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Building Capacity for Deep Learning

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Abstract

Post COVID-19, gives school leaders the opportunity to build back a better school system focusing on the needs of students, preparing students to thrive in the 21st century by shifting from teacher-centred to learner-centred pedagogy. Changing teachers' attitudes, beliefs, and skills to make this shift requires new learning through creating an effective professional learning environment. This organizational improvement plan explores how to build teacher capacity for 21st century learning at the Family of Independent Schools (a pseudonym) in Ontario through the creation of collaborative inquiry teams where teachers develop an individual and collective understanding of deep learning. Deep learning creates student-centred partnerships that integrate academics, well-being, and equity outcomes into regular classroom practices. Social cognitive theory is the theoretical framework that supports teacher learning through leveraging triadic reciprocal causation and its impact on teacher self-efficacy. Collaborative inquiry teams provide a structure for a professional learning environment where opportunities for enactive mastery, vicarious experiences, verbal persuasion and affective states support teachers' self-efficacy as they change their skills, behaviours and attitudes. Transformational and instructional leadership practices focussing on building relationships, capacity and instructional structures are instrumental in supporting student learning by supporting teacher learning. A three-year implementation plan includes the change plan, a monitoring and evaluation framework and a persuasive and active communication plan to support the change. The organizational improvement plan concludes by considering ways to ensure the plan's sustainability over time.

Keywords: 21st century learning, collaborative inquiry, deep learning, instructional leadership, self-efficacy, social cognitive theory, transformational leadership, triadic reciprocal causation

Executive Summary

Preparing students to be successful citizens and leaders of the future has always been a goal of education (Fullan, 2016; Trilling & Fadel, 2009; Wagner, 2008). An excellent educational system balances student acquisition of knowledge and skills with their ability to apply or transfer what they have learned to solve new problems and incorporates student well-being and equity into the educational program (Hargreaves & Shirley, 2022; Longboat et al., 2018; Shirley & Hargreaves, 2021; Tranter et al., 2018). In the 21st century, the world's issues require innovative and novel solutions that require our collective will and skill to solve (Trilling & Fadel, 2009; Wagner, 2008; Wagner & Dintersmith, 2015). This three-chapter organizational improvement plan explores a problem of practice at the Family of Independent Schools (a pseudonym), which is how to create a student-centred 21st century learning environment in a teacher-focused school system in order to connect student achievement, equity and well-being (Hargreaves & Shirley, 2022; Longboat et al., 2018; Shirley & Hargreaves, 2021; Tranter et al., 2018). This organizational improvement plan proposes a solution to the problem of practice through the lens of social cognitive theory, building teacher capacity for change through creating a learning environment that supports teacher self-efficacy.

Chapter 1 begins by introducing the organizational context of the problem and the political, economic, social and cultural influences that affect the organization. Leadership practices are described from a social cognitive learning lens, supporting an integrated leadership style that combines transformational and instructional leadership components. The leadership principles and actions focus on building relationships, building capacity, leading instruction, and creating a positive climate for learning. The triadic reciprocal causation model frames the problem of practice by describing the schools' physical and social environment and the teachers'

attitudes and behaviours to illustrate the gap between the current reality and the desired future state. Three guiding questions and challenges emerging from the problem of practice are explored to support a vision for change. The leadership-focused vision for change is to support the development of 21st century learning by adopting Fullan et al.'s (2018) deep learning model to change the learning environment and prepare students for the 21st century. The change agent leverages internal and external change drivers to support the change vision. The chapter concludes by exploring individual and organizational change readiness using various tools.

Chapter 2 focuses on the planning and development of the change plan to address the problem of practice. The chapter describes how transformational and instructional leadership principles and actions support my leadership approach to change, focused on the content, people and process involved in the change process. As a transformational leader, I lead by building relationships, trust and teacher capacity to support teacher learning through collaboration (Tschannen-Moran, 2001). I lead the instructional program, creating structures that support performance and create a positive climate for learning (Robinson et al., 2009). As the change leader, I integrated Fullan's (2016) dynamic change model with Armenakis et al.'s (1993, 2000) institutionalizing change model. Both models focus on what people need to manage change. Collaborative inquiry, active participation and persuasive communication are incorporated into the integrated change model that supports teacher learning and builds self-efficacy through enactive mastery, vicarious experiences, verbal persuasion and positive affective states (Bandura, 1997; Tschannen-Moran et al., 1998). The critical organizational analysis evaluates the gap between the organization's current state and the desired future state, illustrating where we need to begin to implement the change vision. Three possible solutions to address the problem of practice are described. The solutions are setting up a professional growth plan, providing

professional development through training opportunities and creating collaborative inquiry teams. The chosen solution is using collaborative inquiry teams to support teacher learning. In their teams, teachers use the collaborative inquiry cycle of assess, design, implement and measure, reflect and change to learn about the six global competencies and four learning design elements. In this way, they learn about deep learning by doing deep learning as they put their new learning into practice in their classrooms (Fullan et al., 2018). Chapter 2 ends with a review of leadership ethics, equity and organizational change, focusing on the ethic of care, critique, and justice, to examine the ethical issues related to the content, people and process involved in the approach to change.

Chapter 3 outlines the change plan's implementation, monitoring and evaluation framework, and communication plan that supports the solution to the change vision. Social cognitive theory supports the implementation plan's priorities, goals, activities and outcomes. The monitoring and evaluation framework measures results, tracks progress, guides decisions and informs changes to the plan. The measuring and evaluation framework is participatory and includes an initial baseline and yearly measures. The final part of the change plan is the integrated persuasive and active communication plan, which promotes engagement by involving all the stakeholders.

The organizational improvement plan concludes with specific next steps to operationalize the plan to maintain momentum for the plan through staffing changes and creating a plan for parents and students as important stakeholders.

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Acronyms

CBAM (Concerns Based Adoption Model)

CI (Collaborative Inquiry Model)

IC (Innovation Configuration Map)

LoU (Level of Use)

NPDL (New Pedagogies for Deep Learning)

OECD (Organization for Economic Development and Cooperation)

PPM (Policy and Program Memorandum)

SCT (Social Cognitive Theory)

SoC (Stages of concern)

TRC (Triadic reciprocal causation)

Definitions of Key Terms

Build back better: Building back better requires us to build back a better educational system than what was present before it. In this OIP it means to build a system that integrates academic achievement, well-being and equity into the educational program (Reimers & Opertti, 2021; UNESCO, 2021).

Change drivers: Change drivers are factors that support the change vision and the implementation of the change plan (Whelan-Berry & Somerville, 2010).

Collaborative inquiry: Collaborative inquiry is a structured learning process where teachers or students start by assessing where they are, designing a change, implementing the change and measuring the effect of that change (Fullan et al., 2018, p. 101).

Deep Learning: Deep learning is a model of 21^s century learning characterized by six global competencies that describe the skills and abilities students need to flourish. Students acquire those competencies through a learning design framework (Fullan et al., 2018).

Equity: Equity is the fair, inclusive, and respectful treatment of people, which removes systemic barriers to achievement, democratizing education (Longboat et al., 2018; Ontario Ministry of Education, 2014).

Ethics of care: The ethic of care places students in the centre of educational decisions and considers their care as unique persons of value (Starratt, 1991).

Ethic of critique: The ethic of critique guides decisions based on concerns related to social justice and the need for equity. The ethic of critique considers what is unfair or is a barrier to equity (Starratt, 1991).

Ethic of justice: The ethic of justice guides decisions based on concerns about individual rights, policies and laws. The ethic of justice is concerned with fairness (Starratt, 1991).

First-order change: A first-order change is an adjustment to the current practice or an incremental change that does not change or challenge the culture or beliefs (Bartunek & Moch, 1987).

Global competencies: The global competencies include character, citizenship, collaboration, communication, creativity and critical thinking (Fullan et al., 2018).

Learning Design: The learning design includes learning partnerships, the learning environment, pedagogical practices and leveraging digital (Fullan et al., 2018).

Learning environment: The learning environment includes the decisions that focus on creating a learning space that is physical, virtual, cultural and relational. The learning environment is the third teacher (Fullan et al., 2018).

Learning partnership: The learning partnership is between teachers, students, families, and the world beyond school and represents the change in voice, control, and relationships needed for deep learning to occur. The learning partnership represents new roles for students, teachers, school leaders, families and the community (Fullan et al., 2018).

Leveraging digital: Leveraging digital involves students' digital ecosystem, going beyond simple tools and devices to include partnerships with others beyond the physical space that supports student learning (Fullan et al., 2018).

Pedagogical practices: Pedagogical practices are strategies used to enhance deep learning competencies and meet the learning goals and success criteria for a unit or lesson. Pedagogical practices involve considering instructional strategies, leveraging digital, learning environments, and appropriate learning partnerships (Fullan et al., 2018).

Policy and program memoranda: These are statements from the Ministry of Education that detail changes in policy for public schools. Some memoranda are mandatory for private schools, but many are not. Independent schools follow them as a matter of good practice.

Second-order change: A second-order change changes fundamental beliefs about current practices or culture, requiring new goals, structures or roles (Bartunek & Moch, 1987).

Self-Efficacy: Self-efficacy is the individual belief that one can exert control over personal motivation, behaviour, and the environment to produce the desired outcome (Bandura, 1997).

Social Cognitive Theory: Bandura's social cognitive theory of learning states that learning occurs in a social context within the interaction between a person, the environment and behaviours (Bandura, 1978, 1997).

Triadic Reciprocal Causation: Triadic reciprocal causation assumes that human behaviour results from the interaction between the physical and social environment, behaviour, and personal beliefs and attitudes. For example, the environment influences how a person thinks or feels, which affects their behaviour and can influence the environment (Bandura, 1978).

Well-being: Well-being includes attention to developing physical and mental health, a positive sense of self and belonging and the ability to make good choices (Hargreaves & Shirley, 2022; Longboat et al., 2018; Ontario Ministry of Education, 2014).

Chapter 1: Introduction and Problem

Chapter 1 develops and contextualizes the problem of practice that is the focus of this organizational improvement plan. The problem of practice is how the organization can create a 21st century, student-centred learning environment in a traditional teacher-centric school system. The chapter describes the organization's current context, including a brief history and the organization's mission and vision that relate to the problem of practice. The political, economic, social and cultural influences that impact the organization are described. The chapter outlines the leadership position and lens of the author and describes the problem of practice. The chapter explores guiding questions that emerge from the problem of practice and the leadership-focused vision for change. Chapter 1 concludes with a description of the change readiness tools that will support the change implementation plan.

Organizational Context

Founded in a mid-sized Ontario city over 100 years ago, the Family of Independent Schools, a pseudonym, includes two elementary schools and a high school with a total student population of 2,000. The schools are members of the Canadian Association of Independent Schools (CAIS), which provides its governance structure and accreditation (CAIS, 2016). A board of trustees stewards the organization's assets and employs the director of education, their only employee (CAIS, 2016). The director has total responsibility for the strategic and operational aspects of the schools, hires and fires all employees, and works with supervisory officers to manage all aspects of the system. The supervisory officers oversee the business and educational operations of the schools working with the school principals and other academic leaders.

The enduring mission of the Family of Independent Schools challenges students to use

their education to be caring, productive, and ethical citizens who engage in the world. Students are expected to be positive agents of change due to their educational advantages. The mission is supported by a learning vision that values academic excellence and by experienced and capable teachers. The mission and learning vision guide the decisions of the leadership team and teachers. In the aftermath of COVID-19, the leadership of the schools has an opportunity to "build back better"(Reimers & Opertti, 2021 p. 10). How to build back a better school system to meet the needs of students is at the heart of the problem of practice. Building back better requires the leadership to start by considering the broad political, economic, and social influences that create tensions the leadership must navigate. While these influences are connected, they are discussed separately to highlight their individual impact.

Political Influences

Independent schools do not receive government funding but operate under the legal requirements of the Education Act of Ontario, RSO.,1990, c.E.2.s.16 (1-8) (Ontario Education Act, 2020). The Ministry of Education gives inspected independent schools the authority to grant credits towards the Ontario secondary school diploma, provided they regularly pass an inspection. The inspection determines whether the standard of education for credit courses meets the ministry's requirements (Ontario Ministry of Education, 2013a). The ministry specifies policy and program memoranda (PPM) that apply to inspected schools (Ontario Ministry of Education, 2010, 2013b, 2016).The government influences the schools through the inspection process and the requirement to follow the official curriculum. The inspection process has a strong focus on assessment and accountability, illustrating the neoliberal "age of achievement and effort" (Shirley & Hargreaves, 2021 p. 16). But the official curriculum is influenced by the "age of engagement, well-being and identity" as described by Shirley & Hargreaves (2021 p. 16), with a

strong focus on equity, defining 21ˢᵗ century competencies, and incorporating social-emotional learning into curricular expectations (Ontario Ministry of Education, 2016c, 2017, 2019, 2020, 2021). These two agendas are a tension that the school leadership must navigate as it moves the school system forward. Currently, the inspection process and the school program reflect a focus on achievement. The needs of students and the emphasis of the new curriculum reflect the focus on well-being and equity. The leadership needs to satisfy both agendas if the schools are to continue to operate.

Economic Influences

The Family of Independent Schools is a not-for-profit organization that receives 80% of its operating budget through tuition and cannot run a deficit or a profit. The organization needs a robust business model to ensure sufficient funds to support its programming. Parents pay school fees and incidentals from their after-tax income. van Pelt et al. (2019) used survey and Statistics Canada census data to identify the characteristics of independent school families. The report found that while household incomes for independent school families were generally higher than the Ontario average, most parents considered themselves middle-class. Based on census data, van Pelt et al. (2019) concluded that the higher average family income is likely due to the dual-income family structure, level of education and occupations of the parents. The report suggested that most independent school parents make a considerable financial investment in their children's education. Over two-thirds of surveyed parents make significant economic changes to afford tuition (van Pelt et al., 2019). The middle-class status of parents suggests that our students come to school with advantages concerning school readiness factors that positively impact their academic achievement (Browne et al., 2018). As a group, they are prepared for the academic

rigor of the schools and their parents are able to support their learning (Evans & Thompson, 2021).

The economic downturn in 2008 and the financial impact of Covid-19 during the provincial emergency closures increased the economic instability for some parents making it more challenging to afford school fees. This instability increased parental concern that their children will not have the same guaranteed financial future they have enjoyed. Parental anxiety for their children's future impacts the schools through the increased pressure parents place on teachers to ensure that their children get into the "best" universities and their lowered tolerance for any changes to the school programs. Economic pressure is a significant constraining influence the leadership must consider when considering changes (Evans & Thompson, 2021).

Social and Cultural Influences

Demographic shifts in the schools' catchment area, particularly the decrease in school-age children may impact school enrollment over the next 10-15 years (Government of Ontario, 2020). With fewer school-age students, there will be increased competition between public and independent schools and an increased need to provide what parents believe is a quality educational experience to maintain enrolment levels. Independent school parents judge school quality on the basis of the prestige of the next school their child will attend. This lowers their tolerance for changes to an educational program that they believe has a track record of success (Evans & Thompson, 2021).

A study conducted in high-performing schools by Luthar et al. (2020) concluded that the pressure to excel is one of the top four risk factors for student mental health. An OECD (2021) survey found that the social and emotional skills, creativity and curiosity of 15-year-olds were lower when compared to 10-year-olds. Students' perceptions of competitive school cultures and

high parent and teacher expectations were connected to higher levels of test anxiety (Organization for Economic Cooperation and Development, 2021). These surveys suggest the need to incorporate a greater emphasis on student well-being into the academic program. Parents will need to be convinced of its importance to academic success in order for this change to happen (Tranter et al., 2018).

Overall the parent community is relatively conservative and risk-averse when it comes to the education of their children. The leadership team and teachers tend to be more progressive than the parents creating tension between the two groups and their attitudes towards change (Evans & Thompson, 2021). The leadership's desire to act on the Truth and Reconciliation Commission of Canada's calls to action (2015) and the heightened awareness of the impacts of systemic racism has triggered a review of policies and practices, curricula, hiring practices, admissions criteria, and student experiences. Students are interested in discussing issues around social justice, equity, and inclusion. Teachers may want to have conversations with students but are worried about parental complaints if they do so (Shields, 2018). The leadership needs to navigate these competing interests.

Organizational and Leadership Frameworks

Both organizational and leadership frameworks describe how the schools operate and provide context to the problem of practice. Our schools operate within the traditional industrial model of organizations using rules, outcomes, policies, order, and control (Mitchell & Sackney, 2011; Sergiovanni & MacBeath, 2001; Wheatley, 2006). We have a hierarchical leadership model. A strong leadership focus on accountability, effectiveness and efficiency reflects a neo-liberal orientation (Brown, 2006). Power is role-based and concentrated in the director of education at the top of the reporting structure, who has final authority for any decision (Deszca et

al., 2020). Each supervisory officer has well-defined roles, responsibilities and the authority to act on behalf of the director. The supervisory officers exercise transactional power, which focuses on the exchange between the leader and the follower. The leader gets "work" done, and the follower receives a "reward," which is keeping their job (Bass, 1990). The supervisory officers exert influence and have varying amounts of personal power based on the strength of their relationships with their followers (Deszca et al., 2020). There are different interests, talents, priorities, and leadership styles within the leadership group, which can cause a lack of coherence.

Leadership Position and Lens Statement

I have been the supervisory officer of academic programs and professional learning for ten years. My role is to support and operationalize the director's strategic direction by developing and managing the instructional program, our Ministry inspections and accreditation, and our teachers' professional development. In my role, I am responsible for modelling school principals' leadership actions that Robinson et al. (2008) established as having a positive impact on student learning. These leadership actions include setting goals, priorities and expectations for the schools, supporting the strategic allocation of resources, conducting classroom walkthroughs with school principals and other academic leaders to ensure quality teaching, leading and participating in teacher learning, and ensuring the school principals maintain an orderly and safe environment within their schools (Robinson et al., 2008 p.9). As the principals report to me, I have positional power in our hierarchical system at the individual school level (Deszca et al., 2020). I have knowledge power due to my expertise in curriculum design and my years of experience. I rely most often on my personality power, which comes from my reputation as an ethical leader who works to build trust and relationships (Dearlove & Crainer, 2016; Deszca et al., 2020). As a leader, I understand that leadership is the exercise of influence through building

and maintaining solid relationships and building school-wide structures that positively impact teachers' work (Robinson et al., 2009).

Within the leadership team, I have some autonomy to make decisions within my area of responsibility. I need the approval of the director of education for significant decisions that impact the budget and resources. In the organizational change process, I am the change agent, identifying what needs to change in the schools and suggesting a change plan to the director of education. If the director approves the change plan, I am also the change facilitator, ensuring the change happens by working with the principals and teachers (Deszca et al., 2020). As a leader, I use my understanding of social cognitive theory to support my leadership practices, actions and decisions.

Leadership Lens Statement

A worldview is a general philosophical orientation that serves as a guide to one's beliefs and actions. It is a way of thinking or a perspective that informs how the leader observes the world and examines information (Creswell & Creswell, 2018; Kivunja & Kuyini, 2017). My leadership practices, actions and decisions are strongly influenced by the social cognitive theory of learning. The theory suggests a reciprocal relationship between a person's beliefs, attitudes, behaviour, and environment (Bandura, 1997, 2018).

Social Cognitive Theory and Self-Efficacy

Social cognitive theory focuses on the interrelationship between individuals and their environment and the development of human agency. The theory proposes that people can regulate their thoughts, behaviours and motivation and have control or agency in shaping their lives (Bandura, 2018). People are the products and producers of their environment through the reciprocal relationship between an individual's behaviour, personal factors (beliefs, expectations,

attitudes, feelings) and the physical and social environment (Bandura, 2000). Bandura (1997,

2001) termed this inter-relationship the triadic reciprocal model of interaction, illustrated in

Figure 1.

Figure 1

Triadic reciprocal causation
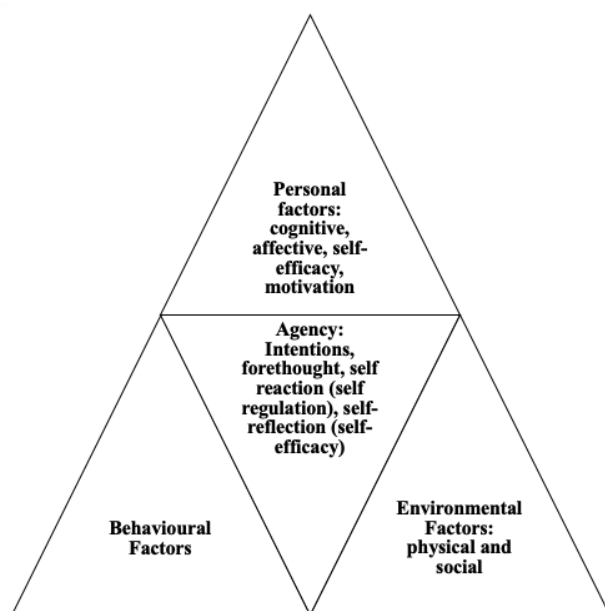
Note: Triadic reciprocal causation is the interconnections between the environment, behaviour

and personal factors that impact the development of agency and self-efficacy beliefs. Adapted

from "Self-Efficacy: The Exercise of Control" by. A. Bandura, 1997, pp. 5-8. Copyright 1997 by

W.H. Freeman and Company.

Human agency is the ability of people to control their motivation and behaviour through

the influence of self-beliefs, including self-efficacy. Agency consists of intentions, forethought,

self-reaction (self-regulation) and self-reflection (self-efficacy). Intention involves making action

plans and strategies to achieve them. Forethought involves motivation, creating goals and

visualizing the outcome of actions. Self-reaction or self-regulation is managing behaviour. In

self-reflection, people examine their self-efficacy or ability to address challenges in their lives,

consider their thoughts and actions, values, meaning and morality, and decide what they will do in a situation (Bandura, 2006, 2018). Self-efficacy is a core self-belief and influences aspiration, motivation and accomplishments (Bandura, 1997). Self-efficacy is the belief that you can act to produce a particular outcome, and it affects behaviour, motivation and success or failure. People are motivated to act when they believe they can make a change. Self-efficacy beliefs are related to the effort you invest in activities, the goals you set, your persistence and resiliency in the face of challenges (Bandura, 1997; Tschannen-Moran & Hoy, 2007).

Self-efficacy is built through interactions with the environment. The physical and social environment provides opportunities for experiences that people use to measure self-efficacy through assessing their performance. These experiences include mastery and vicarious experiences, verbal persuasion and affective states (Bandura, 1997; Tschannen-Moran et al., 1998; Tschannen-Moran & Hoy, 2007). Mastery experiences are experiences where you have the opportunity to try something and succeed and are the most powerful source of self-efficacy beliefs. Vicarious experiences support self-efficacy through modelling when you watch someone you respect complete an action and are the second most substantial source of efficacy beliefs. Verbal persuasion involves a respected person expressing confidence in your ability to overcome a challenge. Affective states are the feelings you have when you are successful (Bandura, 1997; Tschannen-Moran et al., 1998; Tschannen-Moran & Hoy, 2007). When you experience one of these four sources of self-efficacy, you process the information, assessing the physical and social environment and your sense of competence. Your assessment impacts your feeling of self-efficacy or capability to act (Lee et al., 2017; Tschannen-Moran et al., 1998). This feedback loop is illustrated in Figure 2. Self-efficacy affects your goal-setting, effort and persistence towards

completing a task. It changes your behaviour and leads to further opportunities that build self-efficacy (Bandura, 1977, 1982, 1997; Lee et al., 2017; Tschannen-Moran et al., 1998).

Figure 2

Sources of Self-Efficacy
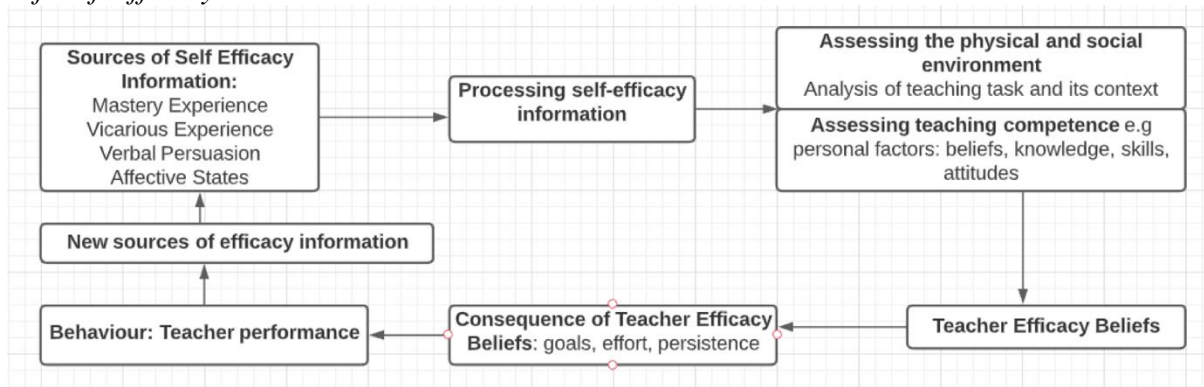
Note: This figure illustrates how triadic reciprocal causation supports developing teacher efficacy beliefs in the form of a feedback loop. From: "Teacher efficacy: Its meaning and measure," by M. Tschannen-Moran, A. Hoy, and W. Hoy, 1998, *Review of Educational Research" 68(2) p. 228.* Copyright M. Tschannen Moran. Reproduced with permission of the author.

