



Canadians for 21st Century
Learning & Innovation

presents

the Spiral PLAYBOOK

Leading with an inquiring mindset
in school systems and schools



Linda Kaser & Judy Halbert

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in school systems and schools

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This publication is proudly sponsored by **C21 Canada – Canadians for 21st Century Learning and Innovation**. C21 Canada is a national, not-for-profit organization advocating for innovations in student learning. The organization brings together executive leaders of school districts and knowledge-sector businesses who share the belief that 21st-century models of learning must be adopted on an urgent basis to position Canadians for economic, social and personal success in the high-skills, knowledge and innovation-based economy.

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The Spiral Playbook is available at c21canada.org/playbook



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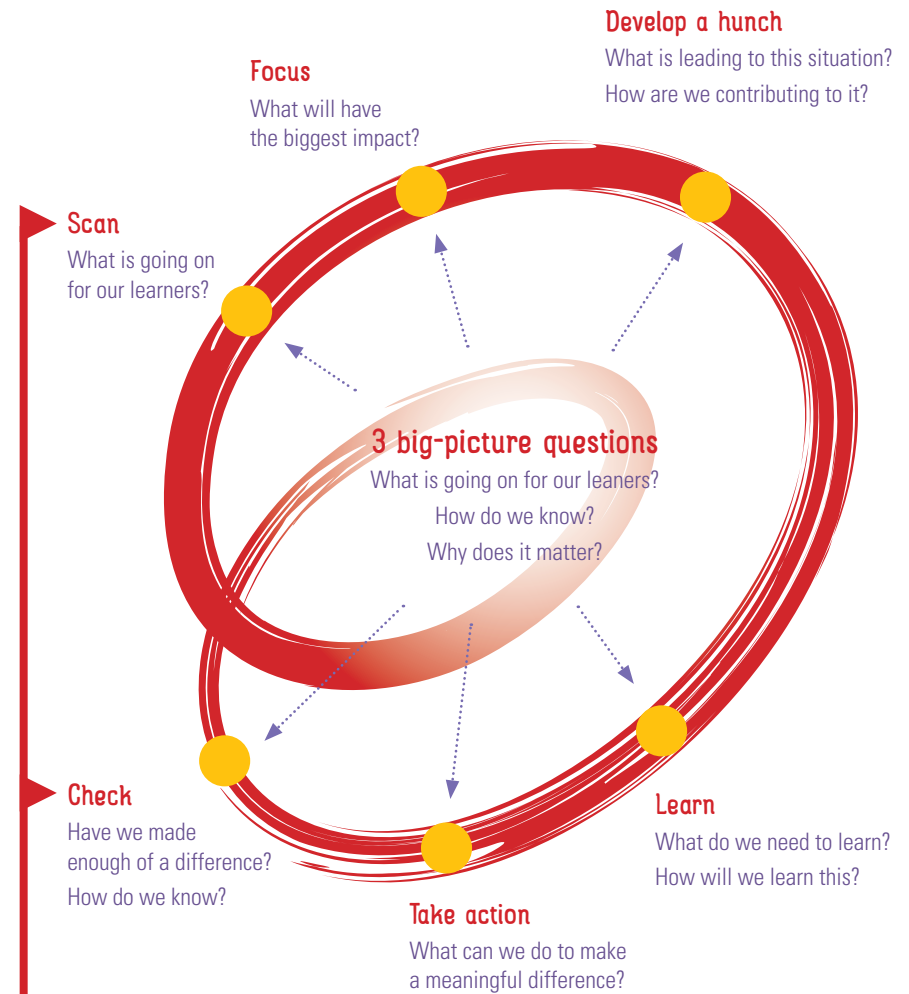
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the spiral of inquiry



4 key questions for learners

Can you name two people in this setting who believe you will be a success in life?

What are you learning and why is it important?

How is it going with your learning?

What are your next steps?

Inquiry

is about being open to new learning and taking informed action.

A message from C21 Canada

C21 Canada exists to support the integration of leading-edge skills and competencies, teaching practices, and learning technologies into Canada's education systems. The organization provides a national forum for leaders to share ideas and build the capacity for system-wide transformation. (Read about the CEO Academy on page 46.)

A previous C21 Canada release, *Shifting Minds 3.0: Redefining the Learning Landscape in Canada*, proposed a shift from hierarchical policy-driven systems toward "networks of strong, responsive schools with educators collaborating continuously and sharing knowledge both horizontally and vertically" (Milton 2015, 8). *Shifting Minds 3.0* noted the crucial role leaders play:

System leaders create the conditions for transformation by encouraging leadership at all levels, imbued with the very attributes we are aiming to develop in young people—creativity, inquiry, collaboration, calculated risk taking, reasoned problem solving, and the capacity to learn from experience and face the next challenge. (17)

This new resource, *The Spiral Playbook*, points a way forward. It describes a disciplined approach to professional inquiry that aims to transform how educators learn and lead—within teams and across networks.

C21 Canada is delighted that researchers Judy Halbert and Linda Kaser accepted our invitation to present their work in this playbook format. We thank the editorial and design team, Joanne Wise and Kathy Kaulbach, for scoping it out and connecting the dots with flair.

The Spiral Playbook offers a concise introduction to an evidence-based model of collaborative inquiry.

Is it a game changer?

We invite you to explore the possibilities and share your learning.



Using this playbook

The spiral of inquiry is something like the game of Ultimate Frisbee. You don't need much equipment. There are no referees. Getting started is easy enough. But to play well requires practice and teamwork.

The Spiral Playbook introduces you to the key ideas for setting a spiral of inquiry in motion with your team, and for building an inquiry learning network. The playbook is concise enough to offer a quick overview, and detailed enough to guide you through a trial run when you are ready to learn more.

For experienced users of the spiral of inquiry, the playbook is a quick reference and a way to introduce new team members to the process.

Key messages

The beauty of the spiral of inquiry is that it is built on evidence-based concepts you already know and practices you may already use. But there are features that, in combination, distinguish this cycle of inquiry from other forms of action research. For example:

- It requires collaboration.
- It starts with a deep understanding of learning and the experiences of learners.
- It is specifically designed to change outcomes for learners in important areas.
- It respects the judgment, experience and language of teachers.
- It is informed by the best of what we currently know about powerful professional learning.

The central argument in the playbook is that **innovation floats on a sea of inquiry** and that **curiosity propels change**. Creating the conditions in school districts and learning settings where curiosity is encouraged, developed and sustained is essential to opening up thinking, changing practice, and creating dramatically more innovative approaches to learning, teaching and leadership.

Getting started

You may find it helpful to have a copy of the spiral diagram and key questions beside you as you read the playbook. Go to c21canada.ca/playbook to download a one-page guide.

The Spiral Playbook is meant to be shared. You can use it to introduce and explore ideas for a collaborative inquiry with district leaders, principals, school staff, community services, or parents and community members. (See the slide deck at c21canada.ca/playbook.)

If you are leading a presentation, we recommend you start with the Big Ideas for Learning and Leadership—especially the idea of growth mindset (page 10). Introduce the three big-picture questions at the centre of the spiral, and the four key questions for learners (page 20). Then go through the phases.

When you are ready to set an inquiry in motion, you can start at any phase. Choose the entry point that makes sense for your team and context. From there you will spiral backward to gather evidence, and forward to test possibilities.

You can learn more

about the ideas in this playbook by reading the book, *Spirals of Inquiry for Equity and Quality* (Halbert and Kaser, 2013). It offers additional background, research and case studies.

To order the book, go to bcpvpa.bc.ca/spirals-of-inquiry-for-equity-and-quality. Proceeds from the sale of *Spirals of Inquiry for Equity and Quality* support inquiry-based learning initiatives in the Aboriginal Enhancement Schools Network.

Big ideas for learning and leadership

Shifting mindsets

Back in the industrial age, a core function of the school system was to sort and rank students for post-secondary education or predictable jobs. In today's knowledge society, little is predictable and lifelong learning is a given. All young people—not only a select few—are now expected to think critically and creatively, to work collaboratively, and to continually transform themselves during their school years and throughout their lifetimes. The same expectations apply to educators and system leaders. This calls for a different kind of classroom learning and a different kind of leadership.

Figure 1 identifies four major shifts that are necessary to move from a sorting system to a learning system. (Kaser and Halbert 2009, 13)

FIGURE 1
Shifting from sorting to learning – implications for systems and learners

From Sorting	To Learning
A focus on instruction and teaching	A focus on deeper forms of learning
Summative assessment for grading and reporting	Formative assessment to provide descriptive coaching feedback and learner self-regulation
Teaching in isolation	Teaching teams working as learning communities
External centralized pressure	Local internalized commitment, capacity building and responsibility

Researchers, including psychologist Carol Dweck, have revolutionized learning theory and classroom practice with insightful work on motivation, resilience and mindset. Cultivating a **growth mindset** is key to learning at any age, and key to leading a team, a school or a whole system.

Although people may differ in every which way—in their initial talents and aptitudes, interests, or temperaments—everyone can change and grow through application and experience... The passion for stretching yourself and sticking to it, even (or especially) when it's not going well, is the hallmark of the growth mindset.

(Dweck 2006, 7)

The opposite of a growth mindset is a *fixed mindset*—the self-limiting belief that we are only as good as our innate abilities, and that our failures are evidence of our limitations. Learners and leaders with a fixed mindset fear failure more than they love new learning.

The good news is that a growth mindset can be learned. The spiral of inquiry offers a way to shift from the fixed mindset of sorting and ranking to a growth mindset for deep learning.



Seven principles of learning in an innovative learning environment

The Organization for Economic Cooperation and Development (OECD) has identified seven principles for developing lifelong learners in the knowledge society (Dumont, Istance and Benavides 2010, 6-7). Figure 2 lists the seven principles and the implications for inquiry-oriented leaders.

Social and emotional learning (SEL) is the process of acquiring and applying the knowledge, attitudes and skills “to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.”
www.casel.org/what-is-sel

FIGURE 2

Seven principles of learning and the implications for inquiry-oriented leaders

What works for LEARNERS?	What this means for LEADERS
Put learners at the centre	Leaders must be relentlessly curious about what’s going on for students in the system. Student learning is the driving force, but students aren’t the only learners. In an innovative learning environment, everyone is a learner, including teachers, support staff, formal leaders, parents and others.
Emphasize the social nature of learning	Leaders collaborate, cooperate, and support networked learning.
Understand that emotions are central to learning	Leaders understand and apply the dynamics of social and emotional learning . They are attuned to their own emotions and motivations, and to the emotions and motivations of others—including the positives, like satisfaction and self-efficacy; and the negatives, like helplessness and anxiety. They understand how emotions affect performance.
Recognize individual differences	Leaders understand the dynamics of their team members, including their strengths, interests, experiences, and gaps in learning. They draw on these differences and help everyone in the system to develop through carefully designed professional learning.
Stretch all learners	Leaders stretch themselves and others, but they avoid overload or stress that diminishes performance.
Use assessment for learning	Leaders set clear expectations while being open to new possibilities. They continually assess what is working and where the gaps are. They always consider qualitative data as well as quantitative data. They seek and give meaningful feedback to promote learning.
Build horizontal connections	Leaders are connectors. They connect activities, ideas and people, in and out of school. Their connections include partnerships in the community, with other schools, and with organizations at a distance.

Integrating Indigenous wisdom

School systems across Canada are waking up to the profound need for Canadians to learn and integrate the wisdom and world views of First Nations, Inuit and Métis peoples.

Figure 3 lists nine principles of learning, drawn from many Indigenous traditions, but especially the First Peoples of present-day British Columbia. These principles were identified by BC's First Nations Education Steering Committee (FNESC) for use in the English First People's curriculum. They remind leaders and learners to become more comfortable with uncertainty, more familiar with the power of story, and more connected with each other and with a sense of place. The principles apply to all learners and to all forms of learning, not only to First Nations, Inuit and Métis learners studying Indigenous traditions and cultures. (Halbert and Kaser 2013, 15)

Bear in mind that there are hundreds of distinct Indigenous cultures across Canada. Your inquiry practice will go deeper when you integrate the wisdom teachings rooted in your territory.

Learning involves patience and time.

FIGURE 3

First Peoples Principles of 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 recognizes the role of Indigenous knowledge.
	Learning is embedded in memory, history, and story.
	Learning involves patience and time.
	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)

Bringing Indigenous wisdom into practice in your school system is a local expression of **global competence**. The OECD describes global competence as "in-depth knowledge and understanding of global and intercultural issues; the ability to learn from and live with people from diverse backgrounds; and the attitudes and values necessary to interact respectfully with others." (OECD 2016, 1)

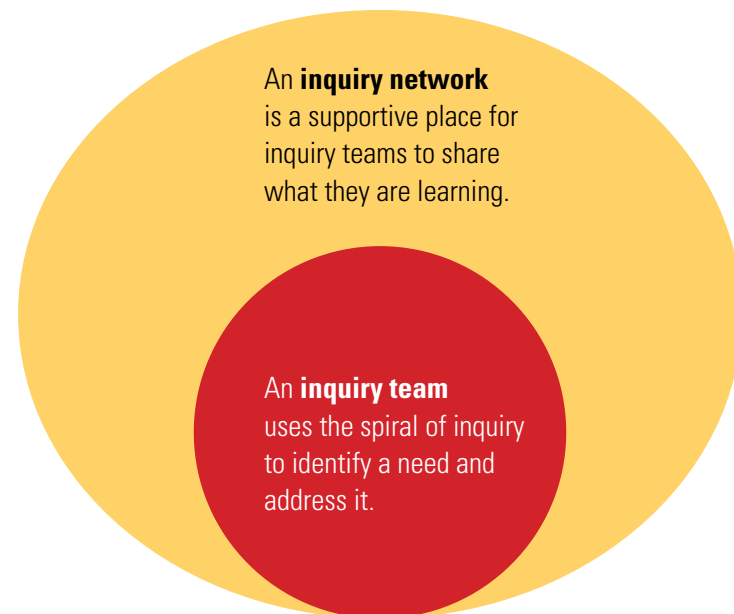
Building an inquiry network

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).

An inquiry network is an incubator for innovative ideas and a supportive place to learn. It is also fertile ground for growing new leaders. Educators who have opportunities to develop an inquiring mindset in an inclusive learning network build skills and relationships that equip them to lead positive transformations in the years to come.

Initially your network might consist mainly of teachers and formal leaders within the district. Over time, the network might extend to other districts. It might also include support staff, cultural workers, university scholars, community members, leaders of organizations and foundations, civil servants, and others with a commitment to learning.

C21 Canada's CEO Academy is an example of a nationwide inquiry network of system leaders. (Read about it on page 46.)



*The more intentional you are about using **the spiral of inquiry** to change outcomes for learners in your setting, the more coherent and innovative the whole system will become.*

Questions to set your inquiry in motion

Start with a clear moral purpose

Having a clear, important and shared purpose is vital for inspiring big changes in your system, and for building an inquiry network.

British Columbia's Networks of Inquiry and Innovation (noii.ca) offer a fine example of clear moral purpose. Over time, participants have identified three key goals that reflect, in everyday language, a shared purpose for system reform:

- *Every* learner will cross the stage with dignity, purpose and options.
- *Every* learner will leave more curious than when they arrive.
- *Every* learner will develop an understanding of, and respect for, Indigenous ways of knowing.

What are the quality and equity goals for all learners in your system?

Three big-picture questions

A spiral of inquiry can begin at any point—with an opportunity, an issue, a directive, maybe a hunch. Throughout the process, the inquiry is guided by these core questions:

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

These three questions keep learners at the centre of the inquiry.

In improvement planning, the conventional question is *How are our kids doing?* The answers are typically quantitative, measured by test scores, graduation rates and post-secondary options. The spiral of inquiry considers the quantitative data but goes deeper, asking where the learning is leading—socially, emotionally, intellectually and academically.

Generally, by *learners* we mean our students. But in an inquiry-oriented system, everyone is a learner and so the questions have a dual meaning for teachers, formal leaders, parents and others:

- What's going on for our students?
- And what's going on for the rest of us as learners?





Four key questions for learners

What we *think* we know about our learners is as likely to mislead us as it is to inform our actions. It's important to challenge our assumptions by asking the learners directly. The following four questions offer a powerful way to gather evidence about what's really going on for learners:

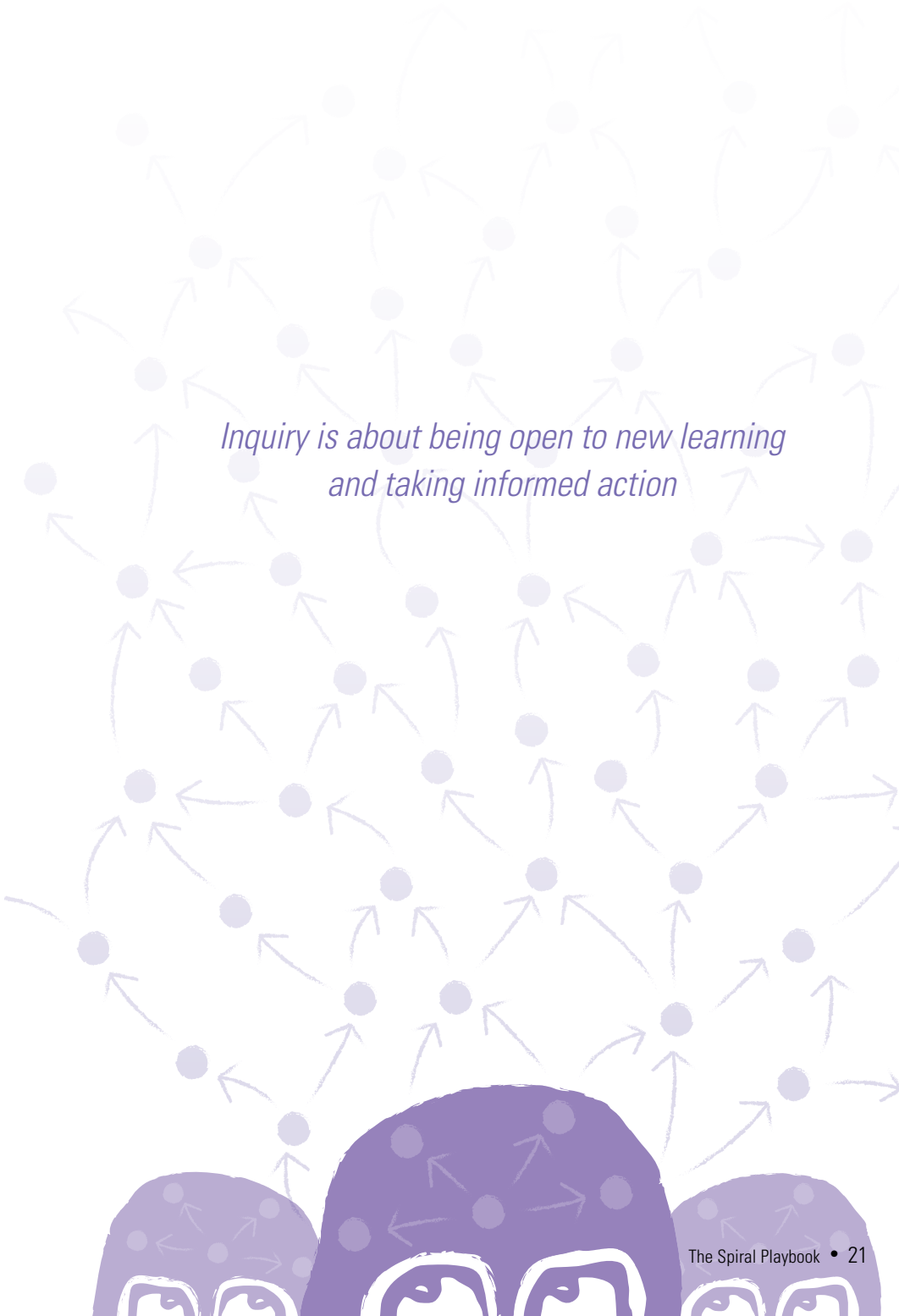
- Can you name two people in this setting who believe you will be a success in life?
- What are you learning and why is it important?
- How is it going with your learning?
- What are your next steps?

These questions are drawn from research on social and emotional learning and self-regulation.* The four questions are pivotal at the scanning and checking phases in the spiral of inquiry. They explore the extent to which learners are connected to their school community (a key indicator of social and emotional wellbeing) and their capacity for metacognition and self-regulation.

As with the three big-picture questions that guide all phases of the inquiry, the four key questions for learners have a dual meaning for the inquiry team. As an inquiry-oriented leader, ask yourself:

- Who are *your* champions and allies? Can you name two people you trust and will rely on for support and feedback in this inquiry?
- What are you learning from this inquiry, and why is it important?
- How is it going?
- What are your next steps?

* The four key questions for learners are informed by the work of Kim Schonert-Reichl at the University of British Columbia, and Helen Timperley at the University of Auckland.

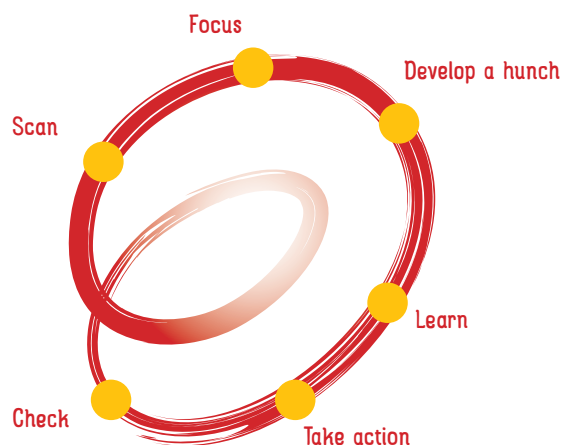


*Inquiry is about being open to new learning
and taking informed action*

Phases in the spiral of inquiry

The spiral of inquiry involves six phases:

- scanning
- focusing
- developing a hunch
- engaging in new professional learning
- taking new professional action
- checking that you've made a big enough difference



Once you have completed a full spiral, you are well-positioned to do it again with a different focus.

Although the stages in the spiral overlap, it is critical that you linger long enough in each phase to do the work that will make the biggest difference for all learners.

There can be quick gains along the way, but the enduring benefits accrue over time as you become more familiar with the spiral of inquiry and share your learning in a supportive network.

Farm Roots: A case study of place-based learning*

A solid majority of students in a suburban school district get the marks they need to succeed academically; but many report feeling anxious, depressed and intellectually disengaged. Educators observe that the students seem far more connected to their lives outside of school than to the learning in school. This seems especially true for the “farm kids”—those who are growing up on a farm or who work on one.

Many students appear to genuinely care about social justice and global issues, including food security and ecological sustainability. They want to be connected to real-world situations where their learning has consequences beyond a grade or mark.

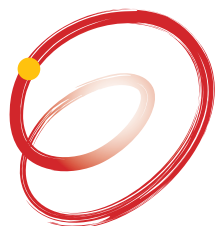
A local parent shares his enthusiasm for students to use emerging technologies and design thinking to find problems in the community and solve them. That parent teaches at a polytechnic university focused on learning by doing, innovating, and contributing to a better world.

At the southern edge of the district, a closed elementary school sits on eight acres of farmland.

Imagine the possibilities...

* Thank you to Brooke Moore for permission to quote from her paper, *Farm Roots: A ground breaking mini school*, 2016.

scan



What is going on for our learners?

Everyone is likely to have opinions about what is going on for learners. In the scanning phase, the inquiry team collects a variety of rich evidence about what is *really* happening. In a reasonable amount of time—generally no more than two months—the team gathers and considers useful information in key areas of learning.

The four key questions for learners (page 20) are essential at the outset to determine the extent to which learners are connected to the learning community and are developing metacognition and self-regulation. You may start with just one or two learners in a face-to-face interview. Or you might use a survey tool and involve all learners. Keep at it. It takes time to develop confidence and ease with these questions.

Your intuition and hunches are useful information, as well. Just don't let your untested assumptions drive the agenda at this point. Work collaboratively with team members and discuss the learning with your inquiry network. You will keep each other curious and open to new learning.

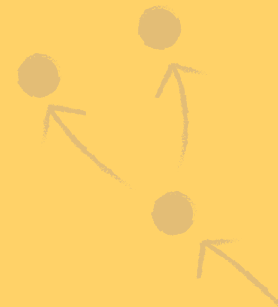
Considerations

- Start somewhere. Give it a go with an open mind. You will learn from the process.
- Slow down. Resist the urge to leap to action.
- Use the four key questions for learners (page 20). Pay close attention to what the learners have to say.
- Use the three big-picture questions (page 19) to keep your team focused on their learning.
- Use the OECD seven principles of learning (page 12), as well as Indigenous wisdom from your territory (page 14), to inform your scanning.

Farm Roots: The scan

An inquiry team used surveys, interviews and educator observations—as well as enrollment and course credit data—to gather information about students' attitudes and experiences of school and their learning. One quarter of the students surveyed could not identify two adults in the school building who believed they would be a success in life. An overwhelming 87 percent of students in one high school reported feeling disengaged, alienated, struggling or disconnected. Even so, most students (99 percent of girls and 93 percent of boys) showed good behavior at school.

In interviews, students said they wanted more choice and ownership over their learning; more space and time to enjoy their learning and to work collaboratively; and a better understanding of the community and their own roots in it.



"Without data you are just another person with an opinion." – Andreas Scheicher, OECD

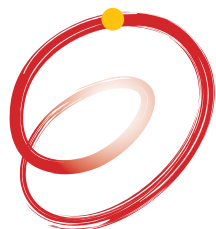
Scanning involves

- A wide perspective on learning, informed by learning principles
- Finding out what learners think and feel about their learning, and what their families and communities perceive about their learning

Scanning is NOT

- Seeking evidence to reinforce the status quo
- Only looking at aspects of academic learning that are easily measured
- Exclusively about what the professionals think

focus



What will have the biggest impact?

In the focusing phase, the inquiry team asks: *Where will we concentrate our energies in order to make a big and lasting difference for our learners?* Unlike scanning, which requires a broad perspective and a willingness to listen to diverse views, the focusing phase challenges the inquiry team to decide among competing priorities.

Look at the evidence that emerged in the initial scan. Select one or two areas on which to focus. Choose an area of high impact that will address important issues.

Be curious about the strengths you find, as well as the challenges, in order to gain a fuller understanding of what is going on and what will make the biggest difference going forward.

Be bold with your goals but realistic about the immediate next steps. Choose a manageable direction. Don't try to do everything all at once because, if you do, your energies will be scattered, the learning will be cursory, and the change will be superficial.

Have the courage to slow down and develop a deeper understanding of what is worth spending time on before moving to action.

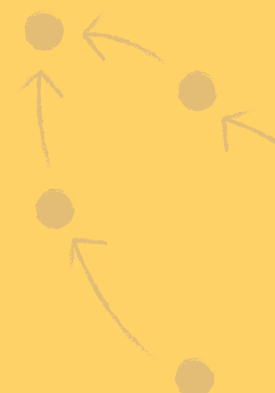
Considerations

- What caught your attention during the scanning phase?
- What's missing? What other evidence do you need?
- What are some strengths that your learners show in this area?
- How could you build on these strengths?
- What can you most effectively tackle over the next few weeks or months?

Farm Roots: The focus

The inquiry team focused on the disconnect between how students *did* in high school, based on their progress toward graduation, and how they *felt* about school, based on attitude surveys and interviews. The team wondered, *what's missing in the traditional school model?*

The school district already had experience developing a range of specialist academies organized around sports or fine arts, including Baseball, Lacrosse, Hockey, Dance, Film Production, Opera, and more. One high school in the district offers a popular STRIVE program—a year-long, curriculum-grounded alternative to the traditional school model, where learning is cross-curricular and takes place outdoors as much as possible. The STRIVE focus on place-based, community-embedded, cross-curricular learning looked promising to the inquiry team.



Aim for focused and deep rather than scattered and shallow.

Focusing involves

- Using information from the scan to identify an area for concentrated team learning
- Gathering more information if you need it to understand the situation
- Building on strengths or positives, as well as clarifying challenges
- Identifying a common area that the team can work on together

Focusing is NOT

- The time to introduce completely new areas disconnected from the scanning process
- About assuming you have it all figured out and don't need to investigate any further
- Just about problems or challenges
- About everyone choosing his/her own area of interest

What is leading to this situation?
How are we contributing to it?

develop a hunch



The inquiry process is not necessarily sequential. It may start with a hunch.

Team members will likely have hunches about why things are the way they are. Some may hold these views passionately. Getting strong views on the table where everyone can discuss and test them is fundamental to moving forward together.

The hunch phase asks the inquiry team to probe for evidence that will clarify what is leading to the present situation and, just as important, how we—the professionals—are contributing to that situation. It is essential to stay curious about our impact on the situation. Blaming parents, the system, the learners, or anyone else, will only stifle inquiry.

Be open to the possibility that your hunch is offside. In one example, some teachers were convinced that students were not doing their homework because they were spending too much time on social media. The inquiry team tested their hunch through a series of student focus groups and discovered that much of the homework was repetitive and dull. By testing out this hunch in a thorough and respectful way, the team was able to shift the focus to the ways in which the professionals were contributing to the problem. (Timperley, Kaser and Halbert 2014, 14)

Considerations

- Provoke your team to be curious, not defensive.
- Focus on areas over which you have control.
- Find quick ways to test your hunches.
- Involve learners and their families in checking your hunches.

Farm Roots: The hunch

The idea for a farm school was born as a hunch that students who currently feel disengaged by traditional schooling would find connection and value in a school built around the project of designing, building and maintaining a farm. It was this hunch that started the spiral of inquiry in motion. The inquiry team spiraled back to scanning and then focusing to clarify their hunch. Their initial research on place-based learning pointed to the possibility that the anxiety, depression, lack of effort, and lack of intellectual engagement reported by many students might be addressed by learning outside in nature, connected to the community, with more choices in the ways students learn and the goals they set.

*Have the confidence to put ideas on the table.
Your hunch may not be grounded in fact—quite yet.*

Developing a hunch involves

- Getting deeply held beliefs and assumptions out on the table about your own practices
- Focusing on things your team can do something about
- Checking your assumptions for accuracy before moving ahead

Developing a hunch is NOT

- A general brainstorm of all possibilities
- Being obsessed with the actions of others or with issues over which you have limited influence
- Venting about the past, fuming about the present, or finding someone to blame

learn



What do we need to learn?
How will we learn this?

All phases of the spiral of inquiry involve learning, but now it's time to get specific. In this phase you carefully design professional learning to test and develop your hunches. The goal is to make meaningful changes in educators' professional practices.

Inquiry teams are often tempted to leap straight to action at this point. It takes discipline to slow down. Remember you are in the business of learning. You have a duty of care to stay curious about current research evidence and how it applies to learners in your context.

You may need the help of both internal and external experts, depending on the situation.

Think holistically, with the intention of bridging the divides between disciplines and content areas. Consider how you will develop **adaptive expertise**—the ability to apply new knowledge and skills flexibly and creatively in different situations (Dumont, Istance and Benavides 2010, 3).

High-stakes professional learning takes time and has to fit the school year calendar. Be prepared to take a year, two years or more to fully develop and roll out a major plan.

Considerations

- Stay curious. Don't adopt a solution just because it's popular or readily available.
- Continue to ask the three big-picture questions (page 19).
- Look for insights from other schools and systems with a similar focus.
- Stay connected with your network to sustain the momentum of learning.
- Involve everyone in the learning, including formal leaders, teachers and support staff.
- Return to the seven principles of learning (page 13) to keep the learning engaging and relevant for all.

Farm Roots: New learning

For the professional learning phase, the inquiry team used the OECD seven principles of learning and the First Peoples Principles of Learning as their core framework. They wondered: *What do we need to consider when building a program in this district with learners at the centre?* The students had said they wanted to develop real-world skills through hands-on learning—outside the classroom and without a rigid schedule. The inquiry team recognized these as keys to developing the capacity for self-regulated learning. Guided by the students' feedback, the team considered how to offer cooperative learning around authentic tasks, without organizing the learning in traditional subject silos and without separating the students by grade.

The school district partnered with experts in sustainable agriculture at the polytechnic university, and began exploring possibilities for a dual credit option for Farm Roots students. Local farmers, Indigenous leaders, and other community members were also consulted as a place-based vision emerged.



"Chefs need to eat, and writers need to read, and teachers need to learn and find new ways of doing things."

— Michelle A'Court

New learning is

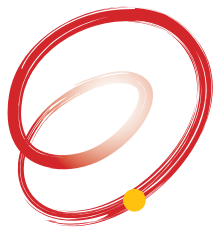
- Tailored to the situation
- Directly linked to the focus identified earlier in the spiral
- Exploratory—testing how new approaches could be better than previous practices
- Sustained and supported over time

New learning is NOT

- Pursuing the latest trends
- Disconnected from the context
- Uncritically adopting new ways without understanding the purpose
- A short-term or quick fix

What can we do to make
a meaningful difference?

take action



Finally it's time to put new ideas into informed, focused and team-led action. The action phase is about real change, not just talk. It is a deep dive into the new learning.

Make sure that everyone who is involved in the action is supported and knows it. Acknowledge that team members may be feeling vulnerable about trying new approaches. Make the risks less risky by emphasizing the qualities of a growth mindset, including the capacity to learn from failures as well as successes.

Be intentional and persistent as you plan, do, check, reflect, and try again. Make sure there are plenty of opportunities for this. It may take a second, third or fourth try without fear of judgement or failure before you have enough evidence to evaluate the new approaches.

Gather evidence of your actions, including records of practice, videos and more, to use for reflection and checking.

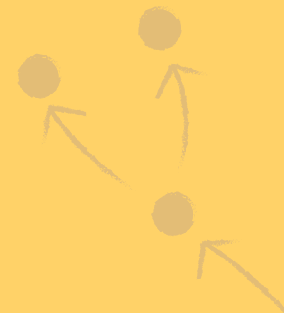
Considerations

- Ensure everyone knows they are expected to DO something different.
- Make time and provide support for the new action. If you are adding a new expectation, set something aside to make room.
- Make risk-taking less risky. Celebrate failures and successes as part of new learning.
- Ensure lots of opportunities for reflection. Keep your network involved.
- Ask *how will we know?* Have ways to measure the results of the actions at the checking phase.

Farm Roots: The action plan

The Farm Roots Mini School opened with close to 30 students in grades 10 to 12 from across the district. Students go to the farm campus every second day and to their regular high school on the other days.

Some of the items in the action plan were achieved quickly, such as eliminating the bell schedule and using and teaching growth mindsets. Others were more seismic in scope, such as connecting the students with other generations and other communities. Teachers have been encouraged to use the spiral of inquiry to decide which action items to focus on as they move through the year so they can be responsive to learners' needs.



Create the space to take risks, make mistakes, and try again—and again.

Taking action involves

- Learning more deeply about new ways of doing things – and then trying them out
- Evaluating the impact on learners – and seeking their feedback
- Building trust and cultivating a growth mindset

Taking action is NOT

- Trying something new without considering its value and relevance in your situation
- Implementing without monitoring the effects on learners
- Assuming everyone feels OK about the change

Have we made *enough* of a difference?
How do we know?

check



The purpose of your inquiry is to make a difference in outcomes that matter for learners. The checking questions ask: *Are we making **enough** of a difference? How do we know?*

Change does not always equal improvement or transformation. There may be cases where teachers change what they are doing only to find not much has changed for their learners. New actions arising from an inquiry can only be considered good if learner outcomes and experiences have changed for the better.

Regardless of the outcome, there is always something to learn from changing practices. The spiral of inquiry is designed to build professional curiosity. There is no place for blame or shame.

Considerations

- Decide in advance what evidence you will gather on the impact of the change.
- Collect evidence of what is happening as it happens.
- Ask the learners for feedback, using the four key questions for learners (page 20), as you did when scanning.
- Make it safe for all participants to share what they are learning.
- Celebrate what you are learning as a team.

Farm Roots: Check it out

At the time this playbook was written, the first group of students had just started at the farm, so the checking phase was ahead. As the program continues, the team will check for a range of indicators to measure the impact of the program on student engagement and learning. Early indicators, such as initial enrollment, were positive, and so was informal feedback. For example, several parents noted that their kids were rising earlier on Farm Roots days, ready to go to school.

The team will reuse the **four key questions for learners** to look for changes in students' intellectual engagement. They will also use surveys and interviews with students and their families to assess changes in anxiety, depression and disengagement. Other positive indicators could include increasing enrollment in the program; increasing graduation rates; and successful transitions to post-secondary options.



*Celebrate what you have learned.
Acknowledge the gains, the losses, and the uncertainties.
Stay open to new possibilities.*

Checking involves

- Knowing what you want to accomplish for your learners and having specific ways to determine how you are doing—early in the inquiry process
- Setting high expectations that your actions will make a substantial difference for ALL learners
- Setting the stage for what comes next

Checking is NOT

- A routine to follow at the end
- Seeking some difference for some learners
- Judging the capacity of learners to succeed
- Justifying your actions

Lessons learned

The spiral of inquiry is grounded in 20 years of research and rigorous field testing with inquiry-minded educators in Canada and around the world. Here are some key insights that have emerged so far.*

- 1 The pull of curiosity can be more powerful than the push of policy.** A challenge for district, school and network leaders is to create the conditions for teachers to be professionally curious. Strategically asking the four key questions for learners—and then acting on the responses—is a starting point for building curiosity about what is going on for learners.
- 2 Give it a go.** You will learn about the potential of the spiral of inquiry by giving it a go. Once you have a basic understanding of the process, jump in. The first time through gives you the opportunity to understand how the spiral works. After that the work just gets richer and deeper.
- 3 You can start anywhere.** Although the spiral diagram looks like a series of steps, you can start anywhere, as long as you pay attention to all of the phases before you're done. Maybe your curiosity was piqued by a new learning experience—perhaps an article or a conference. In that case, you may start with new learning then go to scanning. Or maybe you have some doubts about the effectiveness of a longstanding practice. So you start with a hunch, then go back to scan for more information.

- 4 Mindset matters.** If you have not yet seriously explored the research on mindset, make this the year it happens. Start by reading Carol Dweck's book, *Mindset: The New Psychology of Success*. Once you have read it, make sure you develop ways to share the importance of mindset directly with colleagues and with the students and families you serve. The evidence is simply too compelling to ignore.
- 5 Set hard goals and press on.** Hard goals are fueled by intense—and shared—moral purpose. The BC-based Networks of Inquiry and Innovation (NOII) have been pushing over the past decade toward the goal of *EVERY learner crossing the stage with dignity, purpose and options*. We aren't popping the champagne just yet. But an increasing number of schools and districts are taking up the challenge and are using spirals of inquiry to share their learning. Momentum builds when you stick with it.
- 6 Shared language and common frameworks build coherence.** The findings of the Learning First study on teacher professional learning in high performing systems (Jenson, Sonnemann, Roberts-Hull and Hunter 2016) emphasized the importance of professional learning that is inquiry-based, linked and coherent. The more intentional you are about using the spiral of inquiry to change outcomes for learners in your setting, the more coherent and innovative the whole system will become.

* Adapted from networksofinquiry.blogspot.ca. Posted August 16, 2016.

- 7 The network level is where big changes begin to stick.** In *Schooling Redesigned* (OECD 2015), David Istance argues that, in all the cases reviewed as part of the OECD's study of Innovative Learning Environments, it was a rich web of networks and partnerships that led to substantive and meaningful innovation. The argument is no longer whether innovation is motivated from the top or from the bottom, or indeed from the middle. What matters is the extent to which systems support networks and partnerships across all levels.
- 8 Indigenous education is for everyone.** Indigenous wisdom is not simply an elective for First Nations, Inuit and Métis learners. The teachings are timely and relevant for all of us as Canadians and global citizens.
- 9 Keep it simple.** Sometimes it seems like the biggest challenge for educators is to keep things simple and focused. If a one-page plan is good, wouldn't a ten-page plan be even better? Not so. Whether you are writing growth plans, designing rubrics, or charting your way through a spiral of inquiry, stay focused on the goal and resist the urge to keep adding more.
- 10 Put down the ducky.** Helen Timperley of the University of Auckland makes the strategic point that when we are learning something new, we have to decide what we are going to stop doing. She illustrates this with a clip from Sesame Street ([youtube.com/watch?v=acBixR_JRuM](https://www.youtube.com/watch?v=acBixR_JRuM)). In it, Ernie wants to learn to play the saxophone but all he can produce is a squeak. Why? Because he's still holding onto his Rubber Ducky. As you start a new inquiry, ask yourself: *What ducky am I going to put down?*

We will leave you with one final lesson: **Relationships matter.** Working together in a spirit of appreciative inquiry builds trust and courage, as well as curiosity. It is inspiring to see friendships form and working relationships deepen as teams commit to learn and apply the spiral of inquiry.

In *Turning to One Another*, Margaret Wheatley argues that very great change starts from very small conversations. Change happens when one friend turns to another and says, "I have an idea. What if...?" Great things can happen when friends get together and resolve to take action on what really matters most.

Spiral onward, leaders, learners and friends.



Learn more with these resources

Publications

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- Dweck, C. 2006. *Mindset: The New Psychology of Success*. New York: Random House.
- Dumont, H., D. Istance, and F. Benavides, eds. 2010. *The Nature of Learning: Using Research to Inspire Practice—Practitioner Guide from the Innovative Learning Environments Project*. Paris: OECD Publishing. (oecd.org/edu/ceri/50300814.pdf)
- Halbert, J. and L. Kaser, (in press). *Purpose, Passion and Persistence: System Transformation for Equity and Quality*. Melbourne: Centre for Strategic Education. (To be posted at cse.edu.au/content/publications)
- Halbert, J. and L. Kaser. 2013. *Spirals of Inquiry for Quality and Equity*. Vancouver: The BC Principals' and Vice-Principals' Association (bcpvpa.bc.ca/books)
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- Timperley, H., L. Kaser, and J. Halbert. 2014, April. *A Framework for Transforming Learning in Schools: Innovation and the Spiral of Inquiry*. Melbourne: Centre for Strategic Education, Seminar Series Paper No. 234. (cse.edu.au/content/publications)
- Wheatley, M. 2009. *Turning to One Another: Simple Conversations to Restore Hope to the Future*. San Francisco: Berrett-Koehler Publishers, Inc.

Websites

Farm Roots Mini School (deltalearns.ca/farmroots)
Learn more about the case study featured in this playbook.

Networks of Inquiry and Innovation (noii.ca)

NOII is a voluntary, inquiry-based network of schools in British Columbia, Canada, using the spiral of inquiry. It was established in 2000 with funding support from the BC Ministry of Education, the Irving K Barber Learning Centre at the University of British Columbia, and the BC Principals' and Vice-Principals' Association. The network is designed to improve the quality and equity of education in BC through inquiry and teamwork across roles, schools and districts. NOII includes the Aboriginal Enhancement Schools Network (noii.ca/aesn) and is a partner with the Healthy Schools Network and the District Inquiry Network.

Social and emotional learning (SEL) sites:

- Collaborative for Academic, Social, and Emotional Learning (CASEL), Chicago (casel.org)
- Social and Emotional Learning Lab, University of British Columbia (sel.ecps.educ.ubc.ca)



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And finally, thank you to the **CEO Academy** for continuing to ask questions and advocate for collaborative leadership.

"May your choices reflect your hopes, not your fears."

~ Nelson Mandela



Afterword

Meet our partners

C21 Canada: Canadians for 21st Century Learning and Innovation is a national, not-for-profit organization advocating for 21st Century models of learning in public education in Canada. The organization was formed in 2011 by 12 founding board members and sponsors representing a unique blend of national education organizations and private-sector companies. These leaders were drawn together because of a shared moral imperative and belief that whole-system scaling of global competencies must be accelerated through Canada's education systems to position Canadians for economic, social and personal success in the knowledge and digital era.

C21 Canada's report, *Shifting Minds 1.0: A Vision for Public Education for Canada* (2013), has provided continued impetus for national advocacy and provincial education policies and investment levels that support 21st century learning environments where innovation and teacher-learner partnerships can thrive.

2011 founding partners

- Canadian Education Association
- Canadian School Boards Association
- Dell
- Education First
- IBM Canada K-12 Education
- McGraw-Hill Ryerson
- Microsoft Canada
- Nelson Education
- Oxford University Press
- Pearson Canada
- Scholastic Education
- SMART Technologies

2017 advisory board

- Kainai Board of Education
- FreshGrade
- MaRS Discovery District
- Microsoft Canada
- SMART Technologies
- STEM Learning Lab
- Sun West School Division
- TakingITGlobal
- Faculty of Education, York University

C21 Canada is facilitated by a Secretariat, including MindShare Learning Technology and 21st Century Learning Associates.

Learn more about our partners at c21canada.org/partners.

Connect with the CEO Academy

The CEO Academy is a Pan-Canadian professional network of school system superintendents (chief executive officers of their district) 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.

The CEO Academy contributed to the development of the report *Shifting Minds 3.0: Redefining the Learning Landscape*, and have used it to spark professional inquiries on innovation and system scaling.

CEO Academy leaders are uniquely 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.

Members are listed here and at c21canada.org/ceo-academy.



BRITISH COLUMBIA	Rod Allen , Cowichan Valley School District Pat Duncan , New Westminster School District Chris Kennedy , West Vancouver School District Jordan Tinney , Surrey School District
ALBERTA	Maurice Manyfingers , Kainai Board of Education Tim Monds , Parkland School Division Kurt Sacher , Chinook's Edge School Division Chris Smeaton , Holy Spirit Roman Catholic
SASKATCHEWAN	Gwen Keith , Holy Family Roman Catholic Guy Tétrault , Sun West School Division
MANITOBA	Marc Casavant , Brandon School Division Pauline Clarke , Winnipeg School Division
ONTARIO	Denise Andre , Ottawa Catholic School Board Ted Doherty , Avon Maitland District School Board Laura Elliott , Thames Valley District School Board Angela Gauthier , Toronto Catholic District School Board Kathi Wallace , Simcoe County District School Board
QUEBEC	Michael Chechile , Lester B. Pearson School Board
NEWFOUNDLAND	Darrin Pike , Newfoundland and Labrador English School District
NEW BRUNSWICK	Gregg Ingersoll , Anglophone East School District
NOVA SCOTIA	Gary Adams , Chignecto-Central Regional School Board Elwin LeRoux , Halifax Regional School Board
PRINCE EDWARD ISLAND	Anne Bernard-Bourgeois , La Commission scolaire de langue française
INTERNATIONAL	Doug Prescott , Canadian International Schools in Beijing (at-large)

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Linda Kaser and **Judy Halbert** lead the Transformative Educational Leadership Program at the University of British Columbia (telp.educ.ubc.ca); the Networks of Inquiry and Innovation (noii.ca); and the Aboriginal Enhancement Schools Network (noii.ca/aesn).

In addition to working with leadership groups in BC and the Yukon, they collaborate with educators in Wales, Australia, New Zealand and England. They are deeply committed to achieving equity and quality for all learners—and to networking for innovation and improvement both in Canada and abroad. To that end, they are Canadian representatives to the OECD international research program on Innovative Learning Environments.

Judy and Linda have served as principals, district leaders, and policy advisors with British Columbia's Ministry of Education in the areas of innovative leadership, district change, rural education, literacy and Indigenous education.

They are the co-authors of *Spirals of Inquiry* (2013), *Leadership Mindsets: Innovation and Learning in the Transformation of Schools* (2009) and with Helen Timperley, *A Framework for Transforming Learning in Schools: Innovation and the Spiral of Inquiry* (2014).



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How do we know?

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