

STRENGTHENING YOUR COGNITIVE PERSONAL LEADERSHIP RESOURCES (PLRs) Reflective Manual for Self-Discovery For School Leaders

Module 2: Cognitive PLRs

Problem-Solving Expertise
Knowledge of Effective School and
Classroom Practices that Directly
Affect Student Learning
Systems Thinking

REFLECTION FOR RESOLVING A DIFFICULT PROBLEM.

I've often contended that the best leaders are the best problem solvers. They have the patience to step back and see the problem at-hand through broadened observation or circular vision. They see around, beneath and beyond the problem itself. They see well-beyond the obvious. The most effective leaders approach problems through a lens of opportunity.

[The 4 Most Effective Ways Leaders Solve Problems \(forbes.com\)](https://www.forbes.com/sites/llopis/2013/04/04/the-4-most-effective-ways-leaders-solve-problems/), Llopis 2013

HOW TO USE THIS RESOURCE

This Reflective Manual is a resource that is designed to support leaders in strengthening their Personal Leadership Resources (PLRs). It can be used by individuals on their own to facilitate personal reflection and help identify strengths and areas for growth. Working through the activities with the involvement of others such as critical friends, a facilitator or a mentor/coach will greatly enhance the learning.

This is an open-ended professional learning resource that is enriched by what participants bring to the learning experience. With this in mind, participants are encouraged to draw on and apply their lived experiences and diverse backgrounds to help ensure that the learning is culturally relevant and responsive.

It is recommended that this reflective manual be used with the PowerPoint presentations 2.1, 2.2, 2.3 and 2.4 which are posted on the Personal Leadership Resources section of the [IEL website](https://www.iedl.org/).

There are several activities within this document that reference *Onward: Cultivating Emotional Resilience in Educators* and the *Onward Workbook: Daily Activities to Cultivate your Emotional Resilience and Thrive* by Elena Aguilar. These are commercially produced resources that educators may find helpful in deepening their learning and supporting their development. Links to alternative resources are provided throughout the series.

KEY LEARNINGS

ONTARIO LEADERSHIP
FRAMEWORK (OLF)

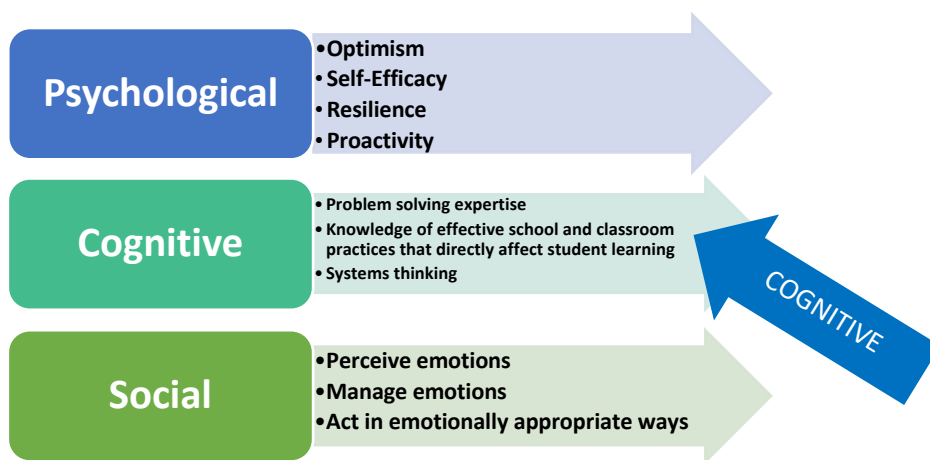
The first version of the OLF was published in 2006 as a roadmap to guide and support school and system leaders. It was revised and updated in 2013 to reflect the current research about effective education leadership.

The OLF (2013) has several distinct purposes:

1. facilitate a shared vision of leadership in schools and districts;
2. promote a common language that fosters an understanding of leadership and what it means to be a school or system leader;
3. identify the practices, actions and traits or personal characteristics that describe effective leadership;
4. guide the design and implementation of professional learning and development for school and system leaders;
5. identify the characteristics of highly performing schools and systems - K-12 School Effectiveness Framework (SEF) and District Effectiveness Framework (DEF)
6. aid in the recruitment, development, selection and retention of school and system leaders

PART A: WHAT ARE PERSONAL LEADERSHIP
RESOURCES?

The Personal Leadership Resources (PLRs) are research-based traits or qualities essential to successful enactment of the practices in the five domains of the Ontario Leadership Framework (OLF). There are three categories of PLRs: cognitive, social, and psychological. Within each category there are several PLRs, which leaders possess to varying degrees, and which they can strengthen through focused and targeted learning and development.



What are the Cognitive Resources?

Problem-Solving Expertise	Knowledge of Effective School and Classroom Practices with Direct Effects on Student Learning	Systems Thinking
• understanding/interpreting problems • identifying goals • articulating principles and values • identifying constraints • developing solution processes • maintaining calm/confidence in the face of challenging problems	• understanding school and system conditions that optimize teaching, learning and leading, • taking into account rational, emotional, organizational, and family conditions.	• being able to understand the dense, complex, and reciprocal connections among different elements of the organization • having foresight to engage the organization in likely futures and consequences for action

[Ontario Leadership Framework \(OLF\)](#) A School and System Leader's Guide to Putting Ontario's Leadership Framework into Action, page 22.

Ideas Into Action, [Exploring the "Cognitive" Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking](#) page 4

“Thinking is the ultimate human resource ... No matter how good we become, we should always want to be better.” Edward De Bono, 1999

Let's Explore Your Cognitive Personal Leadership Resources

Self-Assessment from the Institute for Educational Leadership in Ontario

1. Click on [Self-Assessment Tools](#).
2. Create a login and password.
3. Choose the relevant self-assessment tool.
4. Complete the section of the self-assessment tool on the Cognitive PLRs.
5. Save your data and complete the reflection below.

Follow-Up Reflection

1. Which of the Cognitive PLRs is your strongest? How do you know? What evidence did you gather?

2. Which Cognitive PLR would you like to develop/strengthen? Why?

PART B: PROBLEM-SOLVING EXPERTISE

Strengthening your *Problem-Solving Expertise* is essential for effective leadership. According to the *Ideas Into Action*, publication # 9, [Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking](#), page 4, “Getting it right – finding an effective solution is not easy.” There are several traits associated with Problem-Solving Expertise:

1. Understanding/Interpreting Problems
2. Articulating Principles and Values
3. Maintaining Calm/Confidence in the Face of Challenging Problems
4. Identifying Goals
5. Identifying Constraints
6. Developing Solution Processes

SECTION 1: UNDERSTANDING/INTERPRETING PROBLEMS

Fast vs. Slow Thinking

When we encounter an issue, we must determine whether the problem can be resolved quickly or whether it requires some careful thought and consideration that includes identifying and weighing the options. The importance of “Fast” and “Slow” thinking is discussed on pages 5 and 6 of the [Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking](#) publication. Each plays an important role in our problem-solving processes. There are times when we need to respond in a quick manner and can because it is a technical problem we may have encountered previously. Other situations and challenges that are adaptive in nature require a slower, less prescriptive process. It is essential to determine whether a reactive (fast) or proactive (slow) approach is required and sometimes this on its own requires maintaining calm, composure, and self-regulation.

Complete the exercise on *Examining Organizational Stories* (p. 193 Onward Workbook) or respond to the questions below after reading pages 5 to 7 of the [Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking](#) publication.

How does “slow” thinking support the creation of long-lasting solutions?

Refining the Issue

Five Whys Approach – Once it is determined that a problem-solving approach is necessary, it is imperative to refine this issue. A tool that is effective in helping get to the primary source of an issue is the **Five Whys Approach**. View the [Five Whys](#) YouTube video. (1m05s)

EXAMPLE - *There has been an increase in student accident reports this month.*

1. **Why are students getting hurt?** Because there were more slips, trips, and falls.
2. **Why are there more slips, and falls?** The floors at the entrances are wet.
3. **Why are the floors wet?** Because of the snow being tracked in.
4. **Why are students tracking in snow?** Because it's on their boots and the mats are saturated.
5. **Why are the mats saturated?** Because there are too many students coming in at the same time and the custodial staff cannot keep up with the amount of moisture.

Using the Five Whys Approach helped get to the possible root cause of the issue. Too many students are coming in at the same time. The custodians cannot keep the area dry. Now that you know the root cause, you can put plans in place to rectify the issue.

Using the process above, complete the chart below using this problem:

After lunch, many students arrive late to class.

1	WHY?	
2	WHY?	
3	WHY?	
4	WHY?	
5	WHY?	

Exploring the Full Scope of an Issue

The **5W1H** approach (who, what, where, when, why, how) is an excellent guide to help discern all aspects of an issue. View [How to Question with 5W1H](#) (3m19s)

Using the 5W1H approach, complete the chart below as you explore one of the two issues:

You are a new principal at your present school. Your superintendent wants you and your vice-principal(s) who have been in the school for the past two years to focus on improving EQAO results as a measure of student achievement. This past year, EQAO results for students achieving the provincial standard have decreased 5% from the previous year. There has been a downward trend for the past three years.

OR

There is an increase in slips, trips, and falls in the winter months.

Question	Criteria	Answer to the Question
WHO?	People Affected, Stakeholders, Influencers, Decision Makers	
WHAT?	Definitions, Descriptions, Examples	
WHERE?	Place, Location, Environment	
WHEN?	Time, Frequency, Duration	
WHY?	Reasons, Causes, Motivations, Justifications	
HOW?	Circumstances, Methods, Process, Technology used	

SECTION 2: ARTICULATING YOUR VALUES/PRINCIPLES

Click on the [Core Values](#) free downloadable tool to determine your top 3 values.

View Steve Kerr's [Core Values In Action](#) video (1m49s)

List your top three core values and explain how each impacts the way you approach problem solving? For example, if one of your core values is collaboration, meeting with different stakeholder groups to determine the best course of action before making a decision would be a priority.

How do your core values align with your board's mission statement and / or strategic plan?

SECTION 3: STRENGTHENING YOUR CAPACITY TO STAY CALM, CONFIDENT AND SELF-REGULATED

STRENGTHENING YOUR CAPACITY TO STAY CALM:

Problem-Solving Expertise requires the ability to stay calm and confident in the face of challenging situations. Some researchers refer to this as self-regulation. To support calmness, it is essential to gather tools and use them regularly. Challenging situations can increase the stress-response in the body, making it more difficult to remain calm. However, if we have highly developed tools that we incorporate daily, we will be more adept at accessing them in these high-stress situations.

Read *Onward*, chapter six. Complete activities which are relevant to your experiences from pp. 309-367 of the Onward Workbook. Revisit some of the exercises from the Onward Workbook (pp. 98, 100, 114-115, 120).

View the [How to Keep Calm Under Pressure](#) video (3m42s) and reflect on the following:

What strategies have you used in the past that have helped you remain calm and centred in difficult situations?

STRENGTHENING YOUR CAPACITY TO BE CONFIDENT:

Problem-Solving Expertise also requires the ability to be confident in the face of challenging situations. To strengthen confidence, it is essential to seek to empower yourself by taking appropriate risks and exploring areas in which you are seeking to improve.

Read *Onward*, chapter 7. Complete the activities from the Onward Workbook: *Aptitudes and Interests* (pp. 34-44), *Self-Esteem Reflection* (pp. 339-340), and *Exploring Self-Confidence* (pp. 345-347 WB).

View [How To Have More Self Confidence and Self Esteem](#) (6m40s).

What activities did you complete that helped build your confidence? How can these activities help you when you encounter difficult or challenging situations?

SECTION 4: IDENTIFY GOALS

Setting realistic goals is an important part of developing our problem-solving expertise. While initially we may not reach our expected outcomes, there is positive growth potential in failing and using the lessons to inform the process for setting new goals. This process is often where the greatest learning occurs.

SMART GOALS (Specific Measurable Attainable Realistic Time-based)

Use a goal-setting protocol that is measurable to determine the level of success you have reached. View [Achieve More by Setting Smart Goals](#) (1m15s).

SETTING A SMART GOAL FOR STUDENT ACHIEVEMENT

Example: *By the end of the first month of semester one, 100% of teachers will develop digital platforms that will be accessible to their students from home (specific/measurable). Most teachers already have an online presence (achievable). Principals will send out a survey to determine the needs of their teachers to ensure this goal is attainable. Board personnel will distribute devices (realistic) for all teachers to begin developing e-learning sessions (relevant) for different aspects of online teaching. With remote learning becoming a strong possibility, it is essential to have this in place before October 15th (time-based). Throughout semester one, the digital platforms will be monitored by administrators to mitigate the gaps.*

Using the example above, develop a SMART Goal for student achievement:

S pecific	What exactly do you want to achieve? Who is responsible? What are the steps?
M easurable	What data/measures will you use to quantify your goal?
A ttainable A chievable	Can it be accomplished? What hinders/helps progress towards reaching the goal?
R ealistic/ R elevant	Why does this goal matter?
T ime-Based	What are the start and end times? What checkpoints have you established in addition to a midpoint check-in?
What is your SMART Goal?	

SECTION 5: IDENTIFY CONSTRAINTS AND OPPORTUNITIES

When solving problems, it is vital to determine if there is anything interfering with a achieving a positive outcome, as well as the uncovering the opportunities or hidden gems that come out in the process.

THINKING TRAPS

Also called cognitive distortions or distorted thinking, thinking traps limit our ability to move forward in difficult situations. Examples include all or nothing thinking, personalizing, and overgeneralizing. Complete the exercises in the Onward Workbook on *Recognizing Cognitive Distortions* (pp. 121-123) and *Interrupting Distorted Thinking* (pp. 172-173).

Alternatively, read [Thinking Traps](#) and complete the following:

Which thinking traps are you aware of that you are using? How would these interfere with your ability to solve a challenging issue?

OPPORTUNITIES

How can identifying your cognitive distortions become an opportunity for growth?
How can this knowledge help you improve your problem-solving abilities?

MITIGATE THE IMPACT OF BIAS

In [*Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking*](#), (pp. 19-22), the impact of bias is explored.

One of the strategies recommended in this publication and its tip sheet is to “Mitigate the Impact of Bias.” It begins with understanding the nature of bias and what we mean by bias. According to experts “bias is a prejudice in favor of or against one thing, person, or group compared with another usually in a way that’s considered to be unfair.

Biases may be held by an individual, group, or institution and can have negative or positive consequences. Bias can be explicit or implicit, concepts which are related but distinct”. Explicit bias reflects the attitudes or beliefs that one endorses at a conscious level. Implicit bias which is a product of System 1 or “fast” thinking as opposed to “slow” thinking. (Kahneman, 2019). Fast thinking arises outside of conscious awareness and so does not necessarily align with our openly held beliefs or even reflect stances we would explicitly endorse.

It is important to note that biases, conscious or unconscious, are not limited to ethnicity and race. Though racial bias and discrimination are well documented, biases may exist toward any social group. One’s age, gender, gender identity, physical abilities, religion, sexual orientation, weight, and many other characteristics are subject to bias.

“Our way of looking at the world is tough to change, and our biases are remarkably sticky. But tough and sticky doesn’t mean unchangeable and immutable.” (Konnikova, 2013) Researchers tell us that we can’t consciously force ourselves to stop these biases from forming, but as Konnikova suggests, “we can learn to understand our minds.” We can “try our best to set the starting point back to a more neutral one.”

Exploring Bias

Read *Onward*, pp. 110-113. View this series of videos and consider your answers to the reflective questions below:

1. [Implicit Bias: Peanut Butter, Jelly and Racism](#) (2m 26s)

What is implicit bias? Give an example.

What is the difference between implicit biases and actions or behaviours that are racist?

2. [Implicit Bias: High Heels, Violins and a Warning](#) (1m22s)

How difficult is it to eliminate our biases?

3. [Implicit Bias: Check Our Bias to Wreck Our Bias](#) (3m)

How can a self-audit help us determine our biases?

4. [Implicit Bias: Snacks and Punishment](#) (2m5s)

What does our subconscious mind have to do with bias?

5. [Implicit Bias: Why We're Awkward](#) (2m41s)

How can awareness of racial anxiety help us address or eliminate our biases?

Implicit Association Tests

Complete one or more [Implicit Association Tests](#) to determine your implicit biases. If you are comfortable sharing some or all of the results, talk with a critical friend about them. Talk about how bias can interfere with problem solving. Reflect on your learnings on implicit bias.