Social cognitive theory's conceptions of triadic reciprocal causation and self-efficacy influence my actions as a leader. I support the self-efficacy beliefs in the people I lead by changing their working environment to influence their behaviour, attitudes and beliefs through changing the sources of self-efficacy beliefs (Tschannen-Moran et al., 2000). I use a combination of transformational and instructional leadership principles and actions to create an integrated leadership model (Marks & Printy, 2003; Printy, 2014). The integrated leadership model incorporates three broad principles and their associated actions and connection to triadic reciprocal causation, as illustrated in Table 1. Leadership principles one and two are most closely aligned to transformational leadership. Leadership principle three is most closely aligned to

instructional leadership. All three leadership principles work together, but each is described separately to highlight its essential elements.

Table 1

Leadership Principles and Actions

Leadership Principles	Specific Leadership Actions	Link to Triadic Reciprocal Causation
Build relationships	Trust and respect	Attitudes and Beliefs
Build capacity	Develop people and the organization	Behaviour/Skills
Support learning	Lead instruction and create a positive climate	Environment

Leadership Principle 1: Build Relationships

At its core, leadership is the influence one person has over another exercised to meet the goals and vision of the organization (Bush & Glover, 2003). A leader's influence is connected to their personal and professional values and beliefs (Bush & Glover, 2014).The exercise of influence makes leadership a social process. As people create their perception of reality through their interactions with the physical and social environment, a leader must build strong, trusting and respectful relationships to be effective at changing the attitudes and beliefs of the people they work with (Robinson, 2010). Building trust is the ethical foundation for leadership and the first principle that directs my leadership actions (Robinson, 2011). Building relationships through respect and trust is a characteristic of transformational leadership, which focuses on building teams and leading by providing an inspirational vision and developing people (Leithwood et al., 2020; Robinson et al., 2008).

Transformational leaders set direction, support people, provide individualized support and intellectual stimulation, and exert idealized influence (Leithwood & Jantzi, 2005). These leadership actions require the development of relational trust as a pre-condition for followers to accept the leader as legitimate (Leithwood & Jantzi, 2005). Relational trust requires the leader to

respect the ideas of others, care about their well-being and their professional lives, demonstrate competence, be open in communication, be reliable, act and speak honestly and with integrity (Robinson, 2011; Tschannen-Moran, 2014). Developing trusting, respectful relationships is a pre-condition of the work of a leader in influencing others to build a community that can learn and innovate together (Hoy & Tschannen-Moran, 1999; Robinson, 2011; Schwabsky et al., 2019; Tschannen-Moran, 2009, 2014; Tschannen-Moran & Gareis, 2015).

Leadership Principle 2: Build Capacity

Leadership principle two draws from transformational leadership to focus on building capacity by developing people and the organization by creating a culture of continuous learning, supporting people to change their behaviours and skills. Bass (1999) describes the transformational leader as a person who can move an organization forward by inspiring followers to think and work differently. Transformational leaders inspire their followers through encouraging creativity, offering support and encouragement through supportive relationships, articulating a clear and compelling vision and serving as role models (Leithwood & Jantzi, 2005). The transformational leader encourages followers to move beyond self-interest to become a high-performing team and redesigns the organization by building a collaborative culture and the structures necessary for collaboration to occur to allow for the social construction of knowledge and meaning (Bass, 1999; Leithwood & Jantzi, 2005). Building capacity requires the leader to support changes to the behaviour and skills of people by building conditions that support the development of self-efficacy through the four sources of efficacy (Bandura, 1982, 1989, 2018b).

Leadership Principle 3: Support learning

      The final leadership principle focuses on supporting learning by improving the schools' instructional core through specific changes to the school environment. I lead the instructional program and create a positive climate within the schools through direct and indirect instructional leadership actions that impact the organizational environment. My direct instructional leadership actions focus broadly on improving the quality of teaching through supervising and evaluating instruction. I attend classroom walkthroughs with the school principals, review teacher observations and evaluations, meet with principals, department heads and teachers to discuss questions or concerns regarding the educational program, design, develop and participate in teacher professional development and support the leadership growth of the principals. My indirect instructional leadership actions involve creating the conditions for optimal learning within the school environments through setting appropriate and aligned academic policies and procedures, managing budgets to provide resources and managing the accreditation processes and Ministry inspections (Bendikson et al., 2012; Kleine-Kracht, 1993; Robinson et al., 2008). I work to promote positive school climates through protecting instructional time, fostering professional development and supporting a strong academic focus (Dewitt, 2020; Gumus et al., 2018; Hallinger, 2005; Hallinger & Murphy, 1985; Robinson, 2010).

      The three leadership principles drawn from transformational and instructional leadership practices and actions guide different aspects of my leadership. I start with relationships to develop and support people through building trust and respect, supporting changes to their attitudes and beliefs as teachers. As a leader, I try to inspire and model learning to improve instructional understandings and strategies and measure our impact on student learning. I work to build a community of adult learners who collectively take responsibility to learn and grow to

understand and improve our instructional program for all students through changes to the instructional environment (Hallinger, 2005; Leithwood et al., 2020). My understanding of social cognitive theory, transformational and instructional leadership influences how I work with people within the organization to build an environment that supports self-efficacy (Bandura, 2018). Social cognitive theory and my leadership principles influence how I view the organization and the opportunities for change resulting from the problem of practice.

Leadership Problem of Practice

The problem of practice addressed in this organizational improvement plan is how to create a 21st century, student-centred learning environment in a traditional teacher-centric school system. The leadership problem of practice is within my role as the supervisory officer in the Family of Independent Schools as I oversee the teaching and learning program. The world of the 21st century requires students to have the skills, attitudes and knowledge to be able to solve messy, poorly defined, complex problems that are associated with living in a globally connected world (Fadel et al., 2015; Hargreaves, 2003; Trilling & Fadel, 2009). To be successful in the new knowledge economy of the 21st century, students need critical and creative thinking skills, strong collaboration and communication skills and effective research and technology skills (Soulé & Warrick, 2015). As we build back a better educational system after COVID-19, we need to begin with the needs of the learners in mind, and our newly designed education system must reflect the Delors Report (1996) recommendations that describe the foundations of global education, including learning to "live together, to be, to know and to do" (pp. 20-21). Learning to know is embedded in our academic program. Learning to do and learning to live together are integral parts of our organizational mission. Learning to be highlights the importance of student well-

being as an important educational outcome, which is something we are beginning to consider (Hargreaves & Shirley, 2022).

The 2016 Gallop (2017) student survey reveals that traditional schooling is not engaging students. Students may be prepared for university but not be ready for the future of work (Fullan et al., 2018; Soulé & Warrick, 2015). Students have a performance orientation, focusing on marks, not learning (Donohoo & Katz, 2020; Fullan, 2016; Hattie et al., 2021). There are rising levels of anxiety and perfectionism among students (Luthar et al., 2020). Parents place pressure on teachers for marks and are less confident that their child is prepared for the future (Evans & Thompson, 2021). What strategies or approaches may be appropriate to change our current school system to one focused on developing 21st century learning that support student academic and well-being needs?

The problem of practice is a gap between our current practices as a traditional school system and our desired future state as a 21st century school system. Exploring our current practices and desired future state allows us to understand that gap.

Current Practices

Teachers are experienced and capable practitioners using traditional teacher-directed instructional strategies. Lessons are teacher-directed and controlled. Teachers set the learning goals and success criteria, determine the sequence of activities and control the time and place for learning. Students are successful in our current educational system as measured by academic success. All our graduating students are accepted into the university of their choice. On EQAO testing, 100% of grade 10 students pass the Ontario Secondary School Literacy Test on their first try, and 100% of Grade 3, 6, and 9 students score level three or four on EQAO assessments (EQAO, 2018b, 2018c, 2018a). Parents, students and teachers are comfortable with their roles.

Students understand how to be successful in their classes. Parents are satisfied that their child is getting a good education, measured by marks and university acceptances. Teachers know what they need to do to support students and manage the schools' day-to-day demands.

The extended and repeated school closures during the covid-19 pandemic with the rapid switch to entirely online and then to hybrid learning illustrated the flexibility and adaptability of many of our teachers and students who took the changes in stride. It also highlighted the fragility of others who struggled both academically and social-emotionally with the conditions imposed by the pandemic and illustrated a gap in our ability to support student well-being. Guidance counsellors report an increase in cases of stress, anxiety, perfectionism and depression in our secondary school students. Teachers report a lack of engagement among students and a sense that they are working for marks and are just "doing school" (Pope, 2001; Shirley & Hargreaves, 2021).

In the schools, there is developing tension between the inertia of longstanding traditions, the norms of a selective academic school system where parents have privilege and power, and the growing desire of students and teachers to focus on issues of equity, inclusion and social justice. The lack of resources and support available to teachers and students highlights a gap in our program offerings and the professional learning of our teachers.

Altered Practices for a Desired Future Organizational State

The desired organizational state is to change from our current traditional teacher-focused education system to a 21st century student-focused system, changing the traditional "grammar of school" (Hubbard & Datnow, 2020; Labaree, 2021; Mehta & Datnow, 2020). This is a shift from the "Age of Achievement and Effort to the Age of Engagement, Well-being, and Identity" (Shirley & Hargreaves, 2021 p. 23). This shift is captured in the Ontario Ministry policy

documents, especially Achieving Excellence (Ontario Ministry of Education, 2014). This shift

incorporates a focus on the inclusion of diverse students and their identity who see themselves

reflected in their school and a focus on developing the physical, cognitive, emotional and

spiritual well-being of children (Ontario Ministry of Education, 2014; Shirley & Hargreaves,

2021). Classes in the future shift from teacher-centred to learner-centred, to improve student

learning and engagement (Shirley & Hargreaves, 2021). Teachers use strategies that support

student independence, their ability to make connections to the world, see themselves as members

of the community, think critically, work together, empathize with others, and address complex

problems (Fullan et al., 2018; Wagner & Compton, 2012). The new learning culture for students

and teachers focuses on continuous improvement and a culture of striving to get better (Kegan &

Lahey, 2016; Langley et al., 2009). Students have opportunities to develop knowledge and skills

in a mastery orientation (Donohoo & Katz, 2020). They form an identity as learners when they

connect to what they learn and do and feel part of the community of leaners. School learning is

focused on producing or contributing something new that has value and importance to the learner

(Fullan et al., 2018, 2019; Shirley & Hargreaves, 2021).

      Students in the future develop cognitive, interpersonal and intrapersonal competencies.

Schools focus on developing students as thinkers, learners, and ethical citizens who are

confident, resilient learners who adapt and thrive in a complex and changing world. Students in

this future develop critical and creative thinking skills, agency and understand how social justice,

equity and inclusion impact personal actions (Wagner, 2008; Wagner & Compton, 2012; Wagner

& Dintersmith, 2015). The first step in solving the problem of practice is understanding why we

need to change our school system.

Framing the Problem of Practice

Framing the problem of practice helps to answer why the Family of Independent Schools should change its educational program. Our students are successful as measured by standardized test scores and university acceptance rates, and our parents are satisfied with their child's education. So why is it necessary to change our educational focus? Why is 21st century learning going to make a difference to our students? Answering these questions starts with a brief description of the critical elements of 21st century learning. The problem of practice is framed using the triadic reciprocal causation model to analyze the physical and social aspects of the organizational environment and the teachers' attitudes, beliefs and behaviours to understand the change that is required (Knight, 2022).

21st Century Learning

The world of the 21st century is one of constant change. The demands on students and the challenges they face are complex, unpredictable and different from what schools are currently preparing them for (Hargreaves, 2003; National Research Council, 2013; Ontario Ministry of Education, 2016b).To be successful in the future, students need to be adaptable and flexible thinkers. They need to learn how to learn, and schools need to help them to develop cognitive, interpersonal and intrapersonal skills for the future (Hatch et al., 2021; Ontario Ministry of Education, 2016c; Soulé & Warrick, 2015; Vander Ark & Schneider, 2014; Vosniadou et al., 2021).

As part of the cognitive domain, students must develop collaboration and communication skills, and critical and creative thinking skills. They must improve their ability to reason, look at problems from different points of view, and apply or transfer their learning to solve unique issues

(Fullan et al., 2018; Hargreaves, 2003; National Research Council, 2013; Wagner & Dintersmith, 2015).

Students must develop interpersonal competencies that support self-regulation, belonging, identity, and self-efficacy (Tranter et al., 2018). Well-being is "a positive sense of self, spirit and belonging that we feel when our cognitive, emotional, social and physical needs are met." (Ontario Ministry of Education, 2016b p. 3). Students achieve their well-being needs when given autonomy to learn, do meaningful tasks, and explore and express their identity and to feel they belong in their community (Tranter et al., 2018). Incorporating a focus on well-being as part of the academic program helps students develop into healthy adults able to meet challenges with purpose and self-efficacy (Shirley & Hargreaves, 2021; Tranter et al., 2018)

Students need to develop interpersonal competencies such as compassion, citizenship, courage, and inclusion. These competencies support students as they focus on social interactions that are part of living in a digital, globally connected world. These competencies help them face issues of social justice, equity, diversity and inclusion and have the skills, competencies and desire to do something about them (Fullan et al., 2018; Shields, 2018). Our mission requires students to use their education to engage in the world, which requires their education to prepare them to be able to actively support efforts to dismantle racism and work for social justice, inclusion and equity (Harden-Moore et al., 2019; Jana, 2021; D. Smith et al., 2017; Swalwell, 2013b, 2013a). According to the World Economic Forum (2020) and the Organization for Economic Development and Cooperation (OECD) (2019), there is a need for schools to prepare global citizens to create a more inclusive world. Students in independent schools are part of a privileged group who are often the source of inequity. Disrupting inequity requires an

independent school education that helps students explore their part in perpetuating systemic

inequity and learn how to disrupt it (Curry-Stevens, 2007; Rifkin & Sibbett, 2020).

Implementing the competencies in all three domains — cognitive, interpersonal and

intrapersonal — requires changes to the schools' curriculum, teaching, and learning activities.

Teachers need to change their pedagogical strategies to support students leading their learning.

Teachers must be partners in student learning and provide meaningful, authentic, and connected

tasks (Hargreaves, 2003; Hatch et al., 2021; National Research Council, 2013; Ontario Ministry

of Education, 2016c).

Analyzing Current Practices

To understand the extent of the change that moving to 21st century learning involves, we

must understand what shapes our current practices. One way to understand our current practices

is to view them through the three elements of triadic reciprocal causation: the physical and social

environment of the schools and the teachers' attitudes, beliefs and behaviours. All three elements

are a potential focus of the change efforts (Hatch et al., 2021).

Physical Environment of the Schools

The schools have a traditional "egg crate" structure with twenty-five students and one

teacher in each room (Barrell et al., 2010). In our elementary schools, students and teachers

spend most of their day in a single room, except for specialty subjects, where the students move

to another classroom with a different teacher. The secondary school has a similar physical

structure, but students move between classrooms and teachers four times each day. Each teacher

is responsible for the safety and management of the students in their classroom. Teachers in our

elementary schools work in their classroom or the staff room during their single free period

during the day. Teachers in the secondary school work in subject-specific offices in their single

free period, allowing them to interact with other members of their team if they are also free. The physical structure of the buildings encourages the norms of privacy and independence and makes collaboration between teachers challenging (Little, 1990; Lortie, 2002; Tschannen-Moran, 2001).

Social Environment of the Schools

Teachers have power over students because of their authority within the schools. How a teacher views a student's academic potential may influence their mutual interactions and the child's performance. Parents worry about what the teacher thinks about their child, assessments and grading, and whether or not a teacher is being "fair" (Evans & Thompson, 2021). Teachers fear that how they see a child may be different from how the parent sees the child, which may cause conflict. Teachers are afraid the administrators will not protect them from parent complaints (Evans & Thompson, 2021). Parent and teacher fears reduce trust and make both reluctant to change a program that seems to be working.

Students are admitted to the schools through a selective admission process, and parents choose the schools primarily for their reputation for academic rigour and university placement results. There is a competitive performance-based culture within the school, where marks and university acceptances matter more than learning (Donohoo & Katz, 2020; Hattie & Smith, 2021; Pope, 2001). In this high-stress, performance-focused culture, any proposed changes to the academic program will trigger resistance in parents, students and teachers if it appears that academic success will suffer (Evans & Thompson, 2021).

Teachers are worried that students seem to care more about their marks and what is on the test than their learning, evidence of their lack of engagement. Student climate surveys show that not all students feel they belong because of race, gender identity, socioeconomic class or religious beliefs. Some students want to discuss social justice, equity, diversity, and inclusion

issues both within the school and in society in general and do not feel the schools are doing enough to have these discussions. Some teachers do not feel prepared to have those discussions because there have not been enough professional development sessions to support them. Some teachers want to have the discussions but are worried about parental complaints if they do so. Other teachers are worried about making mistakes when speaking with students and that they will do more harm than good (Gorski & Swalwell, 2015; Rifkin & Sibbett, 2020).

Beliefs, Attitudes and Behaviours of the Teachers

Teachers are collegial and work in course teams, but they value their autonomy, independence and ability to use professional judgement to make decisions around pedagogy and assessment. There are strong privacy norms and limited "joint work" or professional sharing and critique of professional practices within the schools preventing conversations about changing pedagogy (Glazier et al., 2017; Little, 1990). The strong beliefs among teachers about the primacy of autonomy, privacy and professional judgement are significant obstacles to be overcome during the change process (Cohen & Mehta, 2017).

The teachers are experienced, confident and capable of using their current instructional strategies. EQAO data and university acceptance rates are tangible evidence of their effectiveness. Teachers' efficacy beliefs are strongly influenced by their personal experiences of success using instructional strategies, mastery experiences (Bandura, 1997; Guskey, 2021). Student success is measurable and parents are pleased with the current program. From the point of view of teachers, there is no compelling reason to change and change is difficult. Change requires new learning, time and effort (Guskey, 2002a; Katz & Dack, 2013). Change creates anxiety, and has the potential for failure, which threatens teacher efficacy (Fullan, 2016, 2020;

Guskey, 2020, 2021). The narrative that there is no reason to change will be one the leadership must overcome to move forward.

Through framing the problem of practice, the question of why change has been explored, contrasting the benefits of 21st century learning with the current conditions at the three schools. This initial analysis of the schools and the problem begins the change process, informing the guiding questions and establishing the priorities of the change.

<div align="center">

Guiding questions emerging from the Problem of Practice

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There are three guiding questions that arise from the analysis of the problem of practice. The guiding questions are challenges emerging from the main problem that influence the leadership change vision and inform the change implementation plan.

How will a 21st century focus create a better experience for students?

A 21st century focus changes the curriculum (what is learned) and the pedagogy (how it is learned), transforming the learning culture for students (Kegan & Lahey, 2016). The proposed changes to the curriculum include a focus on developing 21st century competencies by exploring cross-disciplinary and real-world issues. Changes to the pedagogy involve a student-focused learning agenda where teachers design learning experiences to support students' more profound understanding of the curriculum and the world's issues (Fullan et al., 2014, 2019). Well-being is integrated into classes to support academic success. Classes involve active learning and authentic problems that are challenging. There is a greater focus on learning about global issues and considering possible solutions to those problems, making space for the exploration of equity and social justice questions and issues (Fullan et al., 2018). Classes focused on 21st century learning give greater agency to the student. Student agency changes their relationship with their teacher to create a learning partnership. From a social cognitive lens, 21st century learning changes the

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classroom environment first to change behaviours and beliefs as the outcome (Fullan et al., 2018, 2019).

What will be different for teachers in a 21st century classroom?

Teachers must learn to teach in ways that will develop the desired outcomes for students. Teachers need to develop the same 21st century competencies and understandings as their students (Timperley, 2011; Timperley et al., 2007). Teachers must apply their understanding of their learners, their subject content and effective pedagogy differently to achieve 21st century outcomes with all students. Effective teaching for the 21st century activates prior knowledge, connects to student experiences, scaffolds learning, adapts to student needs and interests, makes connections to the real world and helps students reflect on and improve their own learning (Darling-Hammond, 2006; Darling-Hammond & Oakes, 2019; Dufour & DuFour, 2015). To make these changes requires teachers to work together in interdependent teams to design new learning experiences and evaluate student work to see the impact of these experiences (Fullan et al., 2018).

Teachers will use different planning templates, strategies, and structures to change the classroom culture to support students as active and engaged thinkers (McTighe & Seif, 2010; Ritchhart, 2015). The role of the teacher will shift from controlling the learning activities of students to supporting students as they take control of their own learning in collaboration with their teacher (Fullan et al., 2018). Teachers will integrate well-being outcomes into classes and explore questions of greater significance to students, including issues of social justice and equity (Fullan et al., 2018).

Teaching in the 21st century classroom has different outcomes for students, which requires different teacher behaviours. Teachers who are not confident in their own or their team's

ability to teach differently have low efficacy, which impacts their motivation, openness to and engagement with the required change. Both individual teacher efficacy and collective efficacy, the group's belief in their ability to effect change, impact how well or to what extent teachers will be successful in adopting and implementing new pedagogies and competencies required for 21st century learning (Bandura, 1997; Tschannen-Moran & Chen, 2014). Supporting and enhancing individual and collective efficacy to improve teacher motivation and engagement will impact the success of the change (Guskey, 1986, 2002b).

How can the leadership support the change to 21st century learning?

A challenge for the leadership is that the current school model seems to be working for students, teachers and parents, and there is little motivation for change. There is no reason for teachers to believe in the value of this proposed change and there are self-efficacy costs to implementing it. The leadership can support the change to 21st century learning by building the conditions to improve teacher self-efficacy by changing their experiences. If teachers have opportunities to use 21st century learning strategies, measure student learning and see the positive impact, that will build their self-efficacy beliefs and make it more likely they will support the change to 21st century learning (Guskey, 2020, 2021; Tschannen-Moran et al., 1998). The leadership should plan professional development activities that address teacher beliefs as well as instructional practices to improve the final outcome for students (Timperley & Phillips, 2003; Tschannen-Moran & Chen, 2014)

This section presented questions that guided the change plan and helped move the organization from its current state to its future state. The future state is described in the leadership vision for change.

Leadership Focused Vision for Change

A vision is a picture of the future that sets the schools' direction and informs the actions

leading to the desired outcome. A vision conveys the purpose for the change, the strategy to

achieve that purpose and what the future will look like (Deszca et al., 2020). The change vision

is provisional, a starting point in the journey to develop a 21st century learning model for the

Family of Independent Schools that fits our specific context, teachers, students and parents. In

the change implementation plan described in Chapter 3, there are opportunities for changes to the

vision and the plan based on the lived experiences of our teachers and students as we develop our

understanding of 21st century competencies and pedagogies.

The Change Vision

The provisional change vision is that the Family of Independent Schools will use Fullan

et al.'s (2018) deep learning model as the beginning steps in creating our own vision of a 21st

century learning environment. The change vision is a second-order, transformational or cultural

change. Second-order changes affect the culture of learning, teacher and student behaviours, and

mindsets (Ackerman-Anderson & Anderson, 2010; Bartunek & Moch, 1987). The deep learning

model is structured to support teachers as they manage this transformational change, providing

tools, processes and successful examples of the change (Fullan et al., 2018; Quinn et al., 2020).

The deep learning model focuses on six global competencies: character, citizenship,

collaboration, communication, creativity, and critical thinking. These six competencies

incorporate the cognitive, interpersonal and intrapersonal competencies necessary for success in

the future (Barrell et al., 2010; Fullan et al., 2018; National Research Council, 2013; Ontario

Ministry of Education, 2016c). The deep learning model requires the development of a student-

centred learning environment that includes using different instructional strategies, creating

learning partnerships, and integrating the digital world. Students take responsibility for their learning and learn how to learn as part of a community. Teachers become activators of learning, building a new collaborative and challenging culture. The school leaders become lead learners, actively participating in the new pedagogy and shaping the learning culture. Families engage as partners in their children's learning, and the community partners with the schools (Fullan et al., 2018).

What are the benefits?

The purpose of implementing 21st century learning is to increase student motivation to learn and engage in their education through exploring real problems, developing skills, knowledge and understandings in an authentic context and preparing them for real-world challenges (Fullan et al., 2018, 2019; Hatch et al., 2021). Students benefit from the change to the envisioned future state as they are better prepared for the future (Wagner & Compton, 2012; Wagner & Dintersmith, 2015). The new program changes the environment of the classroom to support students' social-emotional development as they develop the academic skills, competencies, dispositions, knowledge, and understanding required to deal with new and ambiguous real-life problems. Changing the environment for learning through changing pedagogy, and how students think and feel about solving issues, impacts their behaviour and supports their self-efficacy and agency (Bandura, 1997, 2006). Both efficacy and agency support them to move into the future.

Parents benefit from the change if their ultimate goal is to have children who successfully navigate the uncertain future world. Teachers' environment, behaviours, personal beliefs and attitudes change as they learn and use new pedagogies. The 21st century approach to learning is more exciting and engaging for teachers and students (Fullan et al., 2018, 2019; Hatch, 2021;

Hatch et al., 2021). The proposed change is aligned with the mission and vision of the schools and helps students move confidently into the future as active agents in their own lives.

What is the gap?

As described, the vision for change highlights the gap between the current, traditional, teacher-centred school organization and the future, student-focused organization with 21st century learning at its core. Teachers, students and parents need to move from something known and familiar to something unknown and uncertain. Teachers feel confident and capable in the current school system. Students know how to "play the game of school" (Pope, 2001, 2010; Ritchhart, 2015). The school looks the same as parents remember, and school worked for them (Evans & Thompson, 2021). Beliefs, attitudes, behaviours and the school environment must change (Cohen & Mehta, 2017; Hubbard & Datnow, 2020; Mehta & Datnow, 2020).

If this change vision is successful, we will create a student-focused teaching and learning environment (Hubbard & Datnow, 2020; Mehta & Datnow, 2020).

Priorities for Change

Guided by the change vision, the development of the organizational improvement plan has two main priorities. One priority is to create an implementation team that develops expertise with deep learning and develops facilitation and leadership skills. The implementation team supports the change by working directly with the teachers (Bandura, 1997; Guskey, 2020, 2021; Tschannen-Moran et al., 1998).

The second priority, related to the first, is to support the teachers, students, and parents through the change process. The primary focus of the change plan is supporting the teachers as they engage with and implement the change (Fullan, 2016). The changes they make impact the student experience and, by extension, the parents. The implementation team supports teachers

through changes in their working environment (Bandura, 1997; Guskey, 2020, 2021; Tschannen-Moran et al., 1998).

Change Drivers

In addition to identifying questions that drive the change vision, it is essential to identify change drivers. Change drivers can be factors that support the implementation of change or support understanding the need for change (Whelan-Berry & Somerville, 2010). For this organizational improvement plan, the change drivers are factors that support the change vision and the implementation of change (Whelan-Berry et al., 2003; Whelan-Berry & Somerville, 2010). The change drivers are the leadership actions, building middle leaders, providing resources, and the research support for the change.

Leadership Actions

The leadership's commitment and direct efforts to support the change signal the importance of the change and its outcome (Perry & Richardson, 2022). Robinson (2011), in her summary of the best evidence (2009) synthesis of research on the impact of school leaders on student achievement, found that leaders leading learning had an effect size of 0.84 on student achievement. Leaders who learn alongside teachers, changing their working behaviours and mindsets to model the difference they expect from teachers and students, support teacher learning (Fullan, 2002, 2020; Robinson et al., 2009; Timperley et al., 2020). Modelling builds trust between leaders and followers, an essential part of the change process. Before teachers change their behaviour, they must believe that their leaders will support them through the process (Tschannen-Moran, 2014).

Leaders provide support by delivering a clear message that describes what changes and what stays the same, providing limits to the change (Reeves, 2021). Another important

leadership action is helping teachers and parents understand the need for change from a student's point of view and what students need to be successful (Perry & Richardson, 2022; Reeves, 2021). Leaders create the conditions within the schools that allow teachers to learn what they need to be successful in the transformation that is expected (Kaser & Halbert, 2009).

Building Middle Leaders

The school principals, academic department heads, curriculum leaders and early adopter teachers are essential leaders and facilitators in the change process. These leaders develop their facilitation skills to learn how to lead effective collaborative groups (Glazier et al., 2017). They learn with the teachers, experience the same challenges, and understand what success requires (Perry & Richardson, 2022). These middle leaders advocate for the necessary resources and support the teachers. They provide critical feedback to the change agent about the change process, supporting changes to the plan (Perry & Richardson, 2022). Participating with the teachers as co-learners signals that the middle leaders value the change vision, the required learning and support the teachers (Robinson, 2011; Timperley et al., 2020; Whelan-Berry & Somerville, 2010)

Providing Resources

Supporting the change requires the provision of resources, including money, time and people. Resources are needed so that the teachers have the materials they need to be committed, engaged and motivated to continue participating in the change and signal the importance of the change (Fullan, 2007; Robinson et al., 2008; Whelan-Berry & Somerville, 2010). Supporting teacher motivation and engagement through the provision of resources is essential since the teachers are the ones who have to do the work of changing their practices. They need to have time to make the necessary changes, and they will only do the required learning if they believe

their effort will positively impact students and be well supported by their school leadership (Fullan, 2007).

Supporting Research Documents

As described previously, there are numerous research and policy documents supporting the rationale for the change. The many books and articles discussing how and why to integrate 21st century skills into the current education system provide an external rationale for why the proposed change will prepare students for the future (Hargreaves, 2003; Hatch et al., 2021; National Research Council, 2013; Trilling & Fadel, 2009; Vosniadou et al., 2021). The existence of multiple documents provides a credible external reference for stakeholders and situates the shift in educational direction within the broader political landscape.

The leadership-focused vision for change requires adopting Fullan et al.'s (2018) deep learning model to build 21st century pedagogical approaches in our traditional school system. The vision for change sets the direction and purpose of the change. The gap between the present and future state is described, and the priorities for change are identified. The change drivers describe various supporting factors that the change agent can incorporate into the plan. The next step in the change process is to diagnose the organization's change readiness.

Organizational Change Readiness

Change readiness is the preparation of an individual or an organization to engage in the change process (Blackman et al., 2213; Holt et al., 2010). Readiness involves being committed to a change and confident in one's ability to succeed during the change (Holt et al., 2010; Weiner, 2009). Readiness is the "cognitive precursor to behaviours" leading to change (Armenakis et al., 1993 p. 681). Organizational and individual readiness for change are essential to assess and manage during the change process. Both types of change readiness involve similar concepts

operating at different levels within the organization. One way to connect these concepts is to consider that organizations *adopt* a change and individuals *implement* the change (Hall & Hord, 2020).

Organizational Change Readiness

Organizational change readiness includes a shared commitment to implement the change (change commitment), a shared belief in the collective ability to support the change (change efficacy) and a shared sense of the value of the change (change valence) (Weiner, 2009). Organizational change readiness is higher when people believe that the change is necessary, meaningful, and the right solution. Readiness is higher when people want to implement the change and are confident that they and the organization can successfully make the change happen, a measure of change efficacy and commitment (Armenakis & Harris, 2009; Weiner, 2009).

Change efficacy is a function of people's appraisal of their joint ability to manage the change. Change efficacy rests on three questions that ask us to consider if we know what is needed to implement the change, if we have the required resources and if the change is possible (Weiner, 2009). To support the development of change efficacy, the leadership must consider these questions in the change plan, communicate clearly and change the organizational environment through consistent messages, actions, information sharing and experiences to support the change vision. In addition, the leadership must consider the importance of change valence or the value organizational members place on a change. The more value the change has, the more organization members will support it.

Individual Change Readiness

Change only happens through individuals' actions, and successful change only persists when individuals permanently change their attitudes, beliefs, and behaviours to support the change (Armenakis et al., 1993; Choi & Ruona, 2010; Fullan, 2016). Individuals are not passive recipients of change but are active participants and are a focus of this organizational improvement plan. Hall and Hord (2020) have shown that people exhibit different levels of concern when faced with a change. People's feelings or attitudes about the change influence their behaviour. Change readiness activities need to influence the thoughts, beliefs, and behaviour of the change recipients (Choi & Ruona, 2010). An individual's readiness may be affected by the organization's readiness. Both individual and organizational readiness may be influenced by persuasive communication techniques and active participation, providing opportunities to support individual and joint efficacy beliefs (Armenakis et al., 1993).

When measuring change readiness, data from individuals are aggregated to produce a measure of organizational readiness. The change agent, school principals and academic department heads use three tools to measure readiness: a general change questionnaire, a stages of concern open-ended question and a level of use interview.

Tools to Assess Change Readiness

Organizational readiness is assessed using a questionnaire containing questions that probe readiness in three common aspects of all change plans: process, context and people (Armenakis & Bedeian, 1999; Holt et al., 2007; Walker et al., 2007). Teachers are asked to complete a stage of concern (SoC) and levels of use (LoU) tool, derived from Hall and Hord's (2020) concerns-based adoption model (CBAM) of change. The school principals and academic department heads graph that data to understand both individual and organizational readiness within each school.

Change questionnaire

The organizational change questionnaire contains specific questions about organizational

readiness based on Weiner's (2009) questions about change valence, commitment and efficacy

and Louis et al.'s (2017) questions about the attributes of learning cultures. I used the data

collected by the teachers, school principals and academic department heads, and my

understanding of the change content, process, and the organization's people, to complete the

change questionnaire reflected in the rating scales in Table 2.

Table 2

Change Questionnaire

Aspects of Change		Rating
Content		
Teachers understand the purpose of change (change valence)		4
Teachers understand the plan		3
Teachers understand the value of the plan (change valence)		3
Teachers are committed to taking part in the change (change commitment)		2
Teachers understand their role in the change		4
	16	64%
People		
Teachers are engaged in their own learning plans.		2.
Teachers regularly share their learning with colleagues		2
Teachers try new ideas in their classes, sharing their learning with their students.		2
Teachers are confident in their ability to change (self-efficacy)		2
Teachers are confident in their collective ability to change (change efficacy)		2
	10	40%
Process and context		
Leaders have used a change model in the past (change efficacy)		0
Leaders have successfully implemented a change plan in the past (change efficacy)		1
Leaders have the resources for the change (change efficacy).		2
Leaders have set the change plan as a high priority (change valence)		4
The organization has a culture of change		2
	9	36%
0-5 scale with 5 being most likely and 0 being not present Total points/75 35		47%
Change commitment 2/5		40%
Change efficacy 5/20		25%
Change valence 11/15		73%

Note: The table provides descriptors about the content, people, process and context of a change

and rates the organization's readiness based on these descriptors. The data in this table is based

on the author's knowledge of the organization and the people.

The organizational readiness questionnaire shows that the teachers generally understand the content of the change, with a rating of 64%. The teachers are not accustomed to working together and are not confident in their ability to manage change, with a rating of 40%. The leader-led change process indicates that the organization has little experience with successful change and has a rating of 36%. The valence measure is 73%, the commitment measure is 40%, and the efficacy measure is 25%. Overall the change readiness rating is 47%. The valence measure is high and shows that teachers generally understand the importance of the change. The low commitment and efficacy measures suggest that they are not sure that the organization can manage the change and their commitment to the change is not strong. These low ratings indicate that the change plan should be slow and staged to allow time to build a strong sense of change efficacy and allow time for commitment to develop. Leaders should plan to make changes during the process (Fullan et al., 2018; Oreg et al., 2011).

The low scores for organizational readiness may reflect the risk-averse nature of the organization or the impact of multiple changes in priorities over the past few years and the resultant loss of change efficacy, which makes the teachers less confident and less willing to participate in another change plan (Weiner, 2009). The results of this questionnaire point to the need to support organizational members by changing their environment to support more substantial change efficacy and their perception of the organization's ability to support the change. The leadership must do more work to engage teachers in understanding the problem and how the solution is both preferable and possible (Weiner, 2009).

Measures of Individual Attributes

Two measures of individual attributes are used to assess individual change readiness and are combined to create an organizational map as a baseline measure of organizational readiness.

The stages of concern (SoC) open-ended statement asks teachers to record their thoughts and feelings about a change to 21st century learning. Their school principal or academic department head reads their answers. After determining the overall theme in the answers, they assign each teacher a specific stages of concern (SoC) level, as illustrated in Table 6 in Appendix A.

A similar open-ended process asks teachers about the degree to which they are currently implementing 21st century approaches in their teaching. Their answers are assigned to a specific level of use (LoU) stage, as illustrated in Table 7 in Appendix B (Hall & Hord, 2020). The teachers use this process to assess their change readiness, and the leaders use it to determine group readiness in each school.

Each school principal or academic department head aggregates the data and creates a school map for both stages of concern and levels of use. These tools provide an individual and a school-level measure of readiness as baseline measures (Hall & Hord, 2020).

The final part of organizational change readiness is to determine the internal and external competing forces that will impact the change.

Internal and External Forces Impacting Change

Multiple internal and external forces impact the change process to either support (driving forces) or delay (restraining forces). Change requires either more driving forces or reducing the restraining forces (Deszca et al., 2020).

Internal Forces

The experience and expertise of our teachers are essential internal driving forces. At least 70% of our teachers have taught for more than five years, and 70% of them have a Master's degree or specialist qualifications in their discipline or division. They have a broad repertoire of instructional strategies to draw from and a deep understanding of the content. These factors will

support them during the change (Tschannen-Moran & Hoy, 2007). The teachers are generally

life-long learners, some of whom participate in teacher-led learning teams where they jointly

explore and implement new strategies. Teachers are financially supported to complete additional

qualifications and graduate-level courses aligned to their teaching responsibilities.

Another internal driving force is the structure of the schools. Timetables provide time for

teachers to work together. Teachers spend, on average, 15 hours a week in classes and are at

school for 36 hours per week, allowing time for collaboration, assessment, and professional

development (Robinson et al., 2009).

The most significant internal restraining force is the sense that there is no need to change

since students, by all academic measures, are doing well at school. Teachers, students and

parents are confident that the current educational system is supporting student learning based on

the achievement data and believe that there is no need to change, creating a sense of inertia

(Deszca et al., 2020). Current student success is the most difficult restraining force to overcome

as it does not support the need for change (Deszca et al., 2020).

External Forces

An external restraining force is the changing demographics of the schools' catchment

area and the need to maintain enrolment. The leadership has no control over the change in

demographics, but a drop-in enrolment will impact the resources available to support the change

vision.

Parents can be either a driving or a restraining force. Parents have expectations about

how schools work, and as they are paying for their child's education, they believe they have a say

in the school program and procedures (Evans & Thompson, 2021). If they understand, accept

and support the change to 21st century learning, they will support the teachers and support the

change when speaking to other prospective parents. If they do not understand or accept the change, they may withdraw their child. Losing enrolment has reputational and operating costs (Evans & Thompson, 2020; ISM, 2015).

The change plan must consider the internal and external driving and restraining forces to ensure we maximize the driving forces and minimize the restraining forces.

Chapter 1 Conclusion

Chapter 1 describes the broad political, economic, social and cultural contexts of the family of independent schools and its hierarchical organizational and leadership frameworks. My integrated leadership principles and actions focus on building relationships, capacity, and supporting the instructional program. Social cognitive theory and the triadic reciprocal model of causation direct my leadership actions and decisions. The leadership problem of practice is a gap between the current, traditional school system and the desire to create a 21st century school system. The gap is framed and understood through the formation of guiding questions. Implementing Fullan et al.'s (2018) deep learning model, the leadership-focused vision for change is described, and change drivers are determined. Organizational and individual change readiness is measured. The information about the organization, its employees, and the various aspects of the problem of practice inform the change implementation plan described in Chapter 3.

Chapter 2 Planning and Development

Chapter 2 focuses on the planning and development of the change plan that addresses the problem of how to create a 21st century, student-centred learning environment in a traditional teacher-centric school system. Chapter 2 describes how my leadership approach to change focuses on managing the content, people and process of change. A change model is chosen to

organize and support the change implementation plan described in Chapter 3. This chapter outlines the necessary changes to move the organization from its current state to its preferred future state. Social cognitive theory provides a framework for identifying and evaluating possible solutions to the problem of practice. One solution, creating collaborative inquiry teams, is chosen to serve as the focus of the change plan. The chapter discusses the ethical issues surrounding change within the organization**.**

Leadership Approaches to Change

Chapter 1 introduced the theoretical framework of the organizational improvement plan and my integrated leadership principles that include elements of transformational and instructional leadership as outlined in Table 1. These leadership principles guide my approach to change by managing the content, people and process of change. The content of change is the change vision described in Chapter 1. Managing people during a change involves changing the beliefs, attitudes, behaviours and skills of the change participants, the teachers. The process of change is the change implementation plan described in Chapter 3 (Ackerman-Anderson & Anderson, 2010; Anderson & Ackerman-Anderson, 2010).

Change Theory

A leader can mandate the change vision and create the change process, but people have to implement the change. The success or failure of the change is dependent on the actions of the teachers who are the change participants. I use my transformational and instructional leadership principles to provide the conditions that support the teachers as they make changes to their practice (Fullan, 2016; Hall & Hord, 2020; Katz & Dack, 2013). As described in Chapter 1, the interconnection between teachers' behaviour, the physical and social environment, and their

personal attitudes and beliefs suggests how leadership actions can manage the content, people and the change process.

Managing the Content of Change

As the leader, articulating a clear and compelling vision connected to improving student learning involves transformational leadership approaches to change (Marks & Printy, 2003). The change vision or content of change helps followers see the possibility of the change and supports change readiness (Armenakis et al., 1993). To actualize the change vision, the teachers need to understand and value it, changing their attitudes and beliefs about their instructional practices (Fullan, 2016; Hall & Hord, 2020). As a transformational leader, I inspire teachers to think about what 21st century learning means for student success and the potential positive impact on their practice. I share examples of successful practice as a source of inspiration and to improve their commitment to participate in the change (Fullan, 2014; Leithwood & Jantzi, 2005; Robinson et al., 2009).

Managing People in Change

As a transformational leader, I manage people during change by building relationships and capacity through actions that support changes to teachers' attitudes and beliefs.

Building Relationships

Building relationships through trust is a critical transformational leadership action that supports people during change (Bryk & Schneider, 2002; Tschannen-Moran, 2014). When relationships are strengthened, trust increases (Fullan, 2016). Trust is the willingness to be vulnerable to someone else and be confident that the other person is "benevolent, honest, open, reliable and competent" (Tschannen-Moran & Gareis, 2015a p.257). Relational trust fosters innovation and the willingness to collaborate, balancing autonomy with collaboration (Fullan,

2020). Engaging with teachers through building a trusting relationship is a significant step in achieving school improvement. I do it by demonstrating trust in the teachers as experts in their craft and being available and present to discuss their ideas and challenges with the expected change (Heck & Hallinger, 2010; Leithwood & Sun, 2012; Tschannen-Moran & Gareis, 2015a).

I take the time in large and small groups to explain the proposed change, describing the why, what, and how so people know what to expect (Beatty, 2015). I have conversations with teachers to discuss what we are continuing to work on and what we are stopping in order to create space for the new vision and in recognition of the many demands on teachers' time and attention (Hall & Hord, 2020; Holmes et al., 2013; Reeves, 2021). Building relationships supports building capacity (Stoll et al., 2006).

Building Capacity

As a transformational leader, I work to build capacity by creating a culture of continuous learning. For teachers to support 21st century competencies in students, they need to develop the same competencies. Change for the teachers involves new learning as they become agile, flexible, resilient, and motivated learners (Katz & Dack, 2013). To create the conditions of deep learning for students, teachers need to experience deep learning to support changes in their beliefs, behaviour, and the tools they use (Fullan, 2016; Katz & Dack, 2013). School leaders can build capacity by learning with the teachers. As a co-learner, a leader can provide authentic feedback to the teachers, supporting efficacy beliefs (Bayraktar & Jiménez, 2020). Learning with the teachers sends a signal that the leader values the learning which is a fundamental part of the change process (Stoll et al., 2006).

Managing the Process of Change

The change process is the way the change is planned, designed and implemented (Anderson & Ackerman-Anderson, 2010). As an instructional leader, I change the learning environment to support teacher self-efficacy through building structures and creating a positive climate as a change process strategy.

Building Structures

I manage the change process and support teacher efficacy by creating learning structures that provide teachers with the opportunities to experience the sources of self-efficacy described in Chapter 1. These experiences allow teachers to assess their competence and strengthen their efficacy beliefs, as illustrated in Figure 2 (Lee et al., 2017; Tschannen-Moran et al., 1998). As teachers create classroom experiences that positively impact student learning, their beliefs about 21st century learning change (Guskey, 1984, 2020). Creating the right learning environment includes the leader being present during the change process, working closely with teachers to co-construct goals and providing supportive feedback around those goals to support the development of teacher self-efficacy (Dewitt, 2018).

Building a Positive Climate

A positive climate for change includes protecting instructional time and professional learning time. It involves providing the resources teachers need to learn what 21st century learning involves and the resources to try new ideas in the classroom (Murphy, 2015). Building a positive climate includes monitoring what is happening as teachers begin to implement changes in instruction and providing support, not criticism, to ensure the environment is conducive to learning through opportunities for feedback and celebrating successes and understanding "failures" (Tschannen-Moran et al., 1998).

Change takes time, focus and resources as teachers move through the change process developing new understandings and competencies (Hall & Hord, 2020). As the leader, I monitor the plan's implementation through regular classroom walkthroughs and conversations with teachers. We discuss how teachers might adjust their practices as they learn alongside their students (Hall & Hord, 2020; Robinson et al., 2008, 2009).

I use transformational and instructional leadership to support the change by focusing on the content, people, and the change process. In leading change, I modify the learning environment and use relationships to support changes to teachers' attitudes and beliefs. An essential next step in leading change is choosing an effective change model to organize the change process.

Framework for Leading the Change Process

The change vision involves transformational or second-order changes that involve teachers' changing their behaviour, beliefs, attitudes, knowledge and skills to achieve different outcomes for students (Fullan, 2016; Timperley & Parr, 2005). The change vision requires restructuring how teachers engage with each other and new ideas. A transformational change requires effective leadership and an effective change model (Anderson & Ackerman-Anderson, 2010). Three change models, Armenakis et al.'s (1993, 2000) institutionalizing change model, Cawsey's (2020) change path model and Fullan's (2016) dynamic change model, were reviewed and considered.

Institutionalizing Change Model

The institutionalizing model, described by Armenakis et al. (1993, 2000), incorporates Lewin's (Burnes, 2004) three stages of change and Bandura's (2001) social cognitive theory. The institutionalizing model focuses on the change recipient and their motivation to support

organizational change, leveraging social cognitive theory to build efficacy and change peoples'

beliefs and attitudes (Armenakis et al., 1993, 2000; Armenakis & Bedeian, 1999). The model

views change as a process that includes four stages: readiness, adoption, commitment and

institutionalization. Readiness is the beliefs, attitudes and intentions that the change recipients

hold towards the change. During readiness, people are preparing for the change. When positive

readiness is created, resistance to change is decreased. During adoption, the change is

implemented, and people begin to behave in new ways. The commitment stage involves people

accepting and more fully implementing the change. Institutionalization is the realization of the

change vision and the conclusion of the change plan (Armenakis et al., 1993, 2000).

The two critical parts of the model are the five change messages and the influence

strategies. The five change messages are discrepancy, appropriateness, self-efficacy, principal

support, and personal valence. These five messages influence the change recipients' acceptance

of the change vision and are repeated during each change stage. The discrepancy message

describes the current and desired future stage. The appropriateness message explains why the

change is the right solution to the gap described in the discrepancy message. The efficacy

message expresses confidence that people can manage the change. The principal support

message is that the organization has the resources and commitment to support the change.

Personal valence describes the value of the change to the individual (Armenakis et al., 1993,

2000; Armenakis & Harris, 2002).

The change agent's task is to influence and shape the change recipients' beliefs using the

five key messages and the different influence strategies. Two of the influence strategies, active

participation and persuasive communication, leverage triadic reciprocal causation to provide

access to sources of self-efficacy to support changing behaviour. The attributes of the change

agent, especially credibility and the ability to build relationships, are necessary factors in building support for the change. Ongoing assessment of the change recipients' commitment to the change allows adjustments to the change plan during the implementation stages, creating a responsive change plan (Armenakis et al., 1993, 2000).

Change Path Model

Cawsey et al.'s (2020) change path model focuses on the change process, creating an effective, systematic and linear change process (Deszca et al., 2020). The model includes four defined stages. The awakening stage begins with a critical organizational analysis that considers the organization's internal and external environment to understand what needs to change. A change readiness survey is completed to understand how ready the organization is to change (Deszca et al., 2020). The change agent uses that information to develop a change vision (Deszca et al., 2020). In the mobilization stage, the change agent refines and clarifies the change vision through discussions with key stakeholders. The change agent further analyzes the organizational structures, culture and power relationships to determine how to use those organizational elements to support the change plan (Deszca et al., 2020). The acceleration stage includes the execution and implementation of the change plan, making adjustments based on feedback from stakeholders and other measurements. This stage involves managing the transition from the current stage to the desired future state (Deszca et al., 2020). The institutionalization stage involves continuous monitoring and measuring progress, ensuring the change is embedded into the organization, and the transition to the desired future state is realized (Deszca et al., 2020).

Dynamic Change Model

Fullan's (2016) dynamic change model is different from the other two models in that it is a non-linear, iterative, continuous learning model focused on rapid cycles of "directed vision,

innovation and consolidation of learning" (Fullan, 2016, p. 80). These three elements work

together in the process of change designed to build capacity and coherence to support

transformational change within schools and systems (Fullan et al., 2014, 2018; Fullan & Quinn,

2016). This model focuses on changing people's beliefs, attitudes and behaviours. Participants

learn about the deep learning competencies and how to use the learning design elements,

including pedagogy, partnerships, learning environment and digital tools, through active

participation in collaborative inquiry cycles. New learning, the essence of change, happens

continually through three overlapping change phases called clarity, depth and sustainability that

define increasing understanding, skill and knowledge about deep learning.

Clarity is the beginning phase where teachers begin learning about the global

competencies and the learning framework through the collaborative inquiry cycles, testing new

ideas in the classroom. The second phase, depth, involves increased engagement in deep learning

work and stronger skills in using the deep learning framework to create richer learning

experiences for students. In the final phase, sustainability, the learning design is fully

implemented. Full implementation means that deep learning is part of teachers' professional

practice, and they embrace a culture of continuous learning (Fullan, 2016; Fullan et al., 2014,

2018; Fullan & Kirtman, 2019; Fullan & Quinn, 2016). Collaborative inquiry cycles establish a

system of continuous learning that continues to push change forward (Fullan et al., 2014, 2018).

Assessing the Models

The author assessed the change models based on the perceived degree to which each

model would support the people involved in the change, the change vision and the process of

change. The change models were rated on a scale of zero to five against specific criteria in each

category. Zero represented the absence of a characteristic, and five represented the characteristic

being fully present. The criteria chosen for the assessments are important to the organizational

improvement plan. They include using social cognitive theory, supporting my leadership

principles, supporting the elements of deep learning and leveraging the change drivers. The

overall assessment rating scores are found in Table 3. The detailed assessment is found in Table

8 in Appendix C, which shows the specific elements of each criterion used to rank the change

models.

Table 3

Overall Change Model Evaluation

Evaluation of Change Models	Institutionali zing change	Change Path	Dynamic Change
Focus On People Score (30)	15	9	15
Focus on Content Score (20)	10	9	15
Focus on Process Score (25)	18	20	17
Total	43	38	47
% Score	57	51	63

Note: This table summarizes the rating scores of each of the change models based on the author's

perception of the degree to which the model supported the individual criteria in each category.

The focus on people assessment considered each change model's use of social cognitive

theory to develop efficacy through opportunities for active participation, triadic reciprocal

causation and persuasive communication. The institutionalizing change and dynamic change

models use social cognitive theory to change people's beliefs, attitudes and behaviours, giving

them equally high scores.

The focus on people assessment included each change model's support for my leadership

principles of building relationships, capacity and supporting learning. The dynamic change

model has the highest score as it is designed to support educational change (Fullan, 2016). The

institutionalizing change and change path models are general change models and have a lower score.

The focus on content criteria assessed how well each change model would support the change vision. These criteria included the development of a learning environment, creating teachers as activators, having the leadership act as lead learners and supporting culture building. Since the change vision is derived from Fullan et al.'s (2018) deep learning model, the dynamic change model, which Fullan uses as an implementation tool, has the highest score. It is the only change model that fully supports all aspects of the change vision.

The focus on the process of change criteria assessed how well the model would leverage the change drivers, support the change process and align to the current organizational structure. The change path model has the highest process score. It has a strong focus on the organization and has a greater alignment with the current hierarchical organizational structure.

In this assessment, the dynamic change model has the highest overall score, 63%, followed by the institutionalizing change model at 57% and the change path model at 51%. The relative closeness of the scores suggests that any of the three models could support the change. However, I believe using the dynamic change model and elements of the institutionalizing change model is the best choice for this organizational improvement plan.

The problem of practice asks leaders to consider how to change a traditional school system to a future-focused system. The change vision uses Fullan et al.'s (2018) deep learning model as the provisional structure to support the transition from the current to the future system. The dynamic change model is integrated into Fullan et al.'s (2018) deep learning model as the change process, aligning with the problem of practice and the change vision. Deep learning focuses on building capacity through learning over time using a process of iterative cycles of

innovating and adjusting ideas based on feedback. A vital part of the model is creating a culture

of learning based on the collaborative inquiry process (Fullan et al., 2018, p. 123). The

collaborative inquiry process supports the four sources of efficacy described in Chapter 1, which

are necessary to support a change in teacher practice. Collaborative inquiry involves teachers

learning through doing the work, and teachers need to believe they can be successful (Fullan,

2016, p. 80). The dynamic change model aligns with my transformative leadership style,

focusing on relationships and building capacity. It aligns with my instructional leadership style

of building the structures to support learning, including student and teacher learning. Using the

deep learning dynamic change model integrates the change process with the content of the

change and supports the shift in thinking required by the teachers and leaders.

However, the organizational questionnaire described in Chapter 1 shows a weak change

efficacy score and low process scores, suggesting that the organization has little change

experience and little collective confidence in managing change. The dynamic change model's

sole use of collaborative inquiry cycles to support change is not enough scaffolding for an

organization that has not used a change model in the past and has little confidence in its ability to

manage change. The dynamic change model's reliance on collaborative inquiry is also not

enough to support the people who have to manage the change and the people who are the change

recipients. To build a more substantial change process, amalgamating Armenakis et al.'s (1993,

2000) institutionalizing change model with the dynamic change model would provide the

additional scaffolding.

The institutionalizing change model provides structure without being too prescriptive and

uses social cognitive theory as part of its change messages and influence strategies. The change

messages focus on changing the beliefs of the change recipients to support readiness, adoption

and commitment, which is essential in an organization that is reluctant to change. The change messages focus on the discrepancy between where the organization is currently and where it needs to be and the individual and collective efficacy of the change recipients (Armenakis et al., 1993, 2000). The influence strategies used by leaders to support motivation for change are where the iterative learning cycles of Fullan's dynamic change model (2016;2014, 2018) would be integrated. Using specific influence strategies aligned to social cognitive theory supports my instructional leadership focus on creating school learning structures. The model's use of social cognitive theory aligns with the change vision that requires teachers to actively participate in new learning, providing opportunities to change their practices and develop the competencies they need to build with their students (Armenakis et al., 1993, 2000; Fullan, 2016).

Cawsey's (2020) change path model is not the choice to integrate with the dynamic change model as it has a strong focus on organizational, not individual, change. The change vision focuses on individual change, readiness and building self-efficacy. The change path model does not have as strong a focus on preparing people for change, or building capacity, which are essential in this problem of practice. The change path model does not have a solid connection to social cognitive theory and does not build efficacy, which is necessary to change teacher practice. The change path model focuses more on the change agent developing and communicating a change vision for recipients to accept which does not build ownership for the recipients and does not fit into the iterative nature of the dynamic change model (Deszca et al., 2020).

The institutionalizing change model, with its alignment to social cognitive theory, its focus on readiness, learning, and influence strategies, is the preferred model to use in combination with the dynamic change model.

The Integrated Change Model

The integrated change model combines the dynamic change model and the institutionalizing change model, as shown in Figure 3. The model combines the change phases and collaborative inquiry cycle elements from the dynamic change model with the influence strategies, change assessment, and change belief messages from the institutionalizing change model to create the integrated change model. Each part of the model is described to illustrate its main features. This model guides the change implementation plan described in Chapter 3.

Figure 3

Integrated Change Model
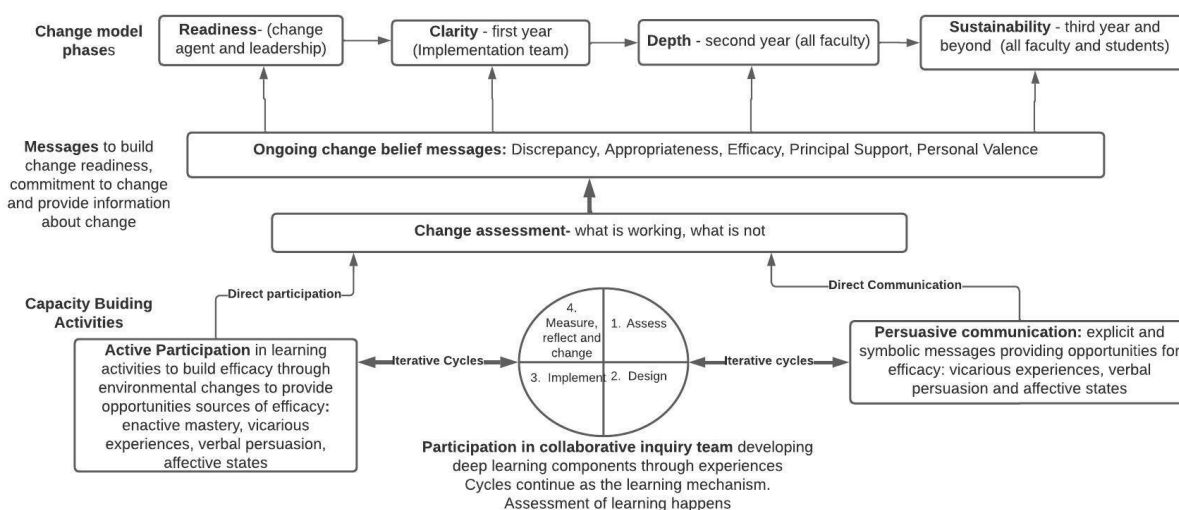
Note: This integrated change model image illustrates elements taken from the institutionalizing and dynamic change models. Both have a strong focus on people during change.

From "Making Change Permanent: A model for institutionalizing change interventions" by A. Armenakis, S. Harris, and Hubert Field, 2000, *Research in organizational change and development, 12, p. 102 (*https://doi.org/10.1016/S0897-3016(99)12005-6) Copyright 2000 Emerald Group Publishing.

From "Deep Learning: Engage the world, change the world" by M. Fullan, J. Quinn, J. McEachen, 2018, Corwin p. 34 Copyright 2014 by New Pedagogies for Deep Learning (NPDL).

Change Model Phases

The model includes four change phases. Readiness is the first phase which is the pre-planning phase. The change agent and the leadership team build the change vision, share the need for change and create an implementation team. Clarity is the next phase and happens in the first full year of implementation. In this phase, the implementation team works together to understand the deep learning elements and get ready to support teacher learning. Depth is the third phase and involves all the teachers and the leaders working with the implementation team leads. Sustainability is the final phase in the third year. It involves all the teachers and leaders continuing to work on implementing deep learning in their classes. At this phase, it is expected that deep learning is embedded into the culture of the schools as a permanent change in pedagogy (Fullan et al., 2018).

Messages

The ongoing change belief messages of discrepancy, appropriateness, efficacy, principal support and valences are repeated during each phase. The change messages support readiness during the initial phases and then build commitment to change and share information (Armenakis et al., 1993, 2000; Armenakis & Harris, 2002). These messages form a large part of the communication plan described in Chapter 3 and are shaped by the assessment information collected as the change plan unfolds.

Change Assessment

The change assessment information is collected from the teachers and leaders participating in the capacity-building activities. The change assessment information is part of the

monitoring and evaluation framework. The information informs the leaders about what is working and what is not working from the point of view of the change recipients (Armenakis et al., 1993, 2000; Armenakis & Harris, 2002). The information is shared between the teams and the leaders and helps to adjust the plan.

Capacity-Building Activities

The capacity-building activities involve changes to the teachers' working environment that build self-efficacy beliefs. At the centre of the capacity-building activities are collaborative inquiry cycles (Fullan et al., 2018). The teachers use these cycles to learn about the deep learning competencies and the learning design elements as they use them with students. Active participation and persuasive communication are two influence strategies that provide other opportunities for teachers to experience sources of efficacy, building their change capacity. Active participation activities involve the teachers in specific learning activities, for example, during a professional development session or when teaching a class. Persuasive communication includes a range of messages that allow teachers to experience learning vicariously or to receive positive feedback on their activities (Armenakis et al., 1993, 2000; Armenakis & Harris, 2002).

The integrated change model is designed to guide the change plan supporting the change vision. Its capacity-building activities, aligned to social cognitive theory, support the learning the teachers need to do to be successful in transformational change. The next step in the change preparation is completing the critical organizational analysis to identify conditions that will need to be in place to support the change to deep learning.

Critical Organizational Analysis

Moving from a traditional school system to a 21st century school system involves re-imagining learning and re-culturing the classroom to create a learning culture (Fullan et al.,

2018). Critical organizational analysis helps the change agent understand the gap between the organization's current and desired state. Since the problem of practice relates to implementing Fullan et al.'s (2018) vision of deep learning, the school conditions innovation configuration map, shown in Table 9 in Appendix D, was created as the measurement tool.

An innovation configuration (IC) map is one of the concerns-based adoption model (CBAM) tools introduced in Chapter 1. The school conditions innovation configuration map identifies five learning conditions that are necessary to support the shift to deep learning. It is an adaptation of the school conditions rubric described by Quinn et. al. (2020 pp. 217-220). The five learning conditions that make up the school conditions innovation configuration map include vision and goals, leadership, collaborative culture, deepening learning, and new measures and evaluation. The school conditions innovation configuration map describes each learning condition in some detail, articulating what the condition looks like when it is fully realized (level one) and when it is emerging or absent (level four). Full implementation for each condition is described on the far left of the map, and limited or no implementation is described on the far right of the map (Hall & Hord, 2020). For the critical organizational analysis, completing the school conditions innovation configuration map identifies the current conditions within the schools, what needs to change, and where the implementation plan should start. The school conditions innovation configuration map is completed each subsequent year as part of the monitoring and evaluation framework discussed in Chapter 3, to measure progress in the change plan (Quinn et al., 2020).

Vision and Goals

Currently, the leadership is at the beginning stages (level four) in determining the deep learning strategies, goals and possible implementation steps. The director has approved the

change vision in principle, but the specific goals and strategies have not been determined.

Chapter 3 develops the specifics of the implementation plan, including priorities and goals. Most

of the schools' decisions and use of resources currently reflect a traditional school system

focused on student academic achievement and not a 21st century approach.

Leadership

The overall organizational leadership is hierarchical and role-based, as described in

Chapter 1. The leadership team is beginning to discuss deep learning, but they have a limited

understanding of what it means in practice. The role of middle leaders and lead learners has not

been developed. Our leaders are not yet modelling being lead learners who are involved in

shaping the culture of learning (Fullan et al., 2018). We have not built change capacity among

the school leaders. The schools are at the beginning (level four) stage for this condition.

However, our instructional leadership practices, including classroom walkthroughs, the

appropriate provision of resources and protected professional development time, are practices

that support the leadership changes that are needed.

Collaborative Culture

On the school conditions innovation configuration map, collaborative cultures include

collaboration, inquiry and capacity building. Overall the schools would score at the beginning of

developing collaborative cultures (level four), as there is a strong culture of teacher autonomy

and independence (Timperley et al., 2020). Many teachers focus on their students and their

classroom practices and are reluctant to engage in professional conversations that may reveal

their vulnerabilities, hampering opportunities for learning from each other (Timperley et al.,

2020). The lack of structured collaboration between teachers decreases the consistency of their

approaches and produces an inconsistent experience for students (Timperley & Robinson, 2000).

Teachers maintain friendly relationships with each other and share ideas and resources. Their interactions are collegial rather than aligned and strategic. Teachers are reluctant to challenge each other's practices (Glazier et al., 2017; Hargreaves, 2019; Little, 1990). However, the collaboration between teachers and students happens in some classes through the development of project work. There is some collaboration between leaders and teachers and limited collaboration between leaders and students.

Inquiry is not widespread in most classrooms, but teacher inquiry is beginning. For example, there are some teacher learning teams where teachers read and discuss a book and are encouraged to use their new learning in the classroom. During faculty meetings, the teams might share their new learning with the school community.

Capacity building is limited to supporting individual teachers as part of their personal, professional growth plan. Professional growth plans need to reflect the school priorities, which are often broad, but are individual to each teacher, lessening coherence within the schools. The effectiveness of the growth plan to change teacher practice depends on each leader's skills in supporting the learning process and the engagement of the individual teacher.

Deepening Learning

The schools score at the beginning of this condition (level four). The six global competencies are not established learning outcomes. Classes are not organized so that students ask questions that direct inquiry activities (Fullan et al., 2018, p. 59). Individual teachers may explore project-based learning to connect learning to the real world, but this is not a required instructional strategy. Teachers are expected to use a backwards design planning template that focuses on big ideas but they do not always transfer their planning into actual lessons.

New Measures and Evaluation

The teachers deliver a solid academic program focusing on marks as the measure of success. The evaluation of student learning relies mainly on products such as tests, essays, and projects. Teachers are beginning to diversify their assessment measures by incorporating observations and conversation assessments as specified by *Growing Success* (Ontario Ministry of Education, 2010). The deep learning conditions, design elements and outcomes are not measured or assessed. These conditions place the schools at the beginning stage of this condition (level four).

Needed changes

Based on the school conditions innovation configuration map rankings, summarized in Table 4, the schools are at a limited or beginning (level four) stage of implementing deep learning in each of the five necessary learning conditions (Fullan et al., 2018; Quinn et al., 2020).

Table 4

Summary of School Conditions Innovation Configuration Map

School Conditions	IC Map Ranking
Vision and Goals	4
Leadership	4
Collaborative cultures	4
Deepening the learning	4
New measures and evaluation	4

Note: The school conditions innovation configuration (IC) map ranking illustrates that changes are needed in each of the five school conditions. The descriptors are found in the school conditions innovation configuration (IC) map in Table 9 found in Appendix D.

The innovation configuration map is used each year to assess the progress made over the year and set goals for the following year (Fullan et al., 2018; Quinn et al., 2020). In the first year of implementation, the change implementation plan uses the school conditions data to set

appropriate goals and to plan the strategy to move the schools forward. The organizational

readiness data reveals that the organization is moderately open to change but has little previous

change experience and the change implementation plan accounts for this. Building understanding

and skills in all five school conditions require creating learning solutions for the leaders and the

teachers (Fullan et al., 2018).

Solutions to Address the Problem of Practice

"Educational change depends on what teachers do and think" (Fullan, 2016, p. 97).

Changing teacher practices requires new learning to support different strategies, resources,

curricula and beliefs about teaching and learning in the 21st century (Fullan, 2016). Teachers and

leaders need to learn about the global competencies, the deep learning design elements (learning

partnerships, learning environments, pedagogical practices, leveraging digital) and the process of

collaborative inquiry (Fullan et al., 2018, p. 34). According to triadic reciprocal causation, one

way to change beliefs and attitudes is to change the teacher's learning environment (Bandura,

2018). For example, deep learning requires teachers to work together in collaborative inquiry

teams, where teachers jointly explore questions about student learning to learn "from and with

each other" (Fullan et al., 2018, p.31). Deep learning requires teachers to learn with their

students and create learning environments that connect students to real-world problems where

they use global competencies to solve problems (Fullan et al., 2018, p. 69). Guskey (1986, 2020)

suggests that when teachers see the positive impact of their changed practices, they change their

beliefs reinforcing changes in their behaviour. The solution to the problem of practice must

support teacher learning through changes to the teachers' environment.

Three different solutions to the problem of practice are considered, and each presents a

different way to support the teachers' learning environment. Solution one, professional growth

plans, focuses on using accountability measures to support individual teacher learning. Solution two, using professional development days for training, is designed to support group learning. Solution three, inquiry teams, focuses on building a learning culture by creating teacher teams. Each solution focuses on teachers and their learning environment because, at its core, successful change relies on teachers changing their practices (Fullan, 2016). Each solution is described, and its benefits, consequences, and resource needs, including time, materials, and personnel costs, are considered.

Solution One: Professional Growth Plans

Solution one is to use the pre-existing requirement for teachers to set learning goals as part of their annual professional growth plan as the learning structure. Goal setting in the professional growth plan focuses teachers' attention on the new learning they need to support student learning outcomes (Robinson, 2011; Timperley, 2011). Teachers are expected to set goals that include learning the deep learning content and practices, implementing these changes in their classroom, and evaluating their effectiveness on student learning. The teacher professional growth plan is a component in the yearly formative evaluation tool used by the school leadership (Teacher Learning Plans, 2007). Teachers discuss their professional learning plan with their direct supervisor, work on the plan throughout the year, and discuss the impact on their professional practice and student learning at the end of the year.

Benefits and Consequences

A benefit of the professional growth plan solution is that it is standard practice for the leadership and teachers, who are generally accomplished and confident with high levels of self-efficacy in the current culture. Self-efficacy influences personal goal setting. The stronger the teacher's self-efficacy, the higher the goal the teacher will set and the stronger their commitment

to the goal (Bandura, 1982; Guskey, 2021; Tschannen-Moran et al., 1998). Goal setting is an

integral part of professional learning, providing a clear focus to teacher learning (Hoerr, 2005).

This form of teacher learning is individualized, flexible and provides some autonomy (Guskey,

2000; Katz & Dack, 2013). The professional growth plan requirement is based on the Ontario

College of Teachers' *Standards of practice for the teaching profession* (2020), giving it

legitimacy and highlighting its importance in supporting professional practices. The OECD

(2013) report on teacher evaluation suggests that an effective teacher appraisal system can

positively impact teacher practices through supporting self-efficacy beliefs and thus improving

student learning outcomes.

The professional growth solution is not deliberately aligned to social cognitive learning

as it is an individual plan. However, teachers could collaborate and support each other's learning

through conversation and joint actions. This might not be accepted by the teachers who value

autonomy and independence (Little, 1990). For example, teachers could try new practices in their

classroom and get feedback from an observer as a mastery experience and opportunity for

feedback. The leadership may decide to add these two conditions to the requirements of the

professional growth plan to support teacher learning through creating performance opportunities,

as described in Chapter 1.

There are risks to using this solution to achieve the required new learning. The goals set

by the teachers need to be specific, clearly related to student learning and supported by a strategy

to achieve them (Cole, 2004). Teachers need feedback on their learning, which may be hard for

leaders to provide promptly. Teachers can use student engagement as a source of feedback on

their teaching competence, as illustrated in Figure 2, but they need to be attentive to this source

of information. Allowing the teachers to set their own goals also risks fragmenting the overall focus of learning for the organization (Bendikson et al., 2020).

Another risk is that a culture of compliance will develop (Sinnema & Robinson, 2007). Teachers may produce professional learning plans that are achievable in a year or based on learning that they have already mastered to "pass" the evaluation component of the accountability solution (Butler, 2007; Sinnema & Robinson, 2007). The culture of compliance and the focus on "passing" the evaluation would not support building a learning culture. There are a few opportunities to build relationships when teachers discuss their goals with their supervisors. This learning structure is not strongly linked to my leadership practices of broadly supporting learning within the schools.

Resource Needs

As annual professional growth plans are established within the schools, this solution does not require additional resources.

Solution Two: Professional Development Days

Solution two uses training as the professional development structure as the teacher learning method. Training is the most common form of professional development and involves a presenter sharing new ideas with participants through various activities (Guskey, 2000). There are five scheduled professional development days over the year. These professional development days include large group presentations and discussions, simulated practice with feedback and time for teachers to discuss the ideas and plan for future classes, working in grade level or department groups.

Regularly scheduled faculty meetings provide additional time to follow up on the learning initiated during the professional development days and offer more opportunities for

teachers to report the impact of their new learning on students in a structured format and discuss

the next steps (Yendol-Hoppey & Dana, 2010). The faculty meetings between professional

development days are an essential component of the training model of professional development

to support the implementation of the new learning (Joyce & Showers, 2002).

Benefits and Consequences

The benefit of the training solution is that it is an efficient and effective way to provide

information. All the participants have a shared experienced, share a knowledge base and develop

a shared language (Guskey, 2000). The professional development opportunities are designed

with the features Desimone and Garet (2015) described as essential to improving teacher

learning. The five elements include presentations that focus on content and how students learn;

opportunities for active learning; alignment to school priorities; sustained duration, and

collective participation. As teachers work together to make sense of the new material and apply it

to their students, they experience the social construction of knowledge (Eun, 2008). Using videos

to show classes where deep learning is well established provides teachers with vicarious

experiences to support self-efficacy development (Bandura, 1997; Eun, 2019). The requirement

that teachers plan together and then report back the impact on students provides the opportunity

for mastery experiences (Bandura, 1997, 2018).Teachers working together to understand and

implement new ideas are more motivated to change their practices if the connection to student

learning is clear (Desimone, 2009; Guskey, 2002b). The leadership can summarize the data

provided by the teachers to illustrate the connection between their new learning and student

outcomes at the school level rather than the individual classroom level. The leaders' presence at

the professional development days, working with the teachers to plan lessons, supports

relationships and capacity building (Robinson, 2011; Robinson et al., 2008).

Desimone and Garet (2015) outline some of the challenges of changing teacher practice through professional development. The challenges include changing teachers' content knowledge, the variability in teachers' responses to professional development, and the need to deliberately connect professional development to the classroom (Desimone & Garet, 2015). Teachers must be supported and encouraged to use their new learning in the schools by providing resources and specific in-class support to improve their self-efficacy beliefs and extend the impact of the new learning (Eun & Heining-Boynton, 2007). Training as professional development is not differentiated, and the content may not be equally engaging or appropriate. Typically, professional development focuses on what to change and why but not how to change (Cole, 2004). Other activities need to be added to the sessions to support the successful implementation of the new ideas (Cole, 2004; Desimone & Garet, 2015; Guskey, 2000; Joyce & Showers, 2002).

Resource needs

The training professional development solution is an effective and cost-efficient model of teacher learning (Guskey, 2000). This solution does not involve additional time or personnel requirements as the professional development days and the faculty meetings are a regular part of the calendar. There will be a training cost if external presenters or consultants provide the content for the professional development days. A yearly professional development budget would provide the funding within limits.

Solution Three: Collaborative Inquiry Teams

Solution three focuses on supporting teacher learning through the development of collaborative inquiry teams. This solution requires teachers and leaders to learn together in learning communities, building capacity within the schools to create an authentic learning culture

for the long term (Timperley et al., 2020). The collaborative inquiry teams allow individual and group learning, focusing on collaborative improvement and individual development (Osmond-Johnson & Campbell, 2018).

The leadership could build on the existing informal learning teams and individual teacher professional learning plans to create collaborative inquiry teams that focus on strategies and structures to build a personal and collective understanding of the deep learning competencies and the learning framework. Teachers and leaders would interact with new ideas and embed them into their teaching practice in short cycles of inquiry (Fullan et al., 2018; Quinn et al., 2020). Each school leader would be a co-learner to help shape the collaborative learning culture by valuing the learning content, modelling learning, supporting the team's relationships, measuring the team's growth, and celebrating their successes (Fullan et al., 2018). In this intentional team structure, the leadership changes the teacher learning environment by building the practice of collaborative inquiry. The collaborative inquiry groups are where teachers and leaders develop personal and collective understandings and build expertise by trying out new activities and watching others. Teachers measure the impact of the new pedagogical strategies and structures on students and, if the strategies are successful, change their behaviour and personal beliefs (Donohoo & Katz, 2017; Donohoo & Velasco, 2016). Participation in collaborative inquiry teams enhances opportunities to build self and collective efficacy through the experiences, building opportunities for personal goal setting, shared vision, critical thinking and debate (Bandura, 1997; Blase & Blase, 1999; Ryan & Deci, 2020). As Fullan stated (2016, p. 107), "significant educational change consists of changes in beliefs, teaching style, and materials, which can come about only through personal development in a social context."

Benefits and Consequences

Creating a culture of collaboration and working together to improve teaching are essential components of improving student learning through inquiry teams (Donohoo & Katz, 2016; 2017; Little, 1990). Utilizing a collaborative inquiry model to encourage the development of collective behaviours and beliefs improves teachers' sense of joint responsibility for student learning. It reinforces that teaching is a collective endeavour (Hargreaves, 2013). Teachers are encouraged to shift from the established culture of individual professional collaboration to group collaborative professionalism and greater efficacy (Fullan & Hargreaves, 2016; Hargreaves & O'Connor, 2018a; 2018b).

However, creating a collaborative learning culture is a long-term commitment to building the necessary processes, structures, and understandings to support an environment where teachers can challenge each other's understandings and practices (Datnow, 2011; Glazier et al., 2017; Kutsyuruba et al., 2014). Collaborative cultures are hard to develop and sustain and must be integrated into the mission and vision of the organization to endure beyond the tenure of the current leadership team (Datnow, 2011; Glazier et al., 2017; Reeves, 2021). Building trust between teachers and leaders and teachers and teachers is essential to support teachers as they move from private to public practice (Melville & Hardy, 2020; Tschannen-Moran, 2009). Building a collaborative culture changes the relationship between teachers and leaders, from a hierarchical authority-based relationship to joint learning, interdependence and shared responsibility for student learning (Lieberman et al., 2014). Teachers need support to move from autonomy and private practice to interdependence and collaboration (Little, 1990). Well-trained facilitators are essential to building functional collaborative teams that engage in the productive discourse patterns necessary to move learning forward (Glazier et al., 2017; Kutsyuruba et al.,

2014; Panero, 2021). It is the responsibility of the leaders to create the right conditions to build commitment to change (Jones & Harris, 2014).

Resource Needs

The collaborative inquiry team solution has a high time requirement. The collaborative inquiry groups need to meet regularly, at least twice a month. Time is always an issue for teachers who often feel there is not enough time for their daily work, let alone time for collaboration and professional learning (Lieberman et al., 2014). There may be additional budget costs if teachers need coverage to observe each other's classes, and a supply teacher is required. There may be higher personnel costs if the decision is made to provide a facilitator to support the collaborative inquiry teams, and the facilitator has a reduced teaching load. The materials cost is the same as in an average year.

Evaluating the Three Solutions

The three solutions are evaluated based on their ability to support the people involved in the change, the content of the change and the change process. Table 5 shows the percentage values for each solution based on the detailed evaluation of each solution illustrated in Table 8 in Appendix C.

Table 5

Overall Percentage Evaluation of Solutions

Percentage Scores	Possible Solutions		
	PGP	PD	Inquiry
Focus on People	40	49	80
Focus on Content	33	33	100
Focus on Process	35	65	95
Overall Score	34	55	88
Resource Score	36	80	92

Note: The percent scores for each solution to the problem of practice are calculated based on the detailed evaluation data in Table 8 in Appendix C. These scores are the opinion of the author.

The detailed evaluative criteria for the people focus include how well each solution uses social cognitive theory to develop efficacy and how well each aligns with my leadership principles and practices. The change content evaluative criteria include the ability of the solution to support the change vision. The change process criteria include each solution's ability to address the five needed changes identified in the school condition innovation configuration map in Table 4 and the solution's ability to leverage the change drivers. Each solution is assessed on criteria related to resource dependence. The evaluation uses a zero to five rating scale. Zero means that solution does not align or include the criteria. Five means the solution is fully aligned or includes the specific criteria.

Based on the evaluation of the solutions, the collaborative inquiry team solution is the best solution to achieve the change vision as it has the highest percentage scores in each category. However, this solution also has a high resource cost. The professional growth plan and professional development solutions can support improving teachers' understanding of ideas. However, these solutions must be integrated into the collaborative inquiry team solution to be most effective. The professional growth plan solution on its own does not build interdependence and runs the risk of maintaining private practices (Lieberman et al., 2014). The professional development solution could be structured to support the collaborative inquiry teams by providing opportunities to develop a shared language and build momentum within the teacher teams. However, it is not as effective at changing culture (Guskey, 2000). These solutions have lower resource costs, are familiar to teachers and are low-risk options. Both could be integrated into the collaborative inquiry team solution as additional elements but on their own are not sufficient.

The collaborative inquiry team solution is the only solution that focuses on transforming school culture. The collaborative inquiry team solution is aligned with Fullan's (2018) deep learning model that frames the change vision and builds capacity for learning. Capacity building is supported by research on building effective structures to support teacher learning (Donohoo, 2013; Donohoo & Katz, 2017; Hargreaves, 2013; Hargreaves & Fullan, 2020; Harris & Jones, 2010; Katz & Dack, 2013, 2014; Timperley et al., 2007; Timperley, 2011). Collaboration needs to become part of a new school learning culture. The collaborative inquiry team solution can support the development of greater self-efficacy. Teachers with higher self-efficacy set higher goals for themselves and their students and persist through adversity. Teachers with higher self-efficacy positively impact student achievement (Ross & Bruce, 2007; Vescio et al., 2008). Self-efficacy is a self-perception. It is situational and develops from experiences within a particular environment (Bandura, 1997). Self-efficacy develops through teacher reflection on sources of efficacy information. The collaborative inquiry teams are environments that provide various self-efficacy opportunities. Teachers can observe each other and engage in co-learning activities. They can give each other feedback and try new activities in the classroom. The teachers can support each other through positive affirmations when lessons go well and support each other when lessons derail. Self-efficacy is built through these types of opportunities that are part of the collaborative inquiry team process (Donohoo & Mausbach, 2021; Donohoo & Velasco, 2016; Lu et al., 2015). The collaborative inquiry teams also provide a more significant opportunity for the co-construction of goal-directed meaning in social groups than group professional development activities (Eun, 2008, 2019).

The collaborative inquiry team solution is aligned with my transformational and instructional leadership principles. Being a member of a collaborative inquiry team is a way to

continue to build respectful relationships with teachers while improving the instructional program. Building relationships and building capacity are components of my transformational leadership practices, and both are part of the collaborative inquiry team processes. Creating school structures to support student learning and the requirement of leaders to participate as co-learners are aligned with my instructional leadership practices focused on supporting learning through leading the instructional program and creating a positive climate.

The preferred solution to the problem of practice supports my transformational leadership principle of building teacher capacity for deep learning by creating collaborative inquiry teams where teachers have opportunities to develop an individual and collective understanding of Fullan et al.'s (2018) deep learning model. Collaborative inquiry as a learning process is the key to the solution to the problem of practice, establishing the conditions and practices that develop deep learning within the schools.

Collaborative Inquiry as a Key Change Process

A collaborative inquiry cycle is a tool for continuous improvement based on iterative cycles of deciding what to change, designing the change, implementing the change, measuring the impact of the change, and using that feedback to determine what to change next (Langley et al., 2009). The model of continuous improvement that is part of the dynamic change model starts by deciding what the goal is, how we will know that the goal is an improvement and what changes would result in the improvement. The original model of continuous improvement is the plan, do, study, act cycle (Langley et al., 2009). The study stage of the cycle emphasizes that the goal is to build new knowledge. Often multiple cycles are required to achieve the improvement (Langley et al., 2009). In the dynamic change model, the plan, do, study, act cycle has been

replaced by assess, design, implement, measure, reflect as the collaborative inquiry process (Fullan et al., 2018; Quinn et al., 2020).

What Happens in Collaborative Inquiry

The collaborative inquiry model has four stages: assess, design, implement and measure, reflect and change, which are the processes that drive new learning by teachers through engaging in the process of building deep learning into lessons. In the assessment stage, teachers determine what knowledge and skills students need to meet the curriculum expectations and develop proficiency with the global competencies, what strengths they demonstrate and how to build on student interests to build appropriate learning goals and success (Timperley, 2011). In the design stage, teachers create learning experiences that engage students in achieving the learning goals. This step requires teachers to choose the right instructional strategies and create an engaging learning environment as students explore the content embedded in the learning goals and the global competencies. In the implementation stage, teachers monitor student learning and guide students' exploration of the learning goals. The teachers use formative assessment information to monitor and adjust the lesson based on student needs. In the measure, reflect and change stage, teachers work together to document student learning and decide the next step in the learning journey (Fullan et al., 2018; Quinn et al., 2020).

How is Collaborative Inquiry Used?

Students, teachers and school leaders use collaborative inquiry to engage in deep learning connected to their role. The best evidence synthesis on teacher professional learning identified the positive impact of teacher inquiry on student engagement, well-being and achievement (Timperley et al., 2007). Teachers use the collaborative inquiry process to learn about global competencies and the deep learning framework by developing deep learning experiences for

students. They teach students how to use collaborative inquiry to explore authentic problems. Students use the inquiry model to design, assess and monitor their learning, giving them greater autonomy and engagement (Fullan et al., 2018).

Leaders use the inquiry model to build experiences for teacher learning. In the assessment stage, the leadership team considers the goals of the change, thinks about where the teachers are and describe the changes they want. The leadership team creates the first plan to implement the inquiry team solution in the design stage. In the implementation stage, the leadership team carries out the design and monitors what the teachers need to continue to move forward. In the measure, reflect and change stage, the leadership team documents teachers' learning and considers next steps (Fullan et al., 2018; Quinn et al., 2020).

The complete plan to implement the collaborative inquiry team solution is described in Chapter 3, along with the monitoring and evaluation framework and the communication plan. This chapter now examines the ethical considerations of the change process and the organization's ethical responsibilities.

Leadership Ethics, Equity and Organizational Change

School leadership is a moral activity based on the fact that "relationships among people are at the very centre of the work of school administrators and teachers" (Greenfield, 2004, p, 174). School leaders act as agents on behalf of the stakeholders they serve and, as agents, make things happen (Cherkowski et al., 2015b). As moral agents, school leaders must support the aims of their organization without violating the rights of others or behaving in immoral or unethical ways. Moral agents are responsible for their behaviour and the behaviour of others, making decisions based on an ethical framework that supports their definition of right and wrong. School leaders make the best ethical decisions when considering all the stakeholders' competing needs

and interests (Kutsyuruba & Walker, 2013). As moral agents, school leaders create and maintain

the ethical environment within their schools through their actions as committed leaders

(Cherkowski et al., 2015b; Greenfield, 2004).

Ethical leadership combines personal moral behaviours and moral influence (Brown &

Treviño, 2006). Ethical leaders are caring, honest and conscientious, promoting inclusion, equity

and collaboration (Brown & Treviño, 2006; Ehrich et al., 2013). Ethical leaders support the

development of ethical behaviours in followers by modelling ethical decision-making and

behaviours and using feedback to help others be ethical (Bandura, 1977; Liu, 2017). As an

ethical leader, I set and communicate our strong moral purpose, which is to support student

learning and build positive relationships with greater equity, as the goal and direction of the

organization. My integrated leadership style is supported by an ethical framework for making

decisions that incorporate Starratt's (1991) ethic of critique, care and justice. The ethic of critique

is concerned with power, social justice and challenging inequity. The ethic of care considers the

importance of human relationships, honouring the dignity of each person and developing equity

as a lens for decision making (Gorski et al., 2022). The ethic of justice focuses on how we

establish and live by rules that are fair to everyone. The ethical framework supports decisions

related to the three critical aspects of effective change management: content, people and process.

The ethic of critique is used to explore the content of the change vision or how deep learning

supports an understanding of equity. The ethic of care is used to understand how to support

people during the change process. The ethic of justice is used to understand issues related to

managing the change process.

Change Content and the Ethic of Critique

The ethic of critique asks teachers and students to challenge the status quo by studying and understanding the role of power and privilege in society, exploring questions about the power we have, why we have power, what we do with our power and how power should be distributed (Swalwell, 2013a p. 106). This critical examination of society, with its emphasis on orientating students and teachers towards supporting greater equity, is an important strategy for disrupting inequity (Gorski, 2006; Gorski & Swalwell, 2015; Swalwell, 2013a).

Deep learning's design elements of learning partnerships, environments, pedagogical practices and leveraging digital create an inclusive learning culture where students are given greater autonomy to ask questions and explore personally relevant issues on a local, national and international level. In a system focused on deep learning, students are encouraged to make connections to the world, think critically, collaborate, empathize, and create solutions to real-world problems (Fullan et al., 2018, 2019; Mehta & Fine, 2019).

Deep learning encourages students and teachers to explore, critique and disrupt systems that create inequity by providing opportunities to develop an understanding of the root causes of inequity and structures to allow them to act as agents of change to create a more equitable world (Swalwell, 2013a). Students and teachers with privilege can perpetuate or disrupt inequity, and deep learning provides the opportunity to explore examples of injustice in their own community as well as develop the skills, attitudes and understandings needed to try to change inequitable structures (Fullan et al., 2018; Rifkin & Sibbett, 2020; Riordan et al., 2019; Shields, 2018). Deep learning for students is an essential strategic move toward creating a more just society by thoughtfully engaging and empowering students who may have the power as adults to effect change (Swalwell, 2013b, 2013a). Deep learning is inherently equitable because it is designed

for all students, not just the most capable students, supporting students and teachers to recognize and value differences as strengths, not deficits (Darling-Hammond & Oakes, 2019; Fullan et al., 2018; Mehta & Fine, 2019).

People in Change and the Ethic of Care

The ethic of care acknowledges the dignity and rights of each person within the organization and focuses on building respectful and trusting relationships (Starratt, 1991). The ethic of care aligns with my transformational leadership priority of building relationships, which is critical to supporting people during the change process. Respecting others is an essential norm to develop in collaborative inquiry teams. Teachers need to feel safe within their teams to collaboratively explore ideas and develop pedagogies that model equitable practices for students (Riordan et al., 2019). The deep learning approach represents a significant change in the teacher-student relationship focusing on building student agency. Changes to that relationship and changes in pedagogical approaches trigger a loss of efficacy and confidence for the teachers that school leaders need to be mindful of as they support teacher learning (Fullan, 2011; Schwabsky et al., 2019; Tschannen-Moran et al., 1998).

Students in independent schools may be unaware of their privilege and may have little understanding of, or engagement with, the impact of inequality in the world (Howard & Maxwell, 2018; Rifkin & Sibbett, 2020). Deep learning challenges and supports students' evolving understanding of power and privilege and their responsibility to act in the world in a socially responsible way (Howard & Maxwell, 2018). The questions raised by the ethic of care help leaders and teachers consider how to support children to understand and challenge inequity in society while not shaming them for their advantages of birth (Kokka, 2020).

Process of Change and the Ethic of justice

The ethic of justice is concerned with governance and the fair and equal treatment of people. Leaders consider the rules, policies and procedures that determine how the organization works (Starratt, 1991). As we implement deep learning practices, we must decide how to change organizational structures to support the development of global competencies, different pedagogical practices and a new learning environment (Fullan et al., 2018). Leaders need to consider how to structure collaborative inquiry teams that require teachers to explore their practice in a group when they are more accustomed to private practice (Hargreaves & O'Connor, 2017). The leadership must ensure that policies support equity and social justice within the schools while supporting the rights and responsibilities of stakeholders. As a leadership team, we must demonstrate that we respect the rights of others, act in the public interest; manage the schools; and develop inclusive learning communities (Cherkowski et al., 2015a; Starratt, 2005, 2010). We must work together to create a culture that is supportive of equity and inclusion, where the enacted and stated norms are consistent and aligned with shared beliefs and assumptions, models, behavioural standards and artifacts that are visible in the schools (Heifetz et al., 2009; Schein, 2016).

<div align="center">

Chapter 2 Conclusion

</div>

This chapter described three leadership principles and related actions connected to social cognitive theory that support a leadership approach to change focused on the content of change, the people involved in change and the process of change. Armenakis et al.'s (1993, 2000) institutionalizing change model, Cawsey's (2020) change path model, and Fullan's (2016) dynamic change model were considered as possible change models. Integrating Fullan's (2016) dynamic change model and Armenakis et al.'s (1993, 2000) institutionalizing change model is

the best choice to support the change process. The school conditions innovation configuration map was used to complete the critical organizational analysis, highlighting some essential changes that must be addressed during the change process. Three solutions to the problem of practice were explored, and one, creating collaborative inquiry teams, was chosen as the most effective solution. The ethic of care, critique, and justice was used to examine the ethical considerations related to the three focus areas for change leadership. Chapter 3 will explore the implementation, evaluation, and communication plans that complete the organizational improvement plan.

Chapter 3: Implementation, Evaluation and Communication

The problem of practice facing the family of independent schools is how to create a 21st century, student-centred learning environment in a traditional teacher-centric school system. This problem requires a cultural change within the schools to focus on developing global competencies and a deep learning framework (Fullan et al., 2018). The preferred solution to the problem of practice builds teacher capacity for deep learning by creating collaborative inquiry teams where teachers have opportunities to develop an individual and collective understanding of Fullan et al.'s (2018) deep learning model. Armenakis et al.'s (1993, 2000) and Fullan's (2016) change models focus on people and what motivates them to change and structures the change plan. The people-centric nature of these change models aligns with my leadership focus on building relationships, trust, capacity and organizational structures to support teacher learning (Harris, 2011; Harris & Jones, 2010; Jones & Harris, 2014).

Chapter 3 starts with a description of the change implementation plan guided by a theory of action and specific priorities, goals, and outcomes. Each part of the change process and the plan's potential implementation issues and limitations are described. The monitoring and

evaluation framework, based on the concerns based adoption model, is designed to provide the change leader with indicators about the effects of the change plan on the teachers' knowledge, skills, attitudes and beliefs and provides the data needed to make adjustments to the plan (Dudar et al., 2017; Hall & Hord, 2020). The communication plan is the final action plan component and is structured around Armenakis and Harris' (1993; 2002) change beliefs messages and influence strategies. The communication plan highlights key messages to stakeholders during the change process. The components are described in separate sections to highlight their essential aspects. The integrated change plan is shown in Table 11 in Appendix F to illustrate the alignment of the change plan components. The chapter ends with the next steps and future considerations for the organizational improvement plan.

<div align="center">**Change Implementation Plan**</div>

The change implementation plan uses social cognitive theory and iterative cycles of collaborative inquiry to organize the plan's activities. While parents and students are essential stakeholders in the plan, the plan's focus is on teacher professional learning. The plan begins with the theory of action and then discusses its important priorities, goals and outcomes. The activities of the readiness phase and the clarity, depth and sustainability phases are described. The connection between my leadership style and stakeholder management is articulated. The section concludes with a discussion of the support and resources needed in the plan and the issues and challenges to overcome.

Theory of Action

A theory of action articulates how and why particular actions in a change implementation plan produce the intended results (Markiewicz & Patrick, 2016, p. 74). Changing teacher practices to create a new learner-centred culture is a second-order change, requiring teachers to

change their current practices and beliefs (Bartunek & Moch, 1987; Ertmer, 1999). Second-order

changes are complex as the teacher must create a new classroom culture, understanding and

acting on changes in teacher and learner roles and responsibilities while ensuring student

learning is not negatively impacted. The required shift in practice that results from the change

from teacher to learning centred culture may impact a teacher's judgement of their competency

as shown earlier in Figure 2, with the possible negative impact on their self-efficacy (Lee et al.,

2017; Tschannen-Moran et al., 1998). The change implementation plan uses Bandura's (2001)

social cognitive theory to build teacher capacity by supporting self-efficacy.

Social cognitive theory posits that behaviour (new learning), the physical and social

environment, and personal factors (beliefs and attitudes) are interconnected processes explained

by the triadic reciprocal causation model described in Chapter 1. Beliefs and attitudes are more

readily changed when teachers are in an environment that supports the desired behaviour. The

change implementation plan exposes teachers to a learner-centred learning environment as they

participate in cycles of collaborative inquiry. Collaborative inquiry, described in Chapter 2,

structures the learning environment to support changes in teacher behaviours, beliefs and

attitudes, including self-efficacy. The anticipated outcome is that teachers create the same

learning culture for their students (Fullan et al., 2018; Guskey, 2021). As members of

collaborative inquiry teams, teachers use the collaborative inquiry process to investigate how

deep learning impacts student learning. The collaborative inquiry team structure allows teachers

to learn from and with each other through their conversations, activities and observations

(Bandura, 2001; Dudar et al., 2017; Fullan et al., 2018; Guskey, 2021; Kutsyuruba et al., 2014).

Professional learning activities within the collaborative inquiry groups and other professional

learning activities support the development of beliefs and attitudes, including self-efficacy

through active participation in activities used to judge self-efficacy: trying new lessons, watching others, getting feedback and positive affirmations (Bandura, 1997; Tschannen-Moran et al., 1998; Tschannen-Moran & McMaster, 2009). These performance assessment activities were described in Chapter 1 and Chapter 2. Table 12 in Appendix G highlights the elements of triadic reciprocal causation integrated into the change implementation plan to support the successful attainment of the change plan's outcomes.

Priorities, Goals and Outcomes

The change implementation plan, illustrated in Table 13 in Appendix H, includes the key priorities, or foci, goals and outcomes important to the plan. Priorities are choices stakeholders make to focus their efforts on achieving the organization's goals and realizing its mission (Sull et al., 2018). Goals describe what needs to happen to achieve the priorities, guide the stakeholders' specific actions, and provide information to assess progress (Hattie & Timperley, 2007; Locke & Latham, 2002). Goals change as the stakeholders participate in the change plan and provide feedback to the change agent (Lewis, 2019). An outcome measures the plan's achievement by describing the desired results (Chaney Jones, 2014). Each phase of the change plan has a set of priorities, goals and outcomes.

The Change Implementation Process

The change implementation plan has four phases: readiness, clarity, depth, and sustainability, described in Chapter 2. During the change plan, teachers participate in cycles of learning using the overall process of "do, reflect, adjust" (Fullan et al., 2018, p. 123). The implementation process is less about "rolling out the change and more about co-learning and co-development taking root" (Fullan et al., 2018, p. 123). The change implementation plan assumes the director of education has accepted the change vision and plan.

Teachers learn by experiencing deep learning within collaborative inquiry teams and professional learning activities. Both types of professional learning experiences provide opportunities to experience efficacy (Bandura, 1997; Fullan et al., 2018; Quinn et al., 2020; Tschannen-Moran, 2001; Tschannen-Moran & McMaster, 2009). The overall plan provides opportunities to develop shared understanding through conversations, observations and learning experiences as described in the theory of action.

Readiness

The readiness phase occurs in the months before the start of the implementation year. The priority or focus in this phase is preparing the organization to change. The goal is to have the change vision and plan approved, reviewed, and adjusted before introducing it to the teachers. The tactics of this phase use the change messages and influence strategies described in the integrated change model in Chapter 2, including direct communication of the change message and active participation in analyzing data that supports the need for change as two mechanisms to change the attitudes and beliefs of the participants. The change message is described in the communication plan and shares information about the gap between where the organization is and where it wants to be (discrepancy), the appropriateness of the plan, the individual's and organization's capacity to successfully change (efficacy), the leadership support for the change and the importance of the change (valence) (Armenakis et al., 1993).

In this phase, the change agent introduces the approved vision and implementation plan to the academic leadership team, including the three school principals, academic department heads, and curriculum leaders. With the support of the change agent, the academic leadership team reviews the research on deep learning, reviews appropriate school climate data on student engagement and student mental health, and revises the change readiness message. Their active

participation in analyzing data is a new activity for the teachers. It supports their self-efficacy as they use the analysis activity to build their understanding of the importance of deep learning before the start of the implementation year (Armenakis & Harris, 2009). In the clarity phase, the academic leadership team forms the implementation team as the first collaborative inquiry team

Teachers are introduced to the need for change through their active participation in a professional learning session where they review the school climate data and assess the needs of students for the future. They are introduced to the change vision and view vignettes of other schools that have implemented deep learning, a vicarious learning experience (Quinn et al., 2020). They listen to and discuss the change readiness message described in the communication plan. The change agent reviews the overall plan with the teachers and answers questions about what is expected and available support. Interested teachers are invited to be part of the first change year as implementation team leaders. At this point, not all teachers are required to join the initial implementation team as the change model is one of slow adoption, reflecting the iterative process embedded in the dynamic change model (Fullan et al., 2018). This slow adoption of change is common at the schools and allows the early adopters to get started while reassuring the late majority that they have time before fully embracing the change (Rogers, 2003). The outcome of the readiness phase is that the change vision and plan are approved, the first implementation team is formed, teachers know that change is happening, what the change will look like and that they will be part of it (Fullan et al., 2018; Quinn et al., 2020).

Clarity

In the first full year of the change plan, the priority or focus is to prepare the implementation team to lead the collaborative inquiry teams. The change agent works with the team to develop their facilitation skills. The team uses collaborative inquiry cycles as the

professional learning structure, developing their understanding of the global competencies and the deep learning structures through the practical experience of implementing them with each other and, for the teachers, with their students. The team designs, implements, and reflects on the impact of two units of study on student learning and captures their learning in the collaborative inquiry tracking sheet in Appendix I. The change agent uses information from the implementation team to modify the next steps in the plan.

The implementation team develops and facilitates four professional learning activities for teachers during the year and showcases their learning at the end of the year, including student feedback to provide school-specific examples of the change in action. Using the collaborative inquiry process and requiring the team members to build units of study provides opportunities to improve their self-efficacy through performance-enhancing activities (Bandura, 1997; Fullan et al., 2018; Quinn et al., 2020; Tschannen-Moran & McMaster, 2009).

The priority or focus of the clarity phase for the teachers is to begin building shared understanding and language about deep learning. During professional learning time, the implementation team leaders facilitate professional learning activities with the teachers to introduce the six global competencies and the learning design elements. Later in this phase, professional learning time is provided to allow teachers to work together with the implementation team leaders to integrate two global competencies into their lessons, examples of enactive mastery. Teachers teach the classes, collect feedback from the students and discuss that feedback at the following professional learning session, a form of verbal persuasion. The implementation team demonstrates one collaborative inquiry cycle as a fishbowl experience for the teachers, an example of vicarious learning (Tschannen-Moran & McMaster, 2009). The implementation team shares highlights of their learning at professional learning meetings, an

example of vicarious learning for the teachers. The outcome of the clarity phase is that the implementation team is ready to lead. Teachers have been introduced to deep learning and have tried it in their classrooms.

Depth

The priority or focus in year two is to support the teachers in more fully implementing deep learning elements into their classes. The teachers are placed in collaborative inquiry teams supported by an implementation team leader. The school schedules are modified to allow the collaborative inquiry teams to meet at least twice a month for 60 minutes. Teachers integrate four global competencies and two learning design elements into lessons during this phase. Teachers teach their classes, collect student feedback, discuss the feedback with their team members during collaborative inquiry cycles, and adjust their lessons. The teachers use the collaborative inquiry form, similar to the example in Appendix I, to record their progress. The teaching activities and reflective experiences provide opportunities for trying out activities, watching others, getting feedback and receiving positive affirmations when things go well and support when they don't, building performance experiences supporting self-efficacy (Bandura, 1997; Holdsworth & Maynes, 2017; Tschannen-Moran & McMaster, 2009).

Faculty meetings and professional learning days are designed for teams to share their learning, including video clips of lessons, time for joint planning and reflection on student feedback, providing opportunities to build self-efficacy (Tschannen-Moran, 2001; Tschannen-Moran & McMaster, 2009). As the teams work together, they develop stronger trusting relationships that include emotional support as they try new ideas in the classroom. The growing trust supports positive affective states, building efficacy (Tschannen-Moran, 2001). At the end of the year, a learning showcase, open to parents and students, highlights student work and teacher

learning as part of the collaborative inquiry process (Kutsyuruba et al., 2014). The outcomes for

the second year are to improve teacher capacity, increase engagement in collaborative inquiry,

increase understanding of the elements of deep learning and create a greater sense of efficacy

among the teachers through their active participation in collaborative inquiry and other

professional learning activities (Holdsworth & Maynes, 2017; Quinn et al., 2020; Schwabsky et

al., 2019; Tschannen-Moran, 2001; Tschannen-Moran et al., 2000; Tschannen-Moran &

McMaster, 2009).

Sustainability

The priority or focus of the sustainability phase is to consolidate deep learning in teacher

practices, completing the second-order change. The goal is to continue the learning activities

started in the depth phase, improve teacher understanding, and refine techniques through

experience. Teachers continue their work together in their collaborative inquiry teams. The

schedule allows the teams to meet regularly. The collaborative inquiry structure deepens the

teachers' understanding, strengthens their planning and classroom instruction, and embeds

cultural change into the organization (Kutsyuruba et al., 2014; Quinn et al., 2020). At the end of

the year, teachers and students host a learning showcase that parents attend. The sustainability

phase is critical in the change implementation plan. It represents the institutionalization where

the stakeholders are committed to the new way of teaching and learning, and it persists beyond

the change plan (Armenakis et al., 2000).

At the end of this year, the desired outcome is that deep learning and collaborative

inquiry are embedded into classrooms, and students are academically successful, engaged, and

active learners. All students benefit from participating in an engaging, student-centred and

inquiry-based learning culture, the deep learning model's embedded "equity hypothesis" (Fullan

et al., 2018, p. 23). Deep learning provides all students with access to challenging ideas and develops their capacity to solve authentic problems (Darling-Hammond & Oakes, 2019; Mehta & Fine, 2019; vander Ark & Schneider, 2014). Teachers benefit from participating in collaborative teams, supporting each other's learning, engaging in the social construction of meaning, and structures that support self-efficacy (Bandura, 2000; Dewitt, 2017; Donohoo, 2013). The change implementation plan is supported by the leadership principles and practices that influence my actions as the change agent in managing the process and the stakeholders.

Leadership focus and Stakeholder Management

The change implementation plan's people-centric change focus aligns with my transformational leadership focus on building relationships, and capacity and my instructional leadership focus on leading instruction and creating appropriate organizational structures to support inquiry teams as the solution to the problem of practice (Harris, 2011; Harris & Jones, 2010; Jones & Harris, 2014). As the change agent responsible for overseeing and implementing the change plan, my transformational leadership focus on building relationships centred on trust and respect is essential to support teachers as they begin to change their practice. In schools with a higher degree of trust, there is a stronger professional community and greater risk-taking and innovation, which is what this implementation plan requires (Robinson, 2011; Schwabsky et al., 2019; Tschannen-Moran, 2001; Tschannen-Moran et al., 2000).

As the change leader, I am part of the change process, take part as a co-learner in the first implementation team, and join other inquiry teams during the three years of the change plan to support building relationships and capacity (Holdsworth & Maynes, 2017). Attending as a co-learner allows me to model the learning attitude we are trying to develop through my active

participation in the learning process. It allows me to continue building relationships with the teachers and the school leaders.

Creating an effective deep learning culture reflects my instructional leadership focus on building an appropriate and sustainable learning culture. For teachers to be able to create deep learning structures for students, they need to experience those learning structures. As an instructional leader, one of my leadership actions is to create the appropriate learning culture by leading instruction and creating a positive climate. (Fullan et al., 2018; Fullan & Quinn, 2016).

My transformational leadership focus on relationships and capacity building means I view the stakeholders as active agents of change rather than passive recipients, building their agency and motivation (Ford & Ford, 1995; Lewis, 2019). The implementation plan ensures the stakeholders are meaningfully engaged in the change process and are active participants who provide insights and valuable perspectives that improve the change plan (Armenakis & Harris, 2009; Lewis, 2019). The change implementation plan focuses on teachers as the primary stakeholders in the change as they will be affected by the change first and can support or sabotage the change (Dudar et al., 2017). The plan is grounded in social cognitive theory that views teachers as individuals who influence each other's understanding of the change (Lewis, 2019). As described in each phase of the change plan, there are opportunities for teachers to engage in activities that build self-efficacy during the transition from their current pedagogical practices to the new expected practices (Armenakis et al., 1993, 2000).

The implementation team leaders have a formal connecting role between the teachers and the change agent. The team leaders act as counsellors supporting their team members and are essential influencers or opinion leaders, both in their formal role and informally through casual conversations. Other teachers play similar roles based on the strength of their connections within

the schools (Lewis, 2019). Measuring stakeholder reactions through the stages of concern tool described in the monitoring and evaluation framework is a way to manage stakeholder reactions by understanding where they are in the change process (Hall & Hord, 2020).

Supports and Resources

The change plan requires ongoing support from the leadership to be successful. Deep learning must be the priority focus for the schools, and time, money, human resources and information must be allocated for the plan to be successful (Perry & Richardson, 2022; Reeves, 2021). If this second-order cultural change is successful, deep learning must be the key priority within the schools over the long term. Focus means that the leadership must articulate what will stay the same, what will change, and what will be abandoned to provide the resources necessary to succeed (Fullan, 2016; Reeves, 2021).

Time is a critical resource in the change implementation plan. Time is needed to change the teaching culture through modifying the environment and teacher behaviour. The change implementation plan is deliberately gradual, providing time for teachers to explore the ideas, try things in the classroom, get feedback from students and other teachers and adjust their approach. Time is required for professional learning sessions and collaborative team meetings where teachers can share ideas and student feedback.

Money is needed to provide resources for the teachers, such as books on deep learning and student achievement or resources to build new unit activities. Money is required if external facilitators are brought in to support the change plan or if the schools decide to join the *New Pedagogies for Deep Learning Partnership*. Money is needed if supply teachers are used to allowing teachers to observe each other's classes, provide feedback, or have time to meet in collaborative teams. Money is related to human resources, both for supply teachers and for

dispersing some of the responsibilities of the implementation team members to other people in

the organization to provide them with more time to work with teachers during the change plan.

Information is another resource required for the change plan. Information includes

monitoring and evaluating data through the change, including student achievement data, student

climate data and well-being data. Data helps measure what is happening within the schools and

the impact of the change plan on the teachers and students. This information needs to be

captured, analyzed and presented to tell the story of the change (Markiewicz & Patrick, 2016).

Implementation Issues and Challenges

The implementation issues and challenges facing the change plan are categorized as

problems with the content, people, and the change process. The content or vision implementation

challenge is determining if the vision is the "right" one to solve the problem of practice in this

organization. The people challenge involves supporting people through a second-order change

from teacher-centred to student-centred pedagogy and harnessing resistance as feedback to

improve the plan. The process challenge is to ensure the change is effective and sustainable

(Armenakis et al., 1993; Deszca et al., 2020).

Content Issues

The content implementation challenge involves making sure the analysis of the problem

is accurate and that the solution to the problem is well researched, supports the organization's

mission, is ethical, and is within the capability of the organization's members. The content

challenge is a problem of discrepancy and appropriateness. The change vision must be

compelling to solve the discrepancy problem and provide a sense of urgency for the

stakeholders. They are more likely to engage with and want to participate in a compelling change

effort (Kotter, 2007; Reeves, 2021). The initial change vision is provisional, subject to further

study and input from the implementation team leaders and later by the change participants to

ensure that the deep learning model continues to be the appropriate solution to the transition

from teacher to student-centred pedagogy. Modifications to the change vision based on feedback

are expected as part of a dynamic change model (Armenakis & Harris, 2009).

People Issues

The people implementation challenge is how to work with people ethically to help them

make the desired cultural change outlined in the change vision. The shift from teacher-centred to

learner-centred pedagogy is a second-order change that requires a fundamental change in

teachers' beliefs about their current practice and established teaching methods (Bartunek &

Moch, 1987; Ertmer, 1999). To navigate a second-order change, the teachers need to accept the

need for change and believe they can change, a self-efficacy belief (Armenakis et al., 1993). The

proposed change requires teachers to change the materials they use, their pedagogical practices

and their beliefs and understandings about pedagogy(Fullan, 2016). These changes may cause a

temporary loss of confidence and a decrease in efficacy and performance as teachers adjust their

practice (Fullan, 2020). Efficacy can be supported by different learning activities such as trying

things out, watching others succeed, getting positive feedback on their efforts), celebrating

success, and addressing fears, anxieties, and tensions (Armenakis et al., 1993, 2000; Armenakis

& Harris, 2009). My leadership focus on building trusting relationships and supporting capacity

building supports teachers through this change. I provide reassurance to the teachers that the

change is necessary, that they can enact the change (efficacy), that the organization can support

the change (principal support) and that the change is essential to their students and worth

undertaking (valence) (Armenakis & Harris, 2009). My leadership focus on building structures

for learning supports teacher learning through developing the collaborative inquiry teams and the professional development activities (Fullan et al., 2018; Holdsworth & Maynes, 2017).

Change creates uncertainty, and managing change is about managing people. Change resistance is an inevitable part of the change process. Resistance reframed as feedback allows the change agent to use the feedback to improve the change plan (Elving, 2005; Ford et al., 2002; Matos Marques Simoes & Esposito, 2014; I. Smith, 2005b; van Vuuren & Elving, 2008). The change agent must recognize that resistance is about uncertainty about what the change will mean to the individual. Clear, consistent communication about the change, an appropriate timeline, and strong relationships with teachers are strategies to reduce uncertainty and resistance (Matos Marques Simoes & Esposito, 2014).

Process Issues

The change implementation plan could be ineffective or unsustainable. The plan requires teachers and leaders to rethink long-standing professional practices. Three years might not be long enough to change the culture as the gap between current practices and future practices might be too big to bridge. In this situation, we would extend the plan and reduce the implementation requirements to give teachers more time to make the needed changes. We can use outside consultants to review our implementation plan and make suggestions for improvement. We can provide more release time for the implementation team leaders to support teachers in the classroom, provide more feedback and positive encouragement, to build their efficacy.

The plan could take too much time, energy, commitment or focus to be sustainable, or during the change plan, other priorities may come up that interfere with the focus necessary for the change (Reeves, 2021). This challenge is a leadership problem that requires the leaders to

demonstrate their full support for the plan and not allow other priorities to distract the teachers from realizing the change in their practice (Armenakis et al., 2000; Reeves, 2021). These process challenges require the leadership to demonstrate their belief in the plan, be part of the process and adjust the plan based on feedback as it progresses (Deszca et al., 2020; Dudar et al., 2017; Hall & Hord, 2020).

The change implementation plan identifies the priorities, goals and outcomes for the change plan and describes how the change will be managed. Issues surrounding managing stakeholders and the implementation challenges are described. The next phase in the plan is the measurement and evaluation framework.

Change Process Monitoring and Evaluation

Information collected from the monitoring and evaluation framework guides decisions about possible changes to the change implementation plan and evaluates its success (Markiewicz & Patrick, 2016). This section of Chapter 3 describes the purpose and approaches to monitoring and evaluation, provides specific details about each framework and discusses the ethical considerations and limitations of monitoring and evaluation.

Purpose of Monitoring and Evaluation

The monitoring and evaluation framework is integrated into the change implementation plan. It is designed to identify results, track progress, support organizational learning and accountability, and improve decision-making through the provision and interpretation of data (Markiewicz & Patrick, 2016; Neumann et al., 2018). The plan's monitoring and evaluation framework is evidence-based, with teachers as active participants. Monitoring and evaluation are integrated functions using similar tools to answer specific questions about the impact of the plan (Markiewicz & Patrick, 2016). The goal of the monitoring and evaluation framework is to

measure the teachers' skills, behaviours, and attitudes and determine if deep learning competencies and structures are embedded into classroom practices. Teachers are active agents in the change process. They are equally involved in the monitoring and evaluation framework, providing information and insight to the collaborative inquiry team leaders and change agent who are managing the monitoring and evaluation framework activities (Fetterman et al., 2017). The benefits of the measuring and evaluation framework are to reduce uncertainty in decision making, identify what is working and what is not, provide for continuous improvement, support individual and organization learning and build awareness, understanding, commitment, acceptance and support for the change plan (Neumann et al., 2018).

Approaches to Monitoring and Evaluation

As a transformational leader, building capacity is important and it includes developing people and the organization. As such, the implementation plan is deliberately focused on people and teacher participation is equally as important to the monitoring and evaluation framework. It is a mark of respect for the teachers as individuals that the monitoring and evaluation plan is based on individuals implementing the change, which involves new learning, and identifying the gap between their current practices and the new approaches (Fullan, 2020; Hall & Hord, 2020). Accordingly, Hall and Hord's (2020) concerns-based adoption model (CBAM) is used to provide the main tools to understand, support, and evaluate the changes in the schools as they focus on change at the level of the individual.

Concerns Based Adoption Model

The monitoring framework is primarily interested in personal changes, and the evaluation plan considers changes in the organization. The stages of concern (SoC) tool, introduced in Chapter 1 and illustrated in Table 6 in Appendix A, describes how stakeholders feel about the

change, measuring their attitudes and beliefs about deep learning. The stage of concern tool lets the change agent create a visual representation of teachers' views about the change. The levels of use (LoU) tool, described in Table 7 in Appendix B, measures how well teachers are implementing the change vision. The results from this tool are used to map the changes in teachers' skills and behaviours. The deep learning innovation configuration map (IC), outlined in Table 14 in Appendix J, measures fidelity to the deep learning framework (Hall & Hord, 2020). Participants use these tools to measure personal growth and set goals. The collaboration inquiry team leaders use these tools to monitor the development of their team members and set group goals. The change agent uses the tools to monitor and evaluate the progress of the overall change process.

The CBAM tools were chosen as they align with my transformational leadership focus on capacity building and building relationships since teacher participation and capacity building are critical features in the intended use of the tools. The monitoring and evaluation framework involve active participation as the teachers collect and analyze their growth data, a mastery experience. The group discussions about the data and what it means for their practice is a vicarious experience. The collaborative inquiry leaders and the change agent provide specific feedback to the teachers as they openly and respectfully discuss what the data illustrates during large group meetings. This activity provides an opportunity for verbal persuasion and for developing positive affective states as the groups celebrate their growth and successes during the change process. Active participation in monitoring and evaluation activities can improve teacher efficacy related to developing 21st century learning (Bandura, 2018; Blake & Pope, 2008). Active participation by the change agent as part of the inquiry group increases opportunities to build relationships and trust, a fundamental transformational leadership principle.

Collaborative Inquiry Cycles

In addition to the CBAM model tools integrated into the monitoring and evaluation plan, the collaborative inquiry groups use collaborative inquiry cycles to monitor and report their progress in learning the components of Fullan's (2018) deep learning model. As described in Chapter 2, teachers learn by implementing and applying deep learning approaches in their inquiry teams and classes. The teams use the collaborative inquiry cycle to monitor their growth during each inquiry cycle as they build their understanding of the global competencies and the new learning structures (Fullan et al., 2018). The collaborative inquiry team leaders use the collaborative inquiry tracking form in Appendix I to report on the progress of their teams during both the monitoring and evaluation phases and determine the next best steps for their teams to move forward (Katz et al., 2018).

Research Methodology

The research methodology used in the monitoring and evaluation framework is a convergent-parallel mixed-method approach that collects and analyzes qualitative and quantitative data, using both data sets to draw conclusions about the success of the change implementation plan (Creswell & Creswell, 2018; Edmonds & Kennedy, 2017). The qualitative data includes stakeholder mapping, observations, interviews, documentation reviews and meeting notes. The quantitative data contains the results of self and collective efficacy surveys, stages of concern and levels of use surveys, innovation configuration evaluations, school conditions innovation configuration maps and learning progression analysis.

The monitoring framework is an ongoing data collection process through each change phase. The evaluation framework is focused on results and on making decisions about the

success of the implementation plan (Markiewicz & Patrick, 2016). Each part of the framework is discussed separately to illustrate its features and foci.

The Monitoring Framework

The monitoring framework provides specific information about individual teachers' skills, attitudes, and behaviours during each change phase and important organizational structures in deep learning. The monitoring framework is outlined in Table 15 in Appendix K.

Readiness

In the readiness phase, the attitude of the school leaders and the teachers about the change vision and change plan is monitored using the stages of concern (SoC) tool. The SoC tool provides a quantitative baseline measure of engagement, interest, curiosity and commitment to the plan. A four compasses exit ticket is used at the end of each presentation of the change vision and plan to provide information about what participants are excited about, worried about, need to know more about and suggestions they might have related to the plan. The SoC tool data and exit ticket data identify which teachers might be ready to volunteer for the first collaborative inquiry teams and recognize teachers who are already using some of the elements of deep learning (Hall & Hord, 2020).

Clarity

In the clarity phase, the monitoring framework focuses on the ability of the implementation team to lead the teachers. The levels of use (LoU) tool monitors their skills at using collaborative inquiry and integrating the global competencies and the learning frameworks into professional learning opportunities for teachers. The quantitative data from the LoU tool is combined with observational data about the use of collaborative inquiry during collaborative team meetings, the review of unit and lesson plans, and data collected in classroom walkthroughs

to monitor the integration of the global competencies and deep learning elements. In addition, the deep learning innovation configuration map (IC) in Table 14 Appendix J, monitors the growth of the implementation team's ability to integrate deep learning structures.

Depth and Sustainability

The tools and data collected during the clarity phase are collected during the depth and sustainability phases, showing growth in understanding and skill. Teachers complete the collaborative inquiry tracking tool, illustrated in Appendix I, to track their progress in implementing each part of the collaborative inquiry cycle. Data collection occurs at different points during each change phase. Table 15 in Appendix K shows the targets for each phase, reflecting the expected growth in teacher attitudes, skills and behaviours over time. The goal of the monitoring plan is to provide information to the teachers and the implementation team leaders that they can use to adjust their approaches to deep learning. The change agent uses the same information to guide the implementation plan, making adjustments as necessary (Markiewicz & Patrick, 2016). The monitoring framework supports the teachers and the inquiry groups to manage and be accountable for the changes through feedback from the collaborative inquiry leaders to the change agent (Markiewicz & Patrick, 2016).

The Evaluation Framework

Evaluation involves making judgements about the quality and value of the program and the achievement of its objectives. Evaluation is periodic and makes conclusions and recommendations for the future of the schools both at the end of each change phase and at the end of the change implementation plan, judging the overall outcome of the change plan (Markiewicz & Patrick, 2016; Neumann et al., 2018). Evaluation is the responsibility of the change agent with the support of the collaborative inquiry leaders. The evaluation framework is

outlined in Table 16 in Appendix L and focuses on the change plan, the teachers and the students across the schools. The evaluation framework uses similar tools as the monitoring framework but focuses on identifying where the teachers are as a group rather than as individuals. The same evaluation framework questions and tools are used in each phase of the change implementation plan. The director receives a summary report at the end of each change phase.

Evaluation Questions

In evaluating the change plan during each phase, data is collected to answer questions about the change plan's appropriateness, effectiveness, efficiency, impact, and sustainability. Appropriateness asks to what extent deep learning is observable in the inquiry teams and the classrooms. Observational data from monthly classroom walkthroughs, questionnaires using stages of concern (SoC) and levels of use (LoU) data are collected, and individual teacher interviews are used to collect data about the appropriateness of the change plan. The data from this question is combined with data collected related to the focus on the teachers. Effectiveness asks if the plan was implemented as intended. This question asks if there is fidelity to the deep learning elements. Classroom observations, either live during walkthroughs or video, are analyzed using the deep learning innovation configuration map in Table 14 in Appendix J to measure fidelity. The question of efficiency asks if the plan worked with the available resources. Interviews with the collaborative inquiry leaders are the source of this data. The impact question measures the plan's effect on changing pedagogy and student experiences. This question uses classroom observation data and the deep learning innovation configuration map to measure impact. The data from this question is combined with data about the plan's impact on students. The sustainability question is concerned with the persistence of deep learning throughout the

schools. Classroom observational data is collected to map change using the deep learning framework innovation configuration map.

The evaluation framework uses qualitative data from the levels of use (LoU) questionnaires, and anecdotal information gathered from observations, teacher interviews, and classroom walkthroughs to evaluate the impact of the change plan on the skills and behaviours of the teachers and whether or not deep learning elements are embedded into their practice. In evaluating the attitudes and beliefs of the teachers about deep learning, data is collected using the stages of concern tool (SoC), self-efficacy scales, and observational data collected from interviews and classroom walkthroughs. Questions about how well the environment has changed to include collaborative inquiry cycles in teacher inquiry and in student activities use data from classroom observations, interviews with inquiry team leaders and questionnaires to complete the school conditions innovation configuration map in Table 9 in Appendix D to measure growth in the school conditions needed to develop deep learning.

The evaluation plan measures the impact of the change implementation plan on students. Quantitative data is collected on their academic progress, primarily using report card data, well-being, and engagement surveys. Qualitative information is collected from observations of students, focus groups and student interviews.

The purpose of the evaluation framework is to judge the success of the implementation plan and make organizational changes as necessary based on aggregating group data. At the end of the implementation plan, the change agent creates a final summary evaluative report that provides insight into how the change plan successfully solved the initial problem of practice and suggestions for necessary steps to sustain the change.

Ethical considerations and Limitations

The monitoring and evaluation framework involves collecting data about and from people and requires a consideration of ethical issues to protect participants, develop trust, promote the integrity of the data, and guard against bias in the interpretation of the data (Creswell & Creswell, 2018; Simons, 2006). As a transformational leader who builds relationships by building trust and respect and focuses on building capacity, developing people and the organization, I lead from an ethic of care, focusing on the importance of relationships and the inherent dignity of people and respecting others (Starratt, 1994).

Leading from an ethic of care during the collection, analysis, and reporting of data means that I follow the Ontario College of Teachers (2020) ethical standards: care, respect, trust, and integrity in the monitoring and evaluation process. I intend to not harm the participants of the change plan by making sure they feel supported and respected throughout the plan (Neumann et al., 2018). Data collected as part of the monitoring and evaluation process is not public. Individuals use the information to monitor personal growth. The collaborative inquiry team leaders use the data to reflect on the team's development and guide necessary changes. The change agent and the leadership team use the data to evaluate the success of the change implementation plan. Individual data is not shared beyond these two groups.

In addition to considering the ethics of using a monitoring and evaluation framework, we need to overcome a lack of professional knowledge about monitoring and evaluation frameworks and the CBAM tools. Specific and targeted professional learning is required to support the leadership group in understanding the monitoring and evaluation framework and why it is necessary. Training is required to correctly use the CBAM tools and interpret the data (Hall &

Hord, 2020). Professional training is incorporated into the readiness phases of the change implementation plan.

The changes in teacher understanding and professional practices required by this change implementation plan need to be measured to guide the plan and signal to participants what is valued by the organization (Deszca et al., 2020). The collection and analysis of data are used to identify the gap between the schools' current and desired future state. During the change process, data collection and interpretation support the implementation of deep learning components, guide the change efforts, allow for course corrections as necessary, and help stakeholders understand what the change is all about. At the end of the change process, the evaluation data measures the change, allowing the leadership to decide what needs to happen to sustain the change (Deszca et al., 2020).

Plan to Communicate the Need for Change and the Change Process

Successful organizational change requires teachers, students, and parents to support the proposed change to the schools' culture of teaching and learning. Communication plays an essential role in the change process, supporting stakeholders' understanding of the change. Communication is a critical aspect of my transformational leadership practices. Building relationships and trust requires clear, consistent and respectful communication. Trust in the leadership and the change agent is an essential aspect of a successful change effort and is built through thoughtful and consistent communication throughout the implementation plan (Dudar et al., 2017; Oreg et al., 2011).

The communication plan delivers critical messages related to the change process, builds awareness, creates change readiness, keeps the stakeholders informed as the plan unfolds, and celebrates successes (Armenakis et al., 1993, 2000; Lewis, 2019). The communication plan has

teachers as its primary focus as they are critical stakeholders in the change process. Teachers

need to accept the change and make it part of their practice. The communication plan is designed

to act on teacher input by changing the plan when required (Elving, 2005; Ford & Ford, 1995;

Lewis, 2019; Schulz-Knappe et al., 2019). This section of Chapter 3 describes the

communication plan as a separate aspect of the change implementation plan to illustrate its

essential components. In reality, the communication plan is integrated into the implementation

and monitoring, and evaluation plan as presented in Table 11 in Appendix F. Communication

throughout the change process is continual, clear, organized, consistent, transparent and

persistent, supporting my transformational leadership principles of building trust and relationship

by ensuring the message reinforces the change vision and implementation plan and my

instructional leadership principle of supporting learning through creating a positive climate

(Beatty, 2015; Oreg et al., 2011; Schulz-Knappe et al., 2019).

The communication plan aligns with my transformational leadership strategy of building

relationships and building capacity through engaging stakeholders in the communication and

implementation of the change plan. For example, the change agent and implementation team

leaders are the messengers for formal communications. Teachers in the implementation teams

are influencers and messengers in the informal communication channels. Engagement in

communicating the plan builds relationships and commitment (Matos Marques Simoes &

Esposito, 2014).

Theoretical Underpinnings of the Communication Plan

The change plan model and the associated communication plan reflect the importance of

using social cognitive theory to support teacher learning. In this theory, communication is a

socially constructed process focused on building understanding and sensemaking by the

stakeholders (Ford et al., 2002; Johansson & Heide, 2008; Matos Marques Simoes & Esposito, 2014). Stakeholders make sense of change through conversations with each other and with the change leaders (Lewis, 2019; Matos Marques Simoes & Esposito, 2014). The change process is driven by continuous and consistent communication focused on the needs of the stakeholders for information to support changes in beliefs, behaviours and their working environment, leveraging triadic reciprocal causation as described in Chapter 1 (Ford & Ford, 1995; Johansson & Heide, 2008). Ongoing and effective communication is essential during the change process since the stakeholders implement the change. They must be motivated to make the necessary effort to achieve the change vision (Armenakis & Harris, 2009; Ford & Ford, 1995; Smith, 2005). Participation on the part of the stakeholders helps them have more agency, which generates greater acceptance of the change (Lewis, 2019; Oreg et al., 2011; Schulz-Knappe et al., 2019).

Armenakis and Harris (2009) highlight the importance of five change beliefs and two influence strategies to support participants' engagement with the desired change. The five change beliefs are backed by messages about discrepancy, appropriateness, efficacy, principal support, and valence and were introduced in Chapter 2 as part of the change model. The influence strategies of persuasive communication and active participation are integrated into the communication plan to influence skills, behaviours, attitudes and beliefs (Armenakis et al., 1993, 2000).

Persuasive Communication

Persuasive communication provides direct information about the change, primarily through discrepancy and efficacy messages. This communication strategy is optimistic and sends a direct message to the stakeholders about the need for change and the progress of the change. When a key influencer delivers the information, that signals that the change has principal support

(Armenakis et al., 2000). In-person communication is the most effective media for this messaging, followed by video messages. The goal of persuasive communication is to establish a personal commitment to the change and allow for a two-way conversation. Written media are less personal and provide less opportunity for dialogue but are still important ways to communicate. The stakeholders can take their time to read, process and think about the information (Armenakis et al., 1993, 2000; Armenakis & Harris, 2009).

Active Participation

Active participation is a learning strategy where participants engage with concepts related to the change plan. These activities support new learning, influencing participant behaviour and supporting their changing beliefs as part of a communication activity, such as during a faculty meeting (Armenakis et al., 1993; Armenakis & Harris, 2002). Active participation builds the relationship between the change agent and the stakeholders, builds the credibility of the change agent and establishes ownership in and commitment to change. Active participation allows stakeholders to learn through opportunities that build self-efficacy and participative decision-making during a faculty meeting where the change agent or implementation team leaders communicate about different aspects of the change (Armenakis et al., 2000).

For example, in the readiness phase, the teachers are present in a face-to-face meeting and hear about the need for change. The active participation part of the message engages teachers in analyzing data that supports the need for change. During the clarity phase, the persuasive communication message in a face-to-face meeting provides information about deep learning, what it is, how we do it, and its impact. The active participation part of the message asks teachers to incorporate global competencies into lessons and report back informally during their collaborative inquiry team meetings and more formally during faculty meetings. During face-to-

face meetings in the depth phase, the change agent shares data from the monitoring and evaluation framework to celebrate progress in implementing deep learning and explains how the plan is adjusted based on the data. Sharing information in ways that allow the teachers to interact with that data and make sense of it is an effective active participation technique (Elving, 2005; Matos Marques Simoes & Esposito, 2014; van Vuuren & Elving, 2008). These examples are described in the communication plan found in Table 17 in Appendix M, the integrated change implementation plan in Table 11 in Appendix F and more fully in the change phases. My preference is to use both influence strategies at the same time. I provide critical information using persuasive communication in a face-to-face format but follow up with teachers engaging with the data through active participation, providing opportunities for conversation and sensemaking (Elving, 2005; Matos Marques Simoes & Esposito, 2014; van Vuuren & Elving, 2008). The persuasive communication technique supports my transformational leadership principle of continuing to build relationships. The active participation technique supports my instructional leadership principle of supporting learning through leading instruction and creating a positive climate, with teachers learning by doing.

Knowledge Mobilization

Lavis et al.'s (2003) proposed knowledge mobilization framework includes five questions that frame how to transfer knowledge in a communication plan. The knowledge mobilization questions are: what should be communicated to decision-makers (the message); with whom should knowledge be shared (the target audience); by whom should knowledge be transferred (the messenger); how should knowledge be transferred (the process and communication structure); and with what effect should knowledge be shared (evaluation) (Lavis et al., 2003). The answers to these questions vary at different times in the communication plan, reflecting

different audiences, messages and messengers. The integration of the knowledge mobilization plan into the change plan is illustrated in Table 18 in Appendix N. For example, in the clarity phase, the message is about the elements of deep learning and their impact on students. The audience is the teachers, and the transfer process is through active participation. The change agent delivers the message, and the effect of the knowledge is the integration of deep learning competencies into lessons. Similarly, in each of the change phases, the five questions help organize the components of the various parts of the message to ensure the information is transferred (Lavis et al., 2003).

The Communication Plan

The purpose of the communication plan is to support the approval, launch and implementation of the deep learning change implementation plan. The plan's key objectives are to engage stakeholders in activities that help knowledge mobilization. The communication plan details are illustrated in Table 17 found in Appendix M. A sample communication plan is outlined in Appendix O. The critical message of the communication plan explains why the change is necessary and is repeated in each communication. The message states that preparing our students to take their place in the world requires using the deep learning framework and global competencies to provide an integrated focus on academics, well-being and equity.

Readiness

In the first communication in the readiness phase, the change agent uses persuasive communication in a face-to-face meeting, presenting the change vision and plan to the director of education, followed by a written report. The goal of this communication is to have the vision and plan approved. If the vision and plan are approved, the change agent presents the same

information to the school principals and academic department heads in a face-to-face meeting. That meeting aims to engage them in supporting the plan and getting feedback.

The first message to the teachers is delivered in a face-to-face faculty meeting. The change agent uses persuasive communication to share the critical message about the need to change our approach to teaching and learning to integrate 21st century competencies, focusing on integrating well-being and equity into the academic program. This first message intends to build teacher awareness about the need for change and answer "why, what, and how" questions about the change (Beatty, 2015, p. 112). The full text of this first message, which includes Armenakis et al.'s (1993) change belief messages, is in the sample communication plan in Appendix O.

The message starts by articulating why change is needed and needed now. This message identifies the gap between where the organization is and where it needs to be in the future**.** The message explains that the change plan is attainable, the organization can meet the goals of the change vision, and that the plan is well thought out and organized. This part of the message articulates what will change and what will not change (Beatty, 2015). The change agent confidently states that the teachers can change, that the gap described in the change vision is not too big to overcome and that we will successfully manage the change. To illustrate visually that the change vision and plan have principal support, the school principals and academic department heads are present and actively participate with the teachers. The last part of the message communicates that providing more collaborative, student-centred approaches to learning will improve student engagement, well-being and academic success. In addition, teachers will find collaborative inquiry teamwork to be personally engaging and exciting (Beatty, 2015; Elving, 2005)**.**

The next part of the meeting includes time for the teachers to review and analyze the student well-being and engagement data. Teachers discuss the change ideas, consider what they might look like with their students and ask questions. The anticipated questions and answers are found in Table 19 in Appendix P. There is time for teachers' questions as providing time communicates that the change agent is interested in their opinions, fears and insecurities and signals support for the plan (Beatty, 2015). The outcome of this first message is that the teachers know about the plan, and some teachers volunteer to join the first implementation team.

Clarity

Much of the communication during this phase is informal during implementation team meetings. The change agent facilitates discussions to support the learning of the school principals, academic department heads and interested teachers who are part of the first implementation team.

During this first year, there are at least four opportunities for teachers to participate in professional learning opportunities where the key messages focus on efficacy, principal support and valence. During these meetings, teachers are introduced to the critical elements of the deep learning framework and the global competencies during face-to-face presentations created and delivered by the implementation team members. The information about deep learning is delivered through persuasive communication, but the central part of each presentation is an opportunity for active participation by the teachers. These are working meetings, providing opportunities for teachers to engage with each other and with ideas.

At the end of the year, the implementation team shares their learning in a learning showcase attended by the leadership team and the teachers. A visual presentation illustrates the team's learning journey through the year, highlighting their successes and failures. The director

of education uses the information from the learning showcase to write an update report to parents and students and host a town hall meeting to inform parents and students about the learning of the faculty and the next steps for the following year. At the end of this phase, the communication message is that the implementation team is well established, confident, and able to support teachers in developing deep learning for students. Teachers have a beginning understanding of how to implement some of the elements in current lessons and can articulate some of the benefits of the deep learning approach.

Depth

During the depth phase, every teacher is a member of a collaborative inquiry team. Informal communication happens between the team members. During team meetings, teachers share their experiences using the deep learning framework and the global competencies in their classes. The inquiry team leaders share the information with the change agent, providing the opportunity to adjust the plan.

Formal communication takes place during four face-to-face presentations. These presentations allow the inquiry groups to share their learning and discuss successes and challenges. The change agent shares the monitoring and evaluation data and how that data has been used to adjust the plan. The key messages conveyed by the change agent reflect an emphasis on efficacy, support and valence. At the end of the year, the director of education updates the community in a written report and face-to-face town hall meetings with parents, students, and the board of governors to highlight the positive impacts of deep learning. The communication message emphasizes efficacy, support and valence.

Sustainability

The communication during this phase is similar to that of the depth phase. There is the addition of a final report by the change agent, who summarizes in a written report and face-to-face presentations the permanent changes that have been achieved, the successes and the next steps of the change plan. The message emphasizes efficacy and valence. Deep learning is embedded into the teaching and learning framework of the schools. Teachers and students use deep learning elements, and the change has been successful. This message is delivered to the senior leadership team, teachers, parents, and students at different times at the end of this phase. Communication during this phase includes celebratory messages of a successful change effort (Deszca et al., 2020; Lewis, 2019).

The communication plan presented is part of the broader change implementation plan. The communication is persuasive and participatory, with the overall purpose of encouraging stakeholders to accept, support and participate in the plan, minimize anxiety about the change and increase the involvement of all members of the community in the change (Deszca et al., 2020; Klein, 1996; Lewis, 2019).

Chapter 3 Conclusion

Anchored by social cognitive theory and the leadership practices of building relationships, capacity, and learning structures, the three-year change implementation plan addresses the problem of practice. The change implementation plan describes the priorities, goals and outcomes for each phase of the plan, integrates the monitoring and evaluation framework and describes the critical elements of the communication plan. The plan describes the actions of the essential stakeholders, predicts challenges and limitations to the plan and considers ways to

mitigate those challenges. The organizational improvement plan concludes by describing possible next steps and future considerations to realize the change plan.

Next Steps, Future Considerations of the Organizational Improvement Plan

The organizational improvement plan addresses the problem of how to create a 21st century, student-centred learning environment in a traditional teacher-centric school system. The change implementation plan describes the plan's details to create collaborative inquiry teams where teachers learn how to incorporate the deep learning strategies, frameworks and competencies in their work with students. The plan's outcome is to improve a focus on supporting equity, well-being and engagement and academic success. The plan's priorities are within my role as the supervisory officer of academics and professional development and are essential for positive outcomes for students. Figure 4 in Appendix Q shows how all of the details of the organizational improvement plan described in each chapter connect with the mission, vision and values of the Family of Independent Schools, to my leadership principles, social cognitive theory, and the approach to change. The next steps in the organizational improvement plan are to operationalize the plan, maintain momentum, and prepare the students and parents as partners in the change.

Operationalizing the Plan

The next steps in the organizational improvement plan are to operationalize and implement the plan in the schools. Once the director of education approves the change vision and plan, the vision and plan need to be reviewed and refined by the senior leadership team, school principals, academic department heads, and engaged and interested teachers. Before the plan is implemented, I recommend that we apply to join the *New Pedagogies for Deep Learning (npdl)* partnership. We have to participate as an associate member, as three schools are too small to join

as full members. Joining *NPDL* provides access to capacity-building institutes, support from other members through participation in regular collaboration meetings, and access to restricted tools and resources. We have access to the services of a deep learning consultant who would review our plan, provide feedback and support our launch and the change implementation phases. In addition, I suggest that we complete a well-being/school climate survey and an equity audit to help us identify our strengths and weaknesses in both areas and help us decide where to start with those aspects of deep learning (Hargreaves & Shirley, 2022; D. Smith et al., 2017; Tranter et al., 2018).

Maintaining Momentum

Maintaining the momentum with deep learning requires embedding deep learning into our teaching and learning framework, our on-boarding plan for new teachers and our professional learning plans. Our current teaching and learning framework is based on teaching for understanding using Wiggins and McTighe's (2005) three-stage backward design model. We need to integrate the deep learning design planning framework, organized around the collaborative inquiry stages, with our current backward design model (Quinn et al., 2020).

Our on-boarding program for new teachers requires the inclusion of the global competencies and the deep learning framework into the teacher induction program. New teachers are placed in collaborative inquiry teams, and some thought needs to be given to managing their integration into existing groups. Ongoing mentoring during a teacher's first two years is critical to help them implement deep learning in their teaching practice. Using the collaborative inquiry process to frame teacher professional learning plans is another way to help teachers continue to use deep learning tools and frameworks to support their learning.

Parents and Students

The change implementation plan is centred around teachers as the key stakeholders in the process. Students and parents need their own change implementation plan to involve them as partners in the change process. Students are participants in the change process, and their feedback is essential as we develop deep learning, providing teachers with information to adjust the plan. Parents pay fees and are invested in the education of their children. As providers of the funds that allow the schools to operate, parents need to understand and support the proposed change, to maintain the viability of the schools. Parents are an essential source of information about the impact of the change on their children. Their information added to the data collected in the monitoring framework provides more depth as we monitor the impact of the change on students. Regular communication with parents is essential during the change plan, so they are fully aware of what we are doing and why. Clear, timely, and strategic communication will build a partnership with parents to help them support the changes we are making and reduce their potential fears of the impact of the plan on their children's future academic success (Evans & Thompson, 2020, 2021).

Conclusion

This organizational improvement plan outlines a leadership problem of practice at the Family of Independent Schools, requiring a cultural shift within the learning environment from a teacher-centric to learner-centric pedagogy to support a move to 21st century learning practices. Students in the 21st century must become active, engaged learners who can apply their learning to solve complex problems. The shift in the role of the student requires a shift in teachers' beliefs, attitudes and behaviours. Social cognitive theory and my transformational and instructional leadership principles and practices, focusing on building relationships, capacity and

learning structures, work together to guide the solution to the problem. Creating collaborative inquiry teams, which requires teachers to work interdependently to learn about deep learning competencies, tools and approaches, is a solution to the problem of practice. The collaborative inquiry team structure and the development of an integrated change process model will endure beyond this time, providing a permanent mechanism for teachers to learn together and for the leadership to manage the change process.

References

2016 Gallup student poll: A snapshot of results and findings. (2017).

https://sac.edu/research/PublishingImages/Pages/research-

studies/2016%20Gallup%20Student%20Poll%20Snapshot%20Report%20Final.pdf

Ackerman-Anderson, L. S., & Anderson, D. (2010). *The change leader's roadmap: How to

navigate your organization's transformation* (2nd ed.). Wiley.

Anderson, D., & Ackerman-Anderson, L. S. (2010). *Beyond change management: How to

achieve breakthrough results through conscious change leadership* (2nd ed.). Pfeiffer.

Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and

research in the 1990s. *Journal of Management*, *25*(3).

https://doi.org/10.1177/014920639902500303

Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational

readiness. *Journal of Organizational Change Management*, *15*(2), 169–183.

https://doi.org/10.1108/09534810210423080

Armenakis, A. A., & Harris, S. G. (2009). Reflections: Our journey in organizational change

research and practice. *Journal of Change Management*, *9*(2), 127–142.

https://doi.org/10.1080/14697010902879079

Armenakis, A. A., Harris, S. G., & Feild, H. S. (2000). Making change permanent: A model for

institutionalizing change interventions. In *Research in organizational change and

development* (Vol. 12, pp. 97–128). Emerald Group Publishing Limited.

https://doi.org/10.1016/S0897-3016(99)12005-6

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, *46*(6), 681–703. https://doi.org/10.1177/001872679304600601

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. https://doi.org/https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1978). The self system in reciprocal determinism. *American Psychologist*, *33*(4), 344–358. https://doi.org/10.1037/0003-066X.33.4.344

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122–147. https://doi.org/10.1037/0003-066X.37.2.122

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*(9), 1175–1184. https://doi.org/10.1037/0003-066X.44.9.1175

Bandura, A. (1997). *Self efficacy: The exercise of control*. W.H. Freeman.

Bandura, A. (2000). Exercise of Human Agency Through Collective Efficacy. *Current Directions in Psychological Science*, *9*(3), 75–78. https://doi.org/10.1111/1467-8721.00064

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*(1), 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*(2), 164–180. http://www.jstor.org.proxy1.lib.uwo.ca/stable/40212163

Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science*, *13*(2), 130–136. https://doi.org/10.1177/1745691617699280

Barrell, J., Darling-Hammond, L., Dede, C., DuFour, R., DuFour, R., Fisher, D., Fogarty, R., Frey, N., Gardner, H., Hargreaves, A., Johnson, D., Johnson, R., Kay, K., Lemke, C., McTIghe, J., November, A., Pearlman, Bo., Pete, B., Reeves, D., … Seif, E. (2010). *21st century skills: Rethinking how students learn* (J. Bellanca & R. Brandt, Eds.). Solution Tree.

Bartunek, J. M., & Moch, M. K. (1987). First-order, second-order, and third-order change and organization development interventions: A cognitive approach. *The Journal of Applied Behavioral Science*, *23*(4), 483–500. https://doi.org/10.1177/002188638702300404

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*(3), 19–31. https://doi.org/https://doi.org/10.1016/0090-2616(90)90061-S

Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, *8*(1), 9–32. https://doi.org/10.1080/135943299398410

Bayraktar, S., & Jiménez, A. (2020). Self-efficacy as a resource: a moderated mediation model of transformational leadership, extent of change and reactions to change. *Journal of Organizational Change Management*, *33*(2), 301–317. https://doi.org/10.1108/JOCM-12-2018-0368

Beatty, C. (2015). *The easy, hard and tough work of managing change*. Queen's University Industrial Relations Centre. https://irc.queensu.ca/wp-content/uploads/articles/the-easy-hard-and-tough-work-of-managing-change-carol-beatty.pdf

Bendikson, L., Broadwith, M., Zhu, T., & Meyer, F. (2020). Goal pursuit practices in high schools: hitting the target? *Journal of Educational Administration*, *58*(6), 713–728. https://doi.org/10.1108/JEA-01-2020-0020

Bendikson, L., Robinson, V., & Hattie, J. (2012). Principal instructional leadership and secondary school performance. *Set: Research Information for Teachers (Wellington)*, *1*, 2–8. https://doi.org/10.18296/set.0387

Blackman, D., O'Flynn, J., & Ugyel, L. (2213). A diagnostic tool for assessing organisational readiness for complex change. *Australian and New Zealand Academy for Management Conference*, 1–18. https://www.anzsog.edu.au/resource-library/research/a-diagnostic-tool-for-assessing-organisational-readiness-for-complex-change

Blake, B., & Pope, T. (2008). Developmental psychology: Incorporating Piaget's and Vygotsky's theories in classrooms. *Journal of Cross-Disciplinary Perspectives in Education*, *1*(1), 59–67.

https://people.wm.edu/~mxtsch/Teaching/JCPE/Volume1/JCPE_2008-01-09.pdf

Blase, J., & Blase, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly*, *35*(3).

https://doi.org/10.1177/0013161X99353003

Brown, M., & Treviño, L. (2006). Ethical leadership: A review and future directions. *Leadership Quarterly*, *17*(6), 595–616. https://doi.org/10.1016/j.leaqua.2006.10.004

Brown, W. (2006). American nightmare: Neoliberalism, neoconservatism, and de-democratization. *Political Theory*, *34*(6), 690–714. http://www.jstor.org/stable/20452506

Browne, D. T., Wade, M., Prime, H., & Jenkins, J. M. (2018). School readiness amongst urban Canadian families: Risk profiles and family mediation. *Journal of Educational Psychology*, *110*(1), 133–146. https://doi.org/10.1037/edu0000202

Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. Russell Sage Foundation.

Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management Studies*, *41*(6), 977–1002. https://doi.org/10.1111/j.1467-6486.2004.00463.x

Bush, T., & Glover, D. (2003). *School leadership: Concepts and evidence*. National College for School Leadership. https://www.researchgate.net/publication/252485640_School_Leadership_Concepts_and_Evidence

Bush, T., & Glover, D. (2014). School leadership models: What do we know? *School Leadership & Management*, *34*(5), 553–571. https://doi.org/10.1080/13632434.2014.928680

Butler, R. (2007). Teachers' achievement goal orientations and associations with teachers' help seeking: Examination of a novel approach to teacher motivation. *Journal of Educational Psychology*, *99*(2), 241–252. https://doi.org/10.1037/0022-0663.99.2.241

CAIS. (2016). *CAIS Governance Guide*.

Chaney Jones, S. (2014, February 2). *Outputs vs. outcomes and why it matters*. Measurement Resources. https://measurementresourcesco.com/2014/02/02/outputs-vs-outcomes-matters/

Cherkowski, S., Walker, K., & Kutsyuruba, B. (2015a). Principal's moral agency and ethical decision-making: Towards transformational ethics. *International Journal of Education Policy and Leadership*, *10*(5). https://doi.org/https://doi.org/10.22230/ijepl.2015v10n5a572

Cherkowski, S., Walker, K., & Kutsyuruba, B. (2015b). Principals' moral agency and ethical decision-making: Towards transformational ethics. *International Journal of Education Policy and Leadership*, *10*(5). https://doi.org/10.22230/ijepl.2015v10n5a572

Choi, M., & Ruona, W. E. A. (2010). Individual readiness for organizational change and its implications for human resource and organization development. *Human Resource Development Review*, *10*(1), 46–73. https://doi.org/10.1177/1534484310384957

Cohen, D. K., & Mehta, J. D. (2017). Why reform sometimes succeeds: Understanding the conditions that produce reforms that last. *American Educational Research Journal*, *54*(4), 644–690. https://doi.org/10.3102/0002831217700078

Cole, P. (2004). *Professional development: A great way to avoid change: Vol. (Seminar Series 194)*. Centre for Strategic Education. https://ptrconsulting.com.au/wp-content/uploads/2018/03/Peter_Cole-PD_A_great_way_to_avoid_change.pdf

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications, Inc.

Curry-Stevens, A. (2007). New forms of transformative education: Pedagogy for the privileged. *Journal of Transformative Education*, *5*(1), 33–58. https://doi.org/10.1177/1541344607299394

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, *57*(3), 300–314. https://doi.org/10.1177/0022487105285962

Darling-Hammond, L., & Oakes, J. (2019). *Preparing teachers for deeper learning*. Harvard Education Press.

Datnow, A. (2011). Collaboration and contrived collegiality: Revisiting Hargreaves in the age of accountability. *Journal of Educational Change*, *12*(2), 147–158. https://doi.org/10.1007/s10833-011-9154-1

Dearlove, D., & Crainer, S. (2016, October). In conversation with Gianpiero Petriglieri. *Thinkers 50*, 42–47. https://thinkers50.com/blog/new-leadership/

Delors, Jacques. (1996). Learning, the treasure within: Report to UNESCO of the International Commission on Education for the Twenty-first Century. In *Report to UNESCO of the*

International Commission on Education for the Twenty-first Century. UNESCO.

https://unesdoc.unesco.org/ark:/48223/pf0000109590

Desimone, L. M. (2009). Improving impact studies of teachers' professional development:

Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181–199.

https://doi.org/10.3102/0013189X08331140

Desimone, L. M., & Garet, M. S. (2015). Best practices in teachers' professional development in

the United States. *Psychology, Society and Education*, *7*(3), 252–263.

https://doi.org/10.25115/psye.v7i3.515

Deszca, G., Ingols, C., & Cawsey, T. (2020). *Organizational change: An action-oriented toolkit*

(4th ed.). SAGE Publications.

Dewitt, P. (2017). *Collaborative leadership: Six influences that matter most*. Corwin Press.

Dewitt, P. (2018). *School climate leading with collective efficacy*. Corwin Press.

Dewitt, P. (2020). *Instructional leadership: Creating practice out of theory*. Corwin Press.

Donohoo, J. (2013). *Collaborative inquiry for educators: A facilitator's guide to school

improvement*. Corwin.

Donohoo, J., & Katz, S. (2017). When teachers believe, students achieve: Collaborative inquiry

builds teacher efficacy for better student outcomes. *Learning Professional*, *38*(6), 20–21.

https://www.lib.uwo.ca/cgi-

bin/ezpauthn.cgi?url=http://search.proquest.com/docview/2013521489?accountid=15115

Donohoo, J., & Katz, S. (2020). *Quality implementation: Leveraging collective efficacy to make

"what works" actually work*. Corwin.

Donohoo, J., & Mausbach, A. (2021, February 21). Beyond collaboration: The power of joint

work. *Educational Leadership*, 22–26.

Donohoo, J., & Velasco, M. (2016). *The transformative power of collaborative inquiry: Realizing change in schools and classrooms*. Corwin Press.

Dudar, L., Scott, S., & Scott, D. E. (2017). *Accelerating change in schools: Leading rapid, successful, and complex change initiatives* (Vol. 27). Emerald Publishing Limited. https://doi.org/10.1108/S1479-3660201727

Dufour, R., & DuFour, R. (2015). Deeper learning for students requires deeper learning for educators. In J. Bellanca (Ed.), *Deep Learning: Beyond 21st century skills* (pp. 21–52). Solution Tree.

Edmonds, A., & Kennedy, T. (2017). Convergent-Parallel Approach. In *An Applied Guide to Research Designs: Quantitative, Qualitative, and Mixed Methods* (pp. 181–188). SAGE Publications, Inc. https://doi.org/10.4135/9781071802779.n15

Ehrich, L., Harris, J., Klenowski, V., Smeed, J., & Spina, N. (2013). The centrality of ethical leadership. *Journal of Educational Administration.*, 197–214. https://doi.org/10.1108/JEA-10-2013-0110

Elving, W. J. L. (2005). The role of communication in organisational change. *Corporate Communications: An International Journal*, *10*(2), 129–138. https://doi.org/10.1108/13563280510596943

EQAO. (2018a). *EQAO school report grade 9 assessment of mathematics 2017-2018*.

EQAO. (2018b). *EQAO school report primary junior 2017-2018*.

EQAO. (2018c). *Ontario student achievement 2017-2018 EQAO's provincial secondary school report*.

Ertmer, P. A. (1999). Addressing first- and second-Order barriers to change: Strategies for technology integration. *Educational Technology Research and Development*, *47*(4), 47–61. http://www.jstor.org.proxy1.lib.uwo.ca/stable/30221096

Eun, B. (2008). Making connections: Grounding professional development in the developmental theories of Vygotsky. *The Teacher Educator*, *43*(2), 134–155. https://doi.org/10.1080/08878730701838934

Eun, B. (2019). Adopting a stance: Bandura and Vygotsky on professional development. *Research in Education*, *105*(1), 74–88. https://doi.org/10.1177/0034523718793431

Eun, B., & Heining-Boynton, A. L. (2007). Impact of an english-as-a-second-language professional development program. *The Journal of Educational Research*, *101*(1), 36–48. http://www.jstor.org.proxy1.lib.uwo.ca/stable/27548213

Evans, R., & Thompson, M. (2020). Combating parental anxiety with a new school partnership model. *Independent School*, 80–85. https://www.nais.org/magazine/independent-school/fall-2020/combatting-parental-anxiety-with-new-school-partnership-model/

Evans, R., & Thompson, M. (2021). *Hopes and fears: Working with today's independent school parents*. NAIS.

Fadel, C., Bialik, M., & Trilling, B. (2015). *Four-dimensional education the competencies learners need to succeed*. Center for Curriculum Redesign.

Fetterman, D., Rodriguez-Campos, L., & Zukoski, A. (2017). *Collaborative, participatory, and empowerment evaluation: Stakeholder involvement approaches*. Guilford Publications.

Ford, J. D., & Ford, L. W. (1995). The role of conversations in producing intentional change in organizations. *The Academy of Management Review*, *20*(3), 541. https://doi.org/10.2307/258787

Ford, J. D., Ford, L. W., & McNamara, R. T. (2002). Resistance and the background

    conversations of change. *Journal of Organizational Change Management*, *15*(2), 105–121.

    https://doi.org/10.1108/09534810210422991

Fullan, M. (2002, May). The change leader. *Educational Leadership*, 16–20.

    https://michaelfullan.ca/wp-content/uploads/2016/06/13396052090.pdf

Fullan, M. (2007). Change theory as a force for school improvement. In J. M. Burger, C. F.

    Webber, & P. Klinck (Eds.), *Intelligent leadership: Constructs for thinking education*

    leaders (pp. 27–39). Springer Netherlands. https://doi.org/10.1007/978-1-4020-6022-9_3

Fullan, M. (2011). *Change leader: Learning to do what matters most*. Jossey-Bass.

Fullan, M. (2014). *The principal: Three keys to maximizing impact*. Jossey-Bass.

Fullan, M. (2016). *The new meaning of educational change* (Fifth Edition). Routledge, Taylor &

    Francis Group.

Fullan, M. (2020). *Leading in a culture of change* (2nd ed.). Jossey Bass.

Fullan, M., Gardner, M., & Drummy, M. (2019). Going Deeper. *Educational Leadership*, *76*(8),

    64. http://www.ascd.org.proxy1.lib.uwo.ca/publications/educational-

    leadership/may19/vol76/num08/Going-Deeper.aspx

Fullan, M., & Kirtman, L. (2019). *Coherent school leadership: Forging clarity from complexity*.

    Association for Supervision and Curriculum Development.

Fullan, M., Langworthy, M., & Barber, M. (2014). *A rich seam: How new pedagogies find deep*

    meaning. MaRS Discovery District. https://books-scholarsportal-

    info.proxy1.lib.uwo.ca/uri/ebooks/ebooks0/gibson_cppc/2014-09-25/1/10886027

Fullan, M., & Quinn, J. (2016). *Coherence: The right drivers in action for schools, districts, and*

    systems. Corwin Press; Ontario Principal's Council.

Fullan, M., Quinn, J., & McEachen, J. (2018). *Deep learning: Engage the world, change the world*. Corwin.

Glazier, J. A., Boyd, A., Bell Hughes, K., Able, H., & Mallous, R. (2017). The elusive search for teacher collaboration. *The New Educator*, *13*(1), 3–21. https://doi.org/10.1080/1547688X.2016.1144841

Gorski, P. (2006). Complicity with conservatism: The de-politicizing of multicultural and intercultural education. *Intercultural Education*, *17*(2), 163–177. https://doi.org/10.1080/14675980600693830

Gorski, P., DuBose, M., & Swalwell, K. (2022). Trading Baby Steps for Big Equity Leaps. *Educational Leadership*, *79*(5), 26–31.

Gorski, P., & Swalwell, K. (2015, March). Equity literacy for all. *Educational Leadership*, 34–40. http://www.edchange.org/publications/Equity-Literacy-for-All.pdf

Ontario education act, Pub. L. No. E.2 (2020).

Government of Ontario. (2020). *Ontario's long term report on the economy*. https://www.ontario.ca/document/ontarios-long-term-report-economy/chapter-1-demographic-trends-and-projections#:~:text=The%20proportion%20of%20core%2Dage,23.4%20per%20cent%20by%202046.

Greenfield, W. D. (2004). Moral leadership in schools. *Journal of Educational Administration*, *42*(2), 174–196. https://doi.org/10.1108/09578230410525595

Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. *Educational Management Administration and Leadership*, *46*(1), 25–48. https://doi.org/10.1177/1741143216659296

Guskey, T. R. (1984). The influence of change in instructional effectiveness upon the affective

characteristics of teachers. *American Educational Research Journal*, *21*(2), 245–259.

https://doi.org/10.3102/00028312021002245

Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher*,

15(5), 5–12. https://doi.org/10.3102/0013189X015005005

Guskey, T. R. (2000). *Evaluating professional development*. Corwin Press.

Guskey, T. R. (2002a). Does it make a difference? Evaluating professional development.

Educational Leadership, *59*(6), 45-51.

Guskey, T. R. (2002b). Professional development and teacher change. *Teachers and Teaching*,

8(3), 381–391. https://doi.org/10.1080/135406002100000512

Guskey, T. R. (2020). Flip the script on change. *The Learning Professional*, *41*(2), 18–22.

https://www.lib.uwo.ca/cgi-

bin/ezpauthn.cgi?url=http://search.proquest.com/docview/2390537270?accountid=15115

Guskey, T. R. (2021). The past and future of teacher efficacy. *Educational Leadership*, *79*(3),

20–25.

Hall, G., & Hord, S. (2020). *Implementing change: Patterns, principles, and potholes* (5th ed.).

Pearson Education.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that

refuses to fade away. *Leadership and Policy in Schools*, *4*(3), 221–239.

https://doi.org/10.1080/15700760500244793

Hallinger, P., & Murphy, J. (1985). Assessing the Instructional Management Behavior of

Principals. *The Elementary School Journal*, *86*(2), 217–247.

http://www.jstor.org.proxy1.lib.uwo.ca/stable/1001205

Harden-Moore, T., Harden, K., & cmaddmin. (2019, March 4). Moving from ally to accomplice: How far are you willing to go to disrupt racism in the workplace? *Diverse Issues in Higher Education* . https://www.diverseeducation.com/opinion/article/15104148/moving-from-ally-to-accomplice-how-far-are-you-willing-to-go-to-disrupt-racism-in-the-workplace

Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. Teachers College Press.

Hargreaves, A. (2013). Push, pull and nudge: The future of teaching and educational change. In X. Zhu & K. Zeichner (Eds.), *Preparing Teachers for the 21st Century* (pp. 217–236). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-36970-4_13

Hargreaves, A. (2019). Teacher collaboration: 30 years of research on its nature, forms, limitations and effects. *Teachers and Teaching: Theory and Practice*, *25*(5), 603–621. https://doi.org/10.1080/13540602.2019.1639499

Hargreaves, A., & Fullan, M. (2020). Professional capital after the pandemic: Revisiting and revising classic understandings of teachers' work. *Journal of Professional Capital and Community*, *5*(3/4), 327–336. https://doi.org/10.1108/JPCC-06-2020-0039

Hargreaves, A., & O'Connor, M. (2017). Cultures of professional collaboration: their origins and opponents. *Journal of Professional Capital and Community*, *2*(2), 74–85. https://doi.org/10.1108/jpcc-02-2017-0004

Hargreaves, A., & Shirley, D. (2022). *Well-being in schools: Three forces that will uplift your students in a volatile world*. Association for Supervision and Curriculum Development.

Harris, A. (2011). System improvement through collective capacity building. *Journal of Educational Administration*, *49*(6), 624–636. https://doi.org/http://dx.doi.org/10.1108/09578231111174785

Harris, A., & Jones, M. (2010). Professional learning communities and system improvement. *Improving Schools*, *13*(2), 172–181. https://doi.org/10.1177/1365480210376487

Hatch, T. (2021). Expanding the boundaries of learning. *Phi Delta Kappan*, *102*(8), 8–13. https://doi.org/10.1177/00317217211013930

Hatch, T., Corson, J., & Gerth Van Den Berg, S. (2021). *The education we need for a future we can't predict*. Corwin.

Hattie, J., Fisher, D., Frey, N., & Clarke, S. (2021). *Collective student efficacy: Developing independent and inter-dependent learners*. Corwin.

Hattie, J., & Smith, R. (2021). 10 mindframes for leaders: The visible learning approach to school success. In *Ten mindframes for leaders*. Corwin.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, *77*(1), 81–112. https://doi.org/10.3102/003465430298487

Heck, R., & Hallinger, P. (2010). Collaborative leadership effects on school improvement: Integrating unidirectional- and reciprocal-effects models. *The Elementary School Journal*, *111*(2), 226–252. https://doi.org/10.1086/656299

Heifetz, R., Linsky, M., & Grashow, A. (2009). *The practice of adaptive leadership*. Harvard Business Review Press978-1422105768. http://web.b.ebscohost.com/ehost/ebookviewer/ebook?nobk=y&sid=90c5ac4d-5c7b-40bf-bdd0-8f63320658aa@sessionmgr103&vid=4&format=EK

Hoerr, T. (2005). *The art of school leadership*. Association for Supervision and Curriculum Development.

Holdsworth, S., & Maynes, N. (2017). "But what if I fail?" A meta-synthetic study of the conditions supporting teacher innovation. *Canadian Journal of Education / Revue Canadienne de l'éducation*, *40*(4), 665–703. https://www-jstor-org.proxy1.lib.uwo.ca/stable/90018384

Holmes, K., Clement, J., & Albright, J. (2013). The complex task of leading educational change in schools. *School Leadership & Management*, *33*(3), 270–283. https://doi.org/10.1080/13632434.2013.800477

Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *The Journal of Applied Behavioral Science*, *43*(2), 232–255. https://doi.org/10.1177/0021886306295295

Holt, D. T., Helfrich, C. D., Hall, C. G., & Weiner, B. J. (2010). Are you ready? How health professionals can comprehensively conceptualize readiness for change. *Journal of General Internal Medicine*, *25*(S1), 50–55. https://doi.org/10.1007/s11606-009-1112-8

Howard, A., & Maxwell, C. (2018). From conscientization to imagining redistributive strategies: Social justice collaborations in elite schools. *Globalisation, Societies and Education*, *16*(4), 526–540. https://doi.org/10.1080/14767724.2018.1512048

Hoy, W. K., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, *9*(3), 184–208. https://doi.org/10.1177/105268469900900301

Hubbard, L., & Datnow, A. (2020). Design thinking, leadership, and the grammar of schooling: Implications for educational change. *American Journal of Education*, *126*(4), 499–518. https://doi.org/https://doi-org.proxy1.lib.uwo.ca/10.1086/709510

ISM. (2015). Three hallmarks that lead parents to choose your school. *Ideas and Perspectives*, *40*(11). https://isminc.com/advisory/publications/ideas-and-perspectives/three-hallmarks-that-lead-parents-to-choose-your-school

Jana, T. (2021, February 8). The Differences Between Allies, Accomplices & Co-Conspirators May Surprise You. *An Injustice*. https://aninjusticemag.com/the-differences-between-allies-accomplices-co-conspirators-may-surprise-you-d3fc7fe29c

Johansson, C., & Heide, M. (2008). Speaking of change: Three communication approaches in studies of organizational change. *Corporate Communications: An International Journal*, *13*(3), 288–305. https://doi.org/10.1108/13563280810893661

Jones, M., & Harris, A. (2014). Principals leading successful organisational change. *Journal of Organizational Change Management*, *27*(3). https://doi.org/10.1108/JOCM-07-2013-0116

Joyce, B. R., & Showers, Beverly. (2002). *Student achievement through staff development* (3rd ed.). Association for Supervision and Curriculum Development.

Kaser, Linda., & Halbert, J. (2009). *Leadership mindsets: Innovation and learning in the transformation of schools*. Routledge.

Katz, S., & Dack, L. (2013). *Intentional interruption breaking down learning barriers to transform professional practice*. Corwin Press.

Katz, S., & Dack, L. A. (2014). Towards a culture of inquiry for data use in schools: Breaking down professional learning barriers through intentional interruption. *Studies in Educational Evaluation*, *42*(9), 35–40. https://doi.org/10.1016/j.stueduc.2013.10.006

Katz, S., Dack, L., & Molloy, J. (2018). *The intelligent, responsive leader*. Corwin.

Kegan, R., & Lahey, L. (2016). *An everyone culture becoming a deliberately developmental organization*. Harvard Business Review Press.

Kivunja, C., & Kuyini, A. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, *6*(5). https://doi.org/10.5430/ijhe.v6n5p26

Klein, S. M. (1996). A management communication strategy for change. *Journal of Organizational Change Management*, *9*(2), 32–46. https://doi.org/10.1108/09534819610113720

Kleine-Kracht, S. P. (1993). Indirect instructional leadership: An administrator's choice. *Educational Administration Quarterly*, *29*(2), 187–212. https://doi.org/10.1177/0013161X93029002005

Knight, J. (2022). To Change, Start Where You (Really) Are. *Educational Leadership*, *79*(5), 80.

Kokka, K. (2020). Social justice pedagogy for whom? Developing privileged students' critical mathematics Consciousness. *The Urban Review*, *52*(4), 778–803. https://doi.org/10.1007/s11256-020-00578-8

Kotter, J. (2007). Leading change: Why transformation efforts fail. *Harvard Business Review*, *85*(1), 96–103. http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=23363656&site=ehost-live

Kutsyuruba, B., Bolden, B., Christou, T., DeLuca, C., Klinger, D., Pyper, J., Shulha, L., & Wade-Woolley, L. (2014). *Professional learning cultures: An evaluation of collaborative inquiry in Ontario elementary schools*.

https://www.researchgate.net/publication/281274346_Professional_Learning_Cultures_An_Evaluation_of_Collaborative_Inquiry_in_Ontario_Elementary_Schools

Kutsyuruba, B., & Walker, K. (2013). Ethical challenges in school administration. *Organizational Cultures: An International Journal*, *12*(3), 85–99. https://doi.org/10.18848/2327-8013/CGP/v12i03/50919

Labaree, D. F. (2021). The dynamic tension at the core of the grammar of schooling. *Phi Delta Kappan*, *103*(2), 28–32. https://doi.org/10.1177/00317217211051141

Langley, G., Moen, R., Nolan, K., Nolan, T., Norman, C., Provost, L., & Moen, R. (2009). *The improvement guide: Practical approach to enhancing organizational performance* (2nd ed.). Jossey Bass.

Lavis, J. N., Robertson, D., Woodside, J. M., McLeod, C. B., Abelson, J., & Group, T. K. T. S. (2003). How can research organizations more effectively transfer research knowledge to decision makers? *The Milbank Quarterly*, *81*(2), 221–248. http://www.jstor.org.proxy1.lib.uwo.ca/stable/3655841

Lee, W. C., Chen, V. D.-T., & Wang, L.-Y. (2017). A review of research on teacher efficacy beliefs in the learner-centred pedagogy context: Themes, trends and issues. *Asia Pacific Education Review*, *18*(4), 559–572. https://doi.org/10.1007/s12564-017-9501-x

Leithwood, K., & Jantzi, D. (2005). A review of transformational school leadership research 1996–2005. *Leadership and Policy in Schools*, *4*(3), 177–199. https://doi.org/10.1080/15700760500244769

Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership. *Educational Administration Quarterly*, *48*(3), 387–423. https://doi.org/10.1177/0013161X11436268

Leithwood, K., Sun, J., & Schumacker, R. (2020). How school leadership influences student learning: A test of "The four paths model." *Educational Administration Quarterly*, *56*(4). https://doi.org/10.1177/0013161X19878772

Lewis, L. (2019). *Organizational change: Creating change through strategic communication*. John Wiley & Sons.

Lieberman, A., Miller, L., Roy, P., Hord, S., & von Frank, V. (2014). *Reach the highest standard in professional learning: Learning communities*. Corwin

Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, *91*(4), 509–536. https://www.researchgate.net/publication/247944039_The_Persistence_of_Privacy_Autonomy_and_Initiative_in_Teachers_Professional_Relations

Liu, H. (2017). Reimagining ethical leadership as a relational, contextual and political practice. *Leadership*, *13*(3), 343–367. https://doi.org/10.1177/1742715015593414

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705–717. https://doi.org/10.1037/0003-066X.57.9.705

Longboat, K. D., Ashraf, N., & James, C. (2018). Achieving excellence: Weaving together student achievement, equity, and well-being. *In Conversation*, *4*(6), 1–33. http://www.edu.gov.on.ca/eng/policyfunding/leadership/spring2018-en.pdf

Lortie, D. C. (2002). *Schoolteacher: A sociological study* (2nd ed). University of Chicago Press.

Louis, K. S., Hord, S. M., & von Frank, V. (2017). *Reach the highest standard in professional learning: Leadership*. Corwin.

Lu, J., Jiang, X., Yu, H., & Li, D. (2015). Building collaborative structures for teachers'

  autonomy and self-efficacy: The mediating role of participative management and learning

  culture. *School Effectiveness and School Improvement*, *26*(2).

  https://doi.org/10.1080/09243453.2014.888086

Luthar, S. S., Kumar, N. L., & Zillmer, N. (2020). High-achieving schools connote risks for

  adolescents: Problems documented, processes implicated, and directions for interventions.

  American Psychologist, *75*(7). https://doi.org/10.1037/amp0000556

Markiewicz, A., & Patrick, I. (2016). *Developing monitoring and evaluation frameworks*. Sage.

Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An

  integration of transformational and instructional leadership. *Educational Administration*

  Quarterly, *39*(3), 370–397. https://doi.org/10.1177/0013161X03253412

Matos Marques Simoes, P., & Esposito, M. (2014). Improving change management: How

  communication nature influences resistance to change. *Journal of Management*

  Development, *33*(4), 324–341. https://doi.org/10.1108/JMD-05-2012-0058

McTighe, J., & Seif, E. (2010). An implementation framework to support 21st century skills. In

  J. Bellanca & R. Brandt (Eds.), *21st century skills: Rethinking how student learn* (pp. 149–

  172). Solution-Tree.

Mehta, J., & Datnow, A. (2020). Changing the grammar of schooling: An appraisal and a

  research agenda. *American Journal of Education*, *126*(4). https://doi.org/https://doi-

  org.proxy1.lib.uwo.ca/10.1086/709960

Mehta, J., & Fine, S. (2019). *In search of deeper learning: The quest to remake the American*

  high school. Harvard University Press.

Melville, W., & Hardy, I. (2020). Teacher learning, accountability and policy enactment in

Ontario: The centrality of trust. *Educational Research for Policy and Practice*, *19*(1), 1–17.

https://doi.org/10.1007/s10671-018-09244-z

Mitchell, C., & Sackney, L. (2011). Sustainable learning communities: From managed systems

to living systems. *Journal of Educational Administration and Foundations*, *22*(1), 19–I.

https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi

Murphy, J. (2015). *Creating instructional capacity: A framework for creating academic press*.

SAGE Publications.

National Research Council. (2013). *Education for life and work: Developing transferable

knowledge and skills in the 21st century* (J. Pellegrino & M. Hilton, Eds.). The National

Academies Press.

Neumann, J., Robson, A., & Sloan, D. (2018). Monitoring and evaluation of strategic change

programme implementation: Lessons from a case analysis. *Evaluation and Program

Planning*, *66*, 120–132. https://doi.org/https://doi.org/10.1016/j.evalprogplan.2017.09.012

OECD. (2013). *Teachers for the 21st Century*. OECD. https://doi.org/10.1787/9789264193864-

en

Ontario College of Teachers. (2020). *Ontario College of teachers standards of practice for the

teaching profession*. Ontario College of Teachers. https://www.oct.ca/public/professional-

standards/standards-of-practice

Teacher Learning Plans, Pub. L. No. Ontario Regulation 98/02, Ontario Education Act (2007).

https://www.ontario.ca/laws/regulation/020098

Ontario Ministry of Education. (2010). Growing success assessment, evaluation and reporting in

Ontario schools. In *Ministry of Education, Ontario*.

Ontario Ministry of Education. (2013a). *Policy and Procedures Manual*. Queen's Printer,

Ontario.

Ontario Ministry of Education. (2013b). *Private schools policy and procedures manual*.

http://www.edu.gov.on.ca/eng/general/elemsec/privsch/PrivateSchools_PolicyManual.pdf

Ontario Ministry of Education. (2014). *Achieving Excellence: A Renewed Vision for Education

in Ontario*. Ontario Ministry of Education.

https://www.oise.utoronto.ca/atkinson/UