, not all of them found the events to be noteworthy sources of support compared to other ways of engaging with the projects and the network.

Sustainability Issues

All networks, indeed, all educational initiatives, raise questions of sustainability – how new practices and relationships last, spread and impact on other people (see the Draft Sustainability Tool in Appendix F). A network that, after the completion of recruitment, exists for a funding period of approximately 8 months places these eternally challenging issues in razor-sharp perspective.

In the Fall of 2024, three in-person regional gatherings were held, and a fourth online gathering was planned to support network sustainability. The key contact and/or school leader was invited to attend the gathering where the focus was on sharing ongoing work on learning through play, as well as discussing next steps to maintain connection between the CPSN schools with the support of the draft sustainability tool.

Three ways of thinking about sustainability within and beyond the CPSN emerged before and during these processes:

- Full sustainability of the whole CPSN network.
- Partial sustainability of network subgroups.
- Sustainability of the practices that the network initiated.

First, it is clear that without further external funding, the CPSN network will not be sustained. The project provided schools with precious time to meet and learn, virtual platforms and facilitation to interconnect, travel funds to attend the National Showcase and regional gatherings, and highly valued funds to purchase equipment like 3D printers, or other resources that supported student field trips, for example. Other networks sometimes persist with government funding, but that funding is usually tied to system implementation priorities rather than innovation and there are 7 separate governments involved in this case. Schools and districts sometimes pay for membership of networks, but we are aware that networks operating on these principles have become vulnerable and in some cases are ending during an age of austerity in public education. The point of network sustainability is not to sustain a specific network. Nothing can or should last forever. But to avoid disillusionment among the participants, from the moment we learned that continuation of funding was unlikely, we were open and transparent with our trusted participants about the limited timeframe in which the whole CPSN would exist. This obviated criticism and cynicism and constructively moved planning and reflection to the two other dimensions of sustainability.

Second, therefore, once participants had learned and experienced what the benefits of the network could be, some of them stepped forward before and during the regional gatherings to offer to lead monthly virtual network meetings – a group of principals in the Ontario/British Columbia gathering, a provincial Ministry of Education in the Atlantic gathering, and school districts in the Saskatchewan gathering. It will be helpful to monitor the progress of these gatherings. It might also be useful for the LEGO Foundation to consider with this and future networks what relatively modest amounts of subsequent investments might support coaching and mentoring processes and personnel that would enable these sub-networks to be sustained and then, perhaps, to connect with each other.

Third, during the school visits, at the National Showcase, and at the regional gatherings, conversations were focused on the question of “What is one thing you have learned or started during this short project that will last forever?”. This is another way to think about sustainability. If the LEGO Foundation funding is viewed as a massive kick-starter rather than a longer-term investment, what has been its impact in this respect? Many participants described how, through their projects, they had come to learn things their students could do that they never imagined they were capable of – an insight that would never desert them. Gardens would not grow over, trails would not be unmade, equipment with years of shelf-life in them would not be returned to their makers, and new relationships would be continued. These were common reflections and promises. A return to these schools in 3-5

years would be able to determine, and affirm, whether, or not this kick-starter project has unearthed a completely new way of thinking about sustainability.

Learnings from the Project

Ultimately, the project accomplished more than was expected based on the expedited timeframe of 18 months. We were surprised—and pleased—to learn from participating schools through their monthly and final reports and the in-depth school visits about the positive impact of the CPSN on their staff, students, and communities. The majority of school teams report that they will continue what they have started with the CPSN. They will build upon what they have learned and continue the relationships that they have made. When provided with a shared purpose, agency to design a bespoke project, opportunities for leadership and collaboration, time to meet regularly, access to resources (funding, research, experts, coaching), the energizing effect of a culture of innovation, and within a network that provides support and transparent accountability, educators can and do work beyond expectations.

Project Challenges

Although the project funding was substantial, it required creating a team, a project, and an infrastructure from almost nothing within a public university setting. The advantages of working within a public university have been considerable – financial accountability and transparency, due diligence, high degrees of intellectual expertise and autonomy that are not tied to interests and agendas that might be associated with private organizations or even some not-for-profits, and a pre-existing academic professional community (Chenine) that was based on prior shared work and relationships and not solely on general employee availability that might be the case in other kinds of institutions. Yet creating a network across 7 very different provinces, and a substantial and sustainable infrastructure within barely 4 months from when the project funding arrived placed enormous and sometimes almost unbearable pressures on project staff and leadership – many of whom also had other prior and parallel commitments to attend to. We were not only flying a plane while building it; we were doing so in turbulent weather. It is unlikely that we would have committed and that others in the future would commit if there had not been strong possibilities of future funding – which did not materialize for this project or others in the same funding stream.

This project and others in the same funding stream addressed the post-COVID educational context. It also had to operate within that context. Many universities have been undergoing major restructuring in the post-COVID market and financial situation, and in the case of the University of Ottawa, this involved a massive overhaul of the university's management and finance systems that required a project extension to complete the project's financial activities. In the same context, many school teams faced problems of shortage of substitute teachers which impacted their ability to fully participate in CPSN collaborations even though they had the resources to do so.

Project Findings



What does learning-through-play mean to the CPSN educators? This question was asked throughout the project in the school team onboarding meetings, at the virtual launch, in the monthly reports and at the National Showcase Conference. The first image of the airplane is a compilation of responses from the onboarding sessions with the 41 school teams and was shared with network members at the virtual launch. The second image is from the poll that gathered network members’ responses at the project’s final Showcase Conference. For CPSN educators, learning through play means engagement for both students and staff – one of the two prime purposes (the other being wellbeing) of the initial project proposal.



Other key learnings are framed in response to the project’s guiding research questions:

Question 1: What motivated the participating school teams to get involved with the CPSN?

In their CPSN project description and accompanying video, school teams were invited to “Tell us about your interest in joining the Canadian Playful Schools Network.” [Their responses](#) to these questions and to inquiries during in-depth school-based interviews and other conversations, highlighted several factors:

- A way to offer students activities they had never experienced before, and “*try some new things that we wouldn’t have had the resources for otherwise.*”
- Being able to purchase *equipment to support student learning* that limited school budgets otherwise did not allow.
- Being “an integral member of the educational movement that recognizes the contribution of play-based learning to strong student *engagement*, improved mental health and *well-being* and overall *academic success*”.
- Support and encouragement for *innovative practice*.

- Continuous *professional learning* opportunities and the opportunity to network and learn with and from other educators across Canada.
- “Having the *time and space*” to collaborate with colleagues.
- Being in a project designed *for teachers and teacher leadership*, rather than administrators and systems.
- Experiencing some *play, fun and joy for themselves* after years of stoicism and basic professional survival during and immediately beyond COVID-19.

Question 2: Why was learning through play important for school teams and their students?

From the school visit and other data, schools emphasized the importance of play for different but often also overlapping reasons.

- *Overcoming disengagement.* Some students who had transitioned back into in-person learning were finding it hard to get-re-engaged, including basic attendance. CPSN projects helped with transition into high school, attracted students into school for projects after they had not been attending for other reasons, and moved beyond basic worksheets and catch-up exercises that created disengagement and even outright resistance in some cases.
- *Developing student well-being.* This was the prime responsibility in several schools and a significant part of their approach in others. Well-being, it was felt, had been threatened during and even beyond COVID-19 by poverty and food insecurity, by isolation from peers, by detachment from school and community routines, and by excess time spent on digital gaming and scrolling. Observations of students’ suffering during and beyond COVID-19 sometimes had educators in tears. CPSN projects therefore focused on indoor changes such as the building of sensory rooms by older students for younger peers to help with self-regulation, removing digital distractions (in one case even turning off the school wifi), and developing a range of outdoor learning projects such as building and walking on trails, creating gardens to grow food for the community, and various forms of learning on the land such as constructing shelters and tipis in Indigenous communities.
- *Building community connections.* Learning through play was a primary way for students to “see themselves as valuable contributors to their community.” Schools created gardens, grew food, built outdoor learning spaces, and designed artwork in and with their local rural communities. One school in a post-industrial town used food-related innovations to support their low-income community with healthy eating initiatives and, by visiting ethnically diverse restaurants and their owners, strove to counteract recent incidences of racism in their town. Learning through play was also used to connect Indigenous students to their surrounding and neighbouring communities.

- *Undertaking innovation.* Most schools who took on innovation as their driving theme were already implementing play-based projects before joining the CPSN and were looking to continue their innovation and connect with other like-minded teams. These schools were less about undertaking specific innovations than developing cultures of innovation in their schools. Often, these were digital or mechanical but could also include green and language-based elements too.
- *Inclusion and Identity.* Many schools were mindful of the contribution that CPSN could make to the multiple and sometimes marginalized identities of their students. Within and beyond the project, French-language schools make identity and language related issues their educational raison d'être. In schools serving Indigenous populations and also in some that have few or no self-identified Indigenous students, inclusion and identity are central to being inclusive of Indigenous cultures and pedagogies in art, storytelling, and learning on the land. Many made parallels between learning through play as a way of responding to the Canadian Truth and Reconciliation calls to action. Learning through play also welcomed new Canadians and offered opportunities for them to show their strengths, by adapting Indigenous pedagogy and curriculum to Black African immigrants, for example. Last, creativity, and dramatic forms of play were, in one school, seen as especially beneficial for their high numbers of 2SILGBTQ+ students at the same time as they were enjoyed by all students. In many play-based initiatives, what was regarded as essential for some students was also regarded as good for all of them.

Question 3: How is 'learning through play' understood for educators/school teams working in the middle years (grades 4-8) in 7 provinces in Canada?

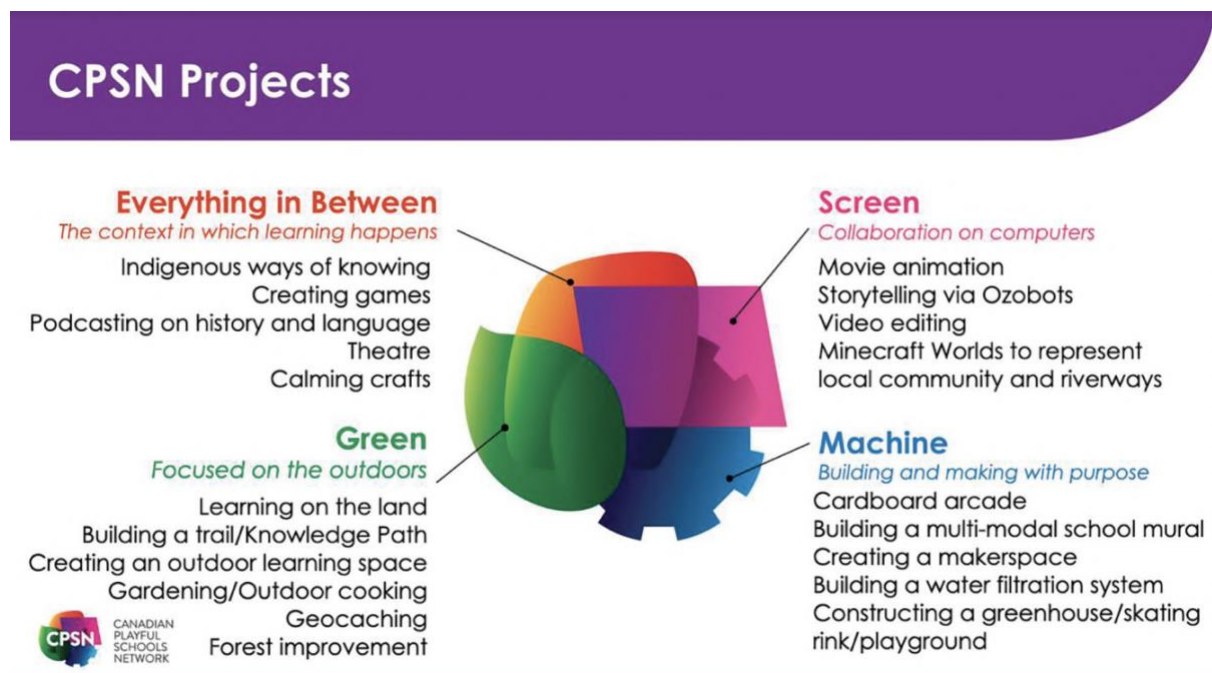
'Learning through play' looks like structured play where students have the freedom to explore subject content and achieve curricular goals through experience. It involves many social and emotional elements for these schools, namely collaboration among peers, multi-grade collaborations, well-being, belonging, etc. Teachers' play-based projects involved outdoor activities, exploration, experiential learning, coding, making, STEM, and learning on the land. Some of the schools used this as an opportunity to support whole-school events and festivals where students can be involved in the whole process of organization—from planning to implementation. Play was perceived as a way of thinking and learning (pedagogies of play) and ultimately, a way of being (playfulness). In one educator's words: "Play is anything that excites the students that is outside the normal classroom routine". Another captured the wide range of activities that can constitute play when they said:

Interest-based, choice-driven, unstructured, interactive activity, brain breaks, community interactions, independence and choice for students, chess tournaments, science presentations, winter carnival, gardening, fence building, zen zone design, sensory room utilization - I am seeing play as exploratory learning within an individual's area of interest.

Play and planning play-based activities were not linear. They allowed for learning from obstacles and mistakes – such as how to grow food indoors rather than outdoors during winter months, creating a sensory room when the need arose etc.

Question 4: What does learning through play look like through the 4 CPSN modes of play? What are the intersections and interactions between green (outdoor), screen (digital play, coding), machine (maker-oriented teaching and learning, design thinking), and everything in between (inclusive, cultural, social, emotional and language learning)?

How learning-through-play was conceptualized within the network is through four modes of play: green, screen, machine, and everything in between – see below for examples.



Multiple modes and sometimes all modes of play were interconnected in the CPSN projects. A green play project of developing a nature path on the school grounds also included digital QR codes that would link students to the indigenous heritage of the land or the use of the surrounding plants. QR codes also linked recipes created by students in a healthy food project to the playlists that would accompany people’s cookery activities. A cardboard arcade included electronic features. A film festival involved coding and digital editing as well as costumes and script writing. A tableau populated by costumed ozobots had a painted landscape and written narratives. Machine play expanded beyond technological tools with some play projects involving creating animal hides from moose skins, beading, making drums, and sewing moccasins.

Digital play or screen play was the only form of play that was mentioned as sometimes representing an obstacle to engagement and well-being. Educators described how it had increased distraction, reduced students’ ability to focus, increased anxiety, impaired their ability to build in-person relationships, created behaviour problems, and displaced other valuable activities such as learning outdoors. All forms of play need to be not just the subject of enthusiastic activity but also a focus for critical reflection. The major alert that

CPSN educators are sending us is that other educators need to be especially mindful about which forms of screen-based play they adopt, and which ones they put to one side.

Question 5: What was the experience for educators within the CPSN and beyond the school team? What does “teaching through play” mean for you?

School teams spoke of how their values of promoting students’ engagement and supporting their wellbeing were reinforced by the network and their CPSN project and that they were learning more about their students as the project progressed. Students who did not come forward as leaders prior to the play project were taking more initiative to lead their peers. Students who had been absent from school a lot were motivated to attend school. Teachers reported improved motivation in students. The sense of [excitement, joy and increased engagement](#) was not only reserved for students, though. It was also reported by the teachers.

Learning through play is a wonderful example of how a focus on relational teachings can positively shape a school's culture. When schools increase student engagement through play, they are better able to produce positive outcomes for students. Students who traditionally struggle with pencil and paper tasks often become the leaders when hands-on activities are provided. Play allows students to work collaboratively and experience ‘light bulb’ moments that they want to share. Staff have observed overall improvement in student engagement, attendance and most importantly in ‘fun’ across the curriculum.

While play-based learning is engaging for students, it’s important to highlight the merits of play-based teaching. It’s invigorating to work in an environment where educators ask, how can we make this more fun? Inevitably, what’s fun for the students is also fun for teachers. We are learning from one another, learning from the community that is ever willing to get involved, and learning from our students. And it sure is fun!

Many educators, however, remarked that it was difficult to assess learning through play and find rigorous means to evaluate the impact of the project on their students. When their work was up against achievement tests and parental scepticism, they noted, this could threaten long term sustainability.

Teaching through play means a lot for the teachers as well as for their students. There is a [global crisis in the teaching profession](#) of recruitment and retention. One of the contributory factors is simply how the job feels these days and how teachers experience the work for themselves. Teachers need to play as well as their students. There needs to be teacher choice as well as student voice. Two schools took this as a central principle when they devoted half a day each week to classes organized around teachers’ interests that their students signed up for, but teachers everywhere got fulfilment by engaging their own passions in their work for learning outdoors, or gardening, or robotics, or creative artwork, or theatre arts, for example. It increased their own wellbeing and engagement:

*I feel my **wellbeing** has improved this year. Even though I had a nasty flu, I am motivated to come to school so the students can enjoy the activities that I have planned. I am often a lead teacher, but always have teachers work with me. I have yet to have someone not interested. They all enjoy it as it's something different, and the students have so much fun learning through play/technology. Educators are also finding that play is making this a happy environment for them to be teaching in.*

*Energized by level of **engagement**. With this project, it has opened our eyes to the power of our own words and openly and without judgment sharing our ideas and building upon each other's ideas. It has allowed us to create and host a wonderful day and evening for our students and their families to come together and learn through play.*

Collegiality and collaboration were enhanced by the project. Schools had to apply in teacher teams, led by teachers, not by principals. Teachers got to know and work with new colleagues – exemplifying a key principle of effective collaboration – that it is best embodied in working together and not just talking together. They met colleagues in other schools with similar passions and diverse interests and approaches. Not all teachers stepped forward spontaneously. Some had to be persuaded to join – expanding the impact of play-based approaches beyond their usual compass.

The relationships between and among teachers and school administrators as well as system administrators varied and sometimes illustrated *dilemmas experienced in teacher-led networks*. Three dilemmas stand out.

1. Teacher v principal involvement.

The project called for recruitment of teacher-led teams. Each school team was expected to have a leader involved, which could involve principals. Sometimes principals participated. Sometimes principals took control, with the support of their teachers. Sometimes they were indifferent or even slightly opposed. The value of a teacher-led project is, as one group of teachers with an unsympathetic principal remarked, that there should sometimes be projects that are for the teachers and that can be controlled by the teachers, even and especially where their principal has no interest in them. Not everything should go through the principals, even though that is what advocates of systemic change often proclaim. However, teacher-led teams were less likely to draw in sceptics than principal-led ones. One school principal repeatedly pressed a sceptical teacher who felt her students' literacy wouldn't improve if her students merely played to be involved in the CPSN project, but in this teacher's words, the principal kept coming back, saying "you're the one". Eventually, the teacher committed and discovered the extraordinary heights her students' learning could then reach. The dilemma, therefore, is that teacher-led teams can bypass unsympathetic administrations, but principal-led teams may be more able to recruit and convince initially reluctant teachers.

2. School change v system change

One of the strategies of the project design was to secure support of and involvement from provincial administrations. The purpose was to maximize the chances of system-wide impact. Levels of provincial support varied from being opposed but unable to interfere, to being supportive of schools' recruitment and permissive after that, to being actively supportive throughout, and to taking on direct responsibility for provincial and regional leadership. The SNA data indicate that the highest number of network ties occurred in two of the provinces where involvement was lowest and even non-existent. It may be that provincial systems that are involved leave less space for school-based network initiative, and, conversely, that without high-level administrative support, schools are more likely to feel they should or would like to initiate network interactions themselves. Network systems may, in this respect, sometimes be in tension with administrative bureaucracies.

Districts typically operate on a smaller scale than whole states and provinces, and here the dynamics and dilemmas are slightly different. Districts that had a holistic view of integrated innovations within and across their schools were associated with schools that were vigorous participants in the network. Other districts were, like the provinces, sometimes indifferent, and more likely to turn to non-CPSN schools in district showcases. And in at least three cases, district administrations actively interfered with or obstructed CPSN projects – in once case calling the school to complain that students had been beautifying the school exterior in non-approved paint colours, in another case delaying a school's construction of a large tipi for fear that teenagers would engage in inappropriate behaviour within it, and in one other case requiring a school to remove scores of rubber tyres from a new outdoor learning area that had been constructed through the project just days before an official opening, many weeks after the tyre installations had been officially approved. If system administrations are not committed to or convinced by play-based learning initiatives, or by teacher-led change, then they can obstruct progress through indifference, discouragement, or active opposition.

3. *Networks v other networks*

The CPSN is not the only educational network in Canada. In our school visits, we learned that some of the project schools were also engaged in and members of other networks. In one province, network leaders had actively encouraged members of their own network to apply to join this one as well. In a school in another province that was a member of a large, user-pays and commercially funded network, the learnings and emphases of both networks were tightly integrated with the school's and the district's priorities. In a third province, schools that were members of this large network were sometimes capitalizing on being involved in both networks, but in other schools, we learned that engagement in the other network sometimes consisted of minimally effective activities like operating a professional book club. When a project is in a school, it sometimes comes across other projects at work. If these are effective, there are strong opportunities for integration and celebration. If they are less effective, and the commercial or political base of other projects makes them less inclined to acknowledge problems and setbacks, then this can create tension between networks. This creates a case for consciously managing inter-school network relations, particularly through the integrating power of a coordinating system like a school district or a school principal.

Question 6: How do students play? Who is included in learning through play and who is excluded?

Play was sometimes used as an entry point to engage students with diverse needs and abilities. CPSN members reported that, initially, some of their most disengaged students were reluctant to take part in the play or frustrated with the tasks. School teams responded by increasing the range of play activities and providing students with more choice. In time, student engagement increased and in the final reports, teachers described how students who were initially shy and reluctant to get engaged were now hitting their stride within the play offerings.

During the school visits, engagement and excitement among students was palpable. There were compelling examples of students with self-regulation challenges and behavioural needs who performed better while engaging with play-based activities. One school created a walking trail as a way for students to self-regulate which led to a decrease in the number of students who came to the principal's office with behavioural issues. In another school, a mainly non-attending student came into school specifically at project times so he could build a bridge as part of a tableau the students were making. In a third school, a student who had been suspended for violent behaviour brought his working-class craft skills into the school at the end of his suspension, to lead other students on constructing their own grow towers. Indigenous students who had thrown worksheets off their desk to the ground and cursed incoming educators who tried to make them learn with them, were transformed when a new teaching principal introduced learning outdoors related to cultural traditions connected to commercial salmon fishing, for example. In educators' own words:

The kids have been engaged, enthusiastic and asking for more! I have been amazed at how well-behaved they have been through these sessions with minimal teacher intervention. They have all impressed me with their ability to take turns, communicate respectfully, and show good sportsmanship.

We are noticing a huge jump in engagement from our struggling writers with the addition of book creator. They are feeling more successful and are excited to produce. This success is improving their well-being and their desire to be in school. All students are engaged.

Students are building relationships with each other and with the school staff. They are more engaged and happier. They are getting along well with each other and being supportive to one another. They are taking the lead in their learning and even teaching their teachers how to play games.

Question 7: Where is play in the schools and where is it not? How is it connected to the network?

Teacher teams used the CPSN project as an opportunity to connect with one another within their school community. The project gave them time to collaborate with one another and co-plan play activities. While we saw evidence in some schools that learning through play

was extending beyond the CPSN teacher team to create a culture of play in the school, most of the learning through play was limited to the teachers involved in the project. With more time, perhaps across at least one more school year, the chances for spread and greater teacher inclusion might have increased.

School teams also networked beyond their own school to engage with other schools in the CPSN and partners they encountered through the network, even though most of that interaction occurred through the leadership of the team in the hub – again, not an unexpected pattern in the first months of any network.

Most schools referenced their own school team and colleagues as being the most valuable sources of support for them during the project. Most teams simply wanted focus time to work with their immediate colleagues and school community. It was the project design that enabled and encouraged these team-based interactions to happen. Schools also communicated intensively with the network hub for ideas and professional learning resources. Playgroups organized by the hub connected the network schools with each other, though schools generally found value in these sessions only once they had time to develop their own projects when they then had something to share. Again, this poses questions of time or duration as being key for effective network development and expansion beyond collections of individual schools. In general, it is fair to say that over an 8-month timespan, the CPSN successfully created a cluster of 41 innovative, teacher-led projects, supported by the professional learning and coaching resources of a centralized hub and with the periodic stimulation of ideas that originated in other network schools through the playgroups, and in professional learning sessions led by international advisers and other external experts. More time and funding support would be needed in this network and any other to develop the practices, grow the confidence, and establish the relationships that would move the network on from being a hub-based structure to a crystalline one.