What can you do to mitigate your own biases and thereby create opportunities for more comprehensive solutions?

Exploring Bias in the School Environment

SCENARIO: A superintendent of a family of schools (FOS) is meeting with principals and vice-principals at their monthly FOS sessions. The focus of the discussion is de-streaming all Grade 9 courses. The FOS includes three secondary schools and 15 feeder elementary schools that are located in a range of rural and urban settings. As a principal you are aware that de-streaming is an evidence-based approach to promoting equity, inclusion and anti-oppression.

As principal, returning to your school, you anticipate the following challenges related to implementing de-streaming in Grade 9:

- Lack of staff awareness of their own biases about this change
- The need to support staff in recognizing and addressing these biases
- How to ensure that culturally relevant and responsive pedagogy (CRRP) is integral to teaching and learning

What other questions related to bias may arise?

How can you use these questions to create opportunities for opening the conversation about equity and inclusion and in particular implicit bias in your school? Look for opportunities to move beyond awareness to action.

In [*Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking*](#), there are a number of strategies that educators can use to help mitigate the impact of bias. For example: understand the nature of bias, recognize our own implicit biases, build diverse relationships, name it and talk about it, counter stereotypic associations, be open to confronting implicit bias. Taking action by engaging in courageous conversations about bias is key to equitable leadership.

How would you engage your staff in conversations about biases that may emerge in order to identify actionable next steps for eliminating them?

ROOT CAUSE ANALYSIS

The 6 “M” CHECKLIST can help determine who or what is interfering with the problem-solving process. What are the opportunities we may have missed? Here are some aspects to examine:

1. [Woman/Man](#) (all stakeholders – this includes you! Who is involved? Who is missing?)
2. [Machine](#) (technology – access, knowledge, availability of support)
3. [Material](#) (resources – brainstorm all the resources that could be helpful)
4. [Method](#) (protocols/procedures – are we too rigid or lax?)
5. [Mother Nature](#) (environment – culturally responsive/relevant? Trauma-free?)
6. [Measurement](#) (data sources – are we using the right data?)

Use the following scenario to explore what might be impeding a positive outcome.
Try to imagine all the possibilities.

SCENARIO: *Student EQAO scores in mathematics have been historically poor for this particular cohort of grade 9's.*

WOMAN/MAN	
MACHINE	
MATERIAL	
METHOD	
MOTHER NATURE	
MEASUREMENT	

SECTION 6: DEVELOP SOLUTION PROCESSES

Previously you explored different solution processes. Which of 6M Checklist, 5 Whys, 5W1H, SMART Goals, Exploring Thinking Traps, Mitigating Bias, Core Values, or Strengthening Calmness and/or Confidence can you see yourself using or modifying on a regular basis? In what ways? How would this enhance your problem-solving expertise?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

PART C: KNOWLEDGE OF EFFECTIVE SCHOOL AND CLASSROOM PRACTICES THAT DIRECTLY AFFECT STUDENT LEARNING

Developing role-specific knowledge is an important component of being an effective leader. According to [*Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking*](#), role-specific knowledge refers to “the knowledge that leaders need in order to influence teaching, learning and leading in their schools” (p. 8).

According to Leithwood (2017) there are four paths of leadership that directly impact student learning, equity and well-being:

1. Rational/Technical – curriculum, teaching, learning
2. Emotional – impact of staff emotions on student learning, equity and well-being
3. Organizational – school structures, cultures, policies, and procedures
4. Family – positive influences on the home

[*How School Leaders Contribute to Student Success: The Four Paths, Leithwood, et al \(2017\)*](#), as cited in *Ideas into Action on the Cognitive PLRs* (p. 11).

BUILDING COMMUNITY

To enhance conditions in the school environment that optimize teaching, leading, and learning, it is vital to create a caring community.

REFLECTION: How do we accompany others in our school communities? How do our values have an impact on our relationships? How does this improve student learning, equity and well-being?

Read *Onward*, chapter four. Complete selected exercises in the Onward Workbook: *Relational Trust: Among Staff* (pp. 216-219), *How to Build Trust* (pp. 220-223), *What Does Community Mean to You?* (pp. 232-234), [*Sixty Ways to Build Community at School*](#) (pp. 235-238), *Neighbourhood Explorations* (240), *Am I in a Toxic Culture?* (pp. 253-256), *What to Say When People Don’t Talk Nicely About Kids or Their Families* (pp. 257-259), *Destination Postcard: Community* (pp. 264).

Read [*11 Ways to Build a Positive School Culture*](#)

REFLECTION: What aspects of your school community have you identified as needing improvement? Who do you view as allies in your school community? Which stakeholders are underrepresented in this group of allies and how will you engage them? How will improvements you identify have a positive impact on the school culture?

STRENGTHENING EQUITABLE AND INCLUSIVE PRACTICES

The implementation of Culturally Relevant and Responsive Pedagogy (CRRP) is vital for student achievement in Ontario's diverse landscape. Students need to see themselves represented in the curriculum and in their learning. Acknowledging students' lived experiences especially as they relate to race, gender and sexuality can deepen their learning, making them more successful in school.

1. Read [*Exploring the "Cognitive" Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking*](#), (pp. 8-10); [Capacity Building Series on Culturally Responsive Pedagogy](#); Pages 13-16 in [Ontario's Education Equity Action Plan](#); Explore some of the articles on CRRP at [EdCan](#); and [Culturally Responsive Teaching and the Importance of Assessment in Canadian Schools](#); [Colour-blindness: The New Racism?](#)
2. View these videos: [Culturally Responsive and Relevant Pedagogy: The Foundation and Core Components](#) (7m57s); [The Changing Face of Ontario- Implications for Equity, CRRP, & School Leadership](#) (10m1s)
3. Complete *Develop Cultural Competence* (pp. 211-212) in the Onward Workbook.

REFLECTION:

What is the impact on students when culture and personal identities are not reflected and acknowledged? What is the impact when they are acknowledged?

Are the perspectives of Indigenous peoples authentically interwoven into the curriculum and reflected in the entire school experience in your context?

What barriers exist in implementing CRRP across disciplines/divisions?

How can these barriers be eliminated?

What strategies would you use to strengthen CRRP across the curriculum and in teaching and learning?

PERSONAL LEADERSHIP PHILOSOPHY

Developing a personal Philosophy of Curriculum, Teaching, and Leading can be a powerful way to create the conditions for a thriving school environment.

EXAMPLE: *As an educator with expertise in Health and Physical Education, I recognized the importance of skill-based learning, good descriptive feedback, and allowing multiple opportunities for practice and success. It is from these foundational principles that I believed that all students can learn, and that I must meet their individual needs. This means incorporating Culturally Responsive and Relevant Pedagogy, providing choice through differentiation, using Universal Design for Learning principles which means that what is good for one is good for all, and other inclusive practices.*

As a leader, I have learned about the importance of supporting staff emotionally. When staff feel supported and cared for, it reduces external stress and helps them perform better. Knowing that my staff feels cared for and comfortable, ensures my own positive emotional well-being. The structures I put in place, like having an open-door policy and showing consistency in student discipline, help build trust. The personal philosophy I have which includes looking for the good in others and communicating it in appropriate ways, helps build a supportive and collaborative culture.

I believe strongly in the importance of creating a community of trust and compassion, not only with staff and students, but also with the home. The adage, "It takes a village," takes us out of our silos and creates an environment where student learning is at the forefront. Our school must be a place where all feel welcomed and experience a sense of belonging. This includes family and other stakeholders.

CREATING YOUR PERSONAL PHILOSOPHY OF TEACHING, LEARNING, AND LEADING

Reflect on the questions below as a starting point in the development of your personal philosophy:

Technical/Rational Conditions (the conditions that support school and classroom conditions)

1. In what area of study are you most knowledgeable?

2. How do you use this knowledge to support staff/teachers/students/families/your school community?

3. What factors are important in student learning?

4. What lead you to believe that all students learn?

5. What happens in a successful teaching and learning situation?

6. What are your values, beliefs, and goals as an educator?

7. What learning strategies facilitate the greatest growth in students?

8. How do you plan to encourage all dimensions of learning such as mastery, competency, transformational learning, lifelong learning, transfer and application of skills, and critical thinking?

9. What role do equity and inclusion have in your classroom/school/community?

Emotional Conditions (supporting staff emotions to optimize student learning)

1. How do you develop trust with staff?

2. When is it that staff feel most supported by you? How do you know?

3. What core values help you to be an authentic leader?

4. How do you support the well-being of others and your own?

Organizational Conditions

1. What are some changes that could be made to school policies that would improve the organization and culture of the school?

2. How do you model and foster a positive culture?

3. What impact do Catholic values and beliefs have on school culture?

Family Conditions

1. How do you know that the school is a welcoming and caring place?

2. What is evidence that parents see and feel that their children are in a welcoming and caring environment?

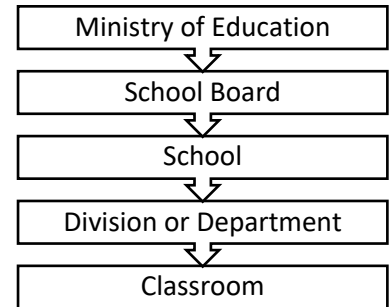
3. How do you engage parents and encourage a sense of belonging in the school and its community?

Drawing on the notes you recorded on Technical/Rational, Emotional, Organizational and Family Conditions, draft your personal leadership philosophy for leading, teaching, and learning:

PART D: SYSTEMS THINKING

Systems thinking is related to the interconnectedness of an organization. Regardless of a position within a school board, whether a teacher or an administrator, it is essential to see the “bigger picture.” It is easy to work in silos in education. Systems thinking takes us out of our comfort zones to help us lead with empathy and compassion.

School systems are sometimes seen as linear, having a top-down approach. A hierarchical structure as shown in the illustration, has a purpose. For example, it would be difficult for a student to transfer schools without the province’s curriculum expectations which help build a common set of knowledge, skills and assessments. When taking a systems thinking approach, it is essential to understand the hierarchical aspects of the organization and also consider how each of these aspects are interconnected.



For more information, view:

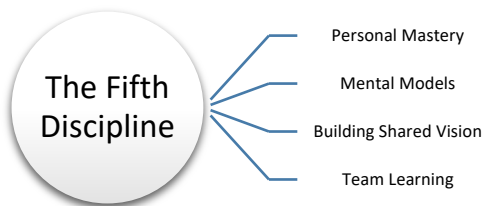
[A Systems Story \(Systems Thinking\)](#) (4m45s)

[Systems-thinking: A Little Film About a Big Idea](#) (11m55s)

You may want to experience an exercise in systems thinking by viewing

[Tom Wujec: Got a wicked problem? First, tell me how you make toast](#) (9m05s)

SECTION 1: SYSTEMS THINKING – THE FIFTH DISCIPLINE



Peter Senge (1990) popularized the concept of systems as the “fifth discipline.” thinking identified the which integrates the four disciplines of personal mastery, mental models, shared vision, and team learning.

According to Senge, systems thinking is:

- A discipline for seeing wholes;
- A framework for seeing interrelationships rather than things; and
- The ability to see patterns of change rather than static snapshots.

Read [Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking](#), pages 12-13. View [The Fifth Discipline in Three Minutes](#) (2m24s)

USING THE FIFTH DISCIPLINE

1. **Personal Mastery** is a reflective practice, where we identify personal and organizational needs to help us meet personal and professional goals. It moves beyond competence to a genuine sense of calling, constantly deepening our vision.

How strong is your motivation and ability to grow and learn? Is there anything that stands in your way?

2. **Mental Models** refers to the awareness of the way our biases and assumptions contribute to the organization. They comprise our own assumptions and generalizations which we must keep open to scrutiny. What assumptions and generalizations stand in your way?

3. **Building Shared Vision** has us moving forward not because we have to but because we want to. It is the connection between our values and the values of our organization. What are your board's mission and vision? What do they mean to you professionally and personally? How do your values align with it?

4. **Team Learning** requires that we act together and develop our capacities as a team, rather than have individual interests distract us. It is our ability to build capacity in our organization through support and collaboration. In what ways do your individual goals or interests interfere with your ability to work with others in a team?

5. **Systems Thinking** is the interconnectedness of all aspects of an organization—How well are you able to integrate the four disciplines?

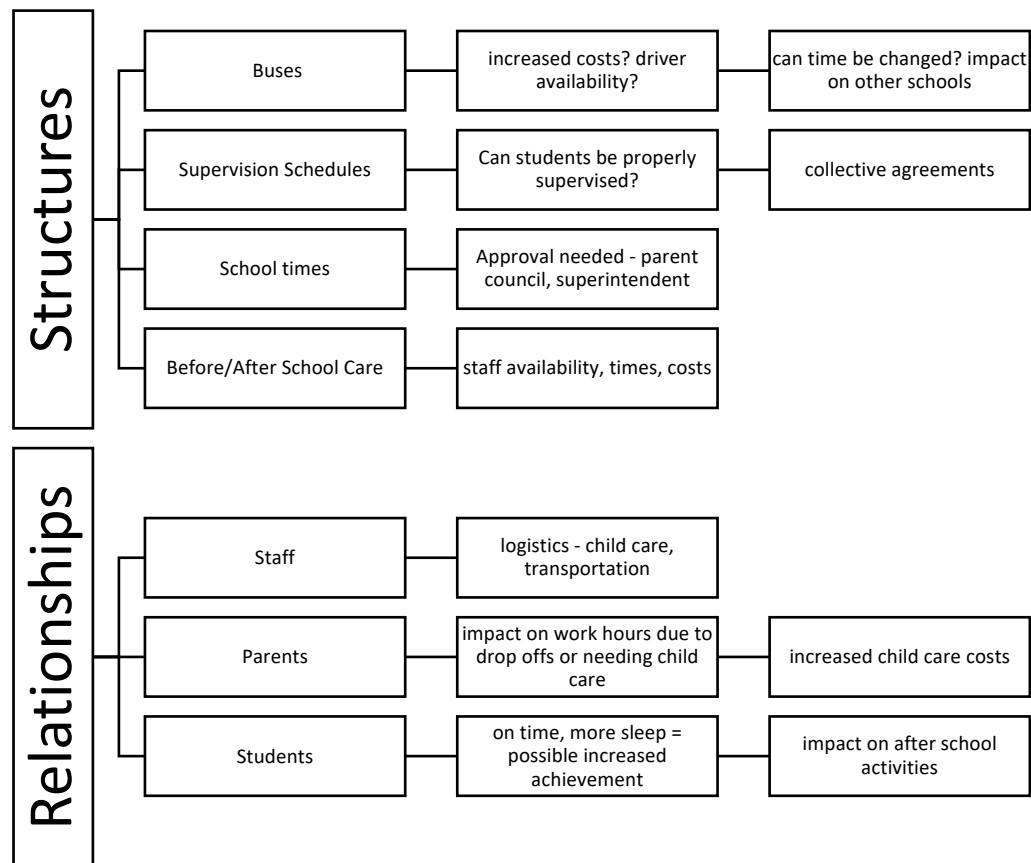
SECTION 2: ORGANIZATIONAL MAPPING

Organizational mapping is an excellent tool used to understand Systems Thinking and its interconnectedness. It helps us see how decisions and policies cast a wide net over various aspects of the organization.

Read: [Why School Leaders Need to be Systems Thinkers](#)

EXAMPLE

SCENARIO: *There has been an increase in students arriving at school late and in response the school is considering a later start to the day. Map the potential impacts of this decision:*



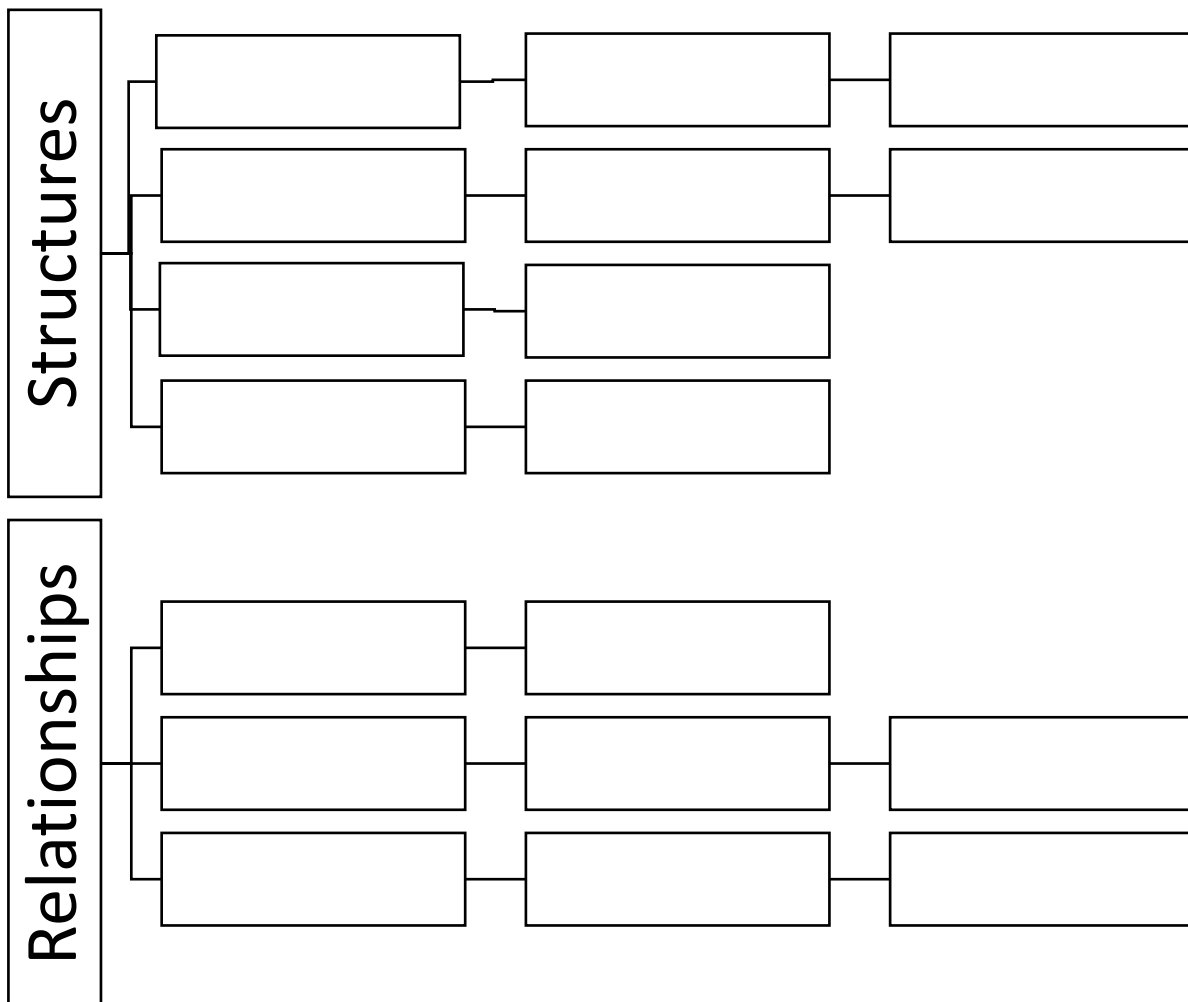
There are several benefits of using this activity to assess the impact of a proposed change. For example, it helps you see the close relationships within in the organization and the way in which decisions have potentially far-reaching impacts not only on the organization, but also on the people within it.

Practise charting different scenarios and note the impacts of your decision making. You may use different models for your maps, for example, [Causal Loop Construction: The Basics](#), [Tools for Supporting Systems Thinking and Change](#), [Have You Mapped Your Key Relationships?](#)

CHART THE IMPACT OF MAKING THIS DECISION:

Scenario: *You have a student who just transferred to your school. She has a service animal that will alert her educational assistant when the student is going to have a seizure. This is the first time a service animal has been in your school.*

1. What structures need to be considered?
2. What are the potential impacts on relationships?



Reflect:

What will your greatest challenges be in supporting this situation? What potential issues will you avert by being proactive?

SECTION 3: FINDING PERSPECTIVE – THE BALCONY VIEW

As we progress within an organization, the balcony perspective becomes more significant to us. The basis of this concept is that when we are on the ground floor, it is difficult to see the full depth of what is happening. When we watch from the balcony, our perspective shifts and we can see more aspect of the situation unfolding. Being able to see beyond that which is in front of us is a key skill in helping us see the impact of our decisions on the whole of the organization.

View the following video: [Dance Floor to the Balcony \(1m25s\)](#)

Read [For a Fresh Perspective, Stop Dancing and Get Out on the Balcony](#)

Reflect:

In your present role, where do you spend most of your time, on the dance floor or on the balcony? When you are implementing or supporting the implementation of a new strategy or paradigm, how do you take into account how others with a different vantage point perceive the situation?

APPLYING THE BALCONY VIEW

SCENARIO: *The Ministry of Education released a PPM that requires all boards to implement a plan to introduce Trauma-Informed Practices. You have agreed to have your school participate in a pilot project to explore implementation and need to find allies to support this important initiative.*

What reactions might you get from staff?

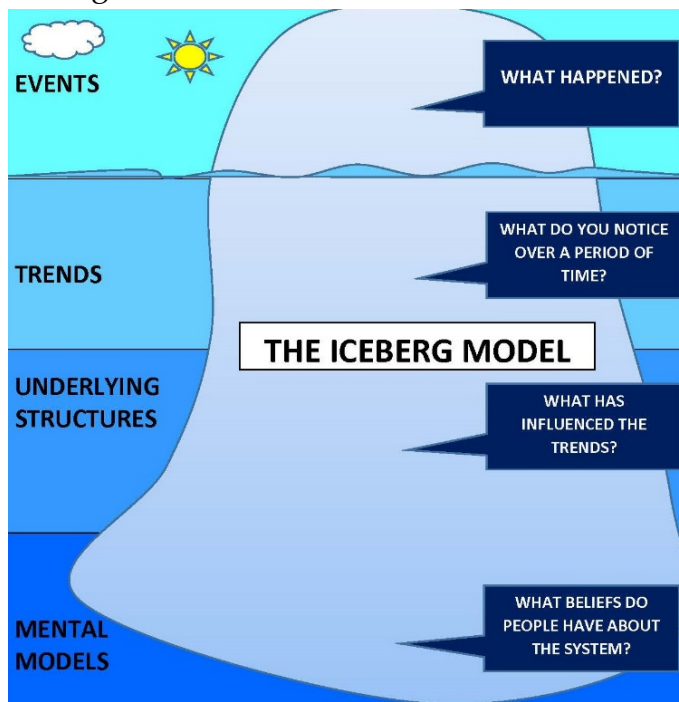
How do you use the “balcony view” to support your colleagues and the initiative?

How do you help your staff see from different vantage points?

How will this make the initiative successful?

SECTION 4: LOOKING BELOW THE SURFACE - THE ICEBERG MODEL

The Iceberg Model encourages us to go below the surface to help facilitate growth and change.



Events – This is what is above the surface. Everyone can see it.

Trends – This is just below the surface. This is the data that reveals patterns.

Underlying Structures – This step asks us to review the aspects of the system which have influenced the trends.

Mental Models – This step encourages us to look at attitudes and beliefs that need to be brought to the surface.

View [Iceberg Model - Systems Thinking - Business Leadership - Education series, Chancellor University](#) (6m46s)

THE ICEBERG MODEL IN ACTION

EXAMPLE:

Events: There have been numerous events which have heightened awareness of systemic racism. Systemic racism includes: recurrent individual mistreatment; exclusionary or harmful institutional policies and practices; and broader societal and intergenerational injustice. ([Understanding how racism becomes systemic](#))

THOUGHTS: What have we done about this? Why is this a problem? How are we seeing it manifest itself in our system?

Trends: The data says students who are racialized have lower graduation rates, higher incidences of suspensions, and greater number of absences.

THOUGHTS: Let's graph this out over time. What patterns do we see?

Structures: There are several forces which may have created the trends listed above including Eurocentric Curriculum and lack of diversity in staffing.

THOUGHTS: What policies/procedures do we need to examine that have contributed to this problem?

Mental Models: There are several attitudes or beliefs that have led us to this juncture.

THOUGHTS: How can we bring these attitudes or beliefs to the surface in a respectful way? Are any of my biases preventing me from seeing the whole picture? Do we need a major paradigm shift?

Using the scenario below, apply the Iceberg Model.

SCENARIO: You have been appointed the System Principal of Indigenous Education and Equity. One of the goals of the Board Action Plan for Indigenous Education is to increase graduation rates of students who identify as Indigenous.

Apply the Iceberg Model to this challenge and explore solutions for positive outcomes. Use the example provided above to guide your reflection.

What are your thoughts?

Events:

Trends:

Structures:

Mental Models:

What steps do you need to take to ensure there is an increase in graduation rates?

STRENGTHENING YOUR COGNITIVE PLRs

A Self-Reflective Tool

The purpose of this activity is to help you gather tools and strategies to deepen and strengthen your Cognitive PLRs.

1. Revisit the results of your Cognitive PLRs [Self-Assessment](#) and adjust or add to your reflections.
2. Choose a trait from each PLR (problem-solving expertise, role-specific knowledge, and systems thinking) on which you would like to focus.
3. When choosing your tools, refer to [Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking](#), the information in this Reflective Manual, activities from the Onward Workbook, and personal experience.
4. Consider reaching out to a coach or mentor or critical friend to help foster continued growth in these areas.
5. Use the example to guide your thinking and complete the activity using the template provided on page 32.

LEADERSHIP RESOURCE	IDEAS TO EXPLORE	
Problem-solving expertise • understanding/interpreting problems • identifying goals • articulating principles and values • identifying constraints • developing solution processes • maintaining calm/confidence in the face of challenging problems	FOCUS	<i>I want to be more confident when I am faced with challenging issues.</i>
	CONCERN	<i>I work with some excellent educators who have strong personalities. I find that when I get push-back, I get a bit tongue-tied and have difficulty articulating my views in a way that inspires confidence in others. I have to find a way to build my own confidence, so that when I encounter divergent thinkers, I have a more solid foundation.</i>
	TOOL	<i>In Section c-1, page 15 of <u>Exploring the “Cognitive” Personal Leadership Resources: Problem-Solving Expertise, Role-Specific Knowledge & Systems Thinking</u>, there is a section called, “Keep a Decision Diary.” Keeping a log of my decisions and the outcomes will help me learn to recognize patterns where my decisions are successful, keep a record of my risks, and show me how much I have learned. With this data, I have something concrete to go back to, helping me build confidence.</i>

LEADERSHIP RESOURCE	IDEAS TO EXPLORE	
Problem-solving expertise (CHOOSE 1) • understanding/ interpreting problems • identifying goals • articulating principles & values • identifying constraints • developing solution processes • maintaining calm/ confidence in the face of challenging problems	FOCUS	
	CONCERN	
	TOOL	
Knowledge about school and classroom conditions that affect student learning (CHOOSE 1) • technical/ rational conditions • emotional conditions • organizational conditions • family conditions	FOCUS	
	CONCERN	
	TOOL	

Systems Thinking (CHOOSE 1) • being able to understand the dense, complex, and reciprocal connections among different elements of the organization • having foresight to engage the organization in likely futures and consequences for action	FOCUS	
	CONCERN	
	TOOL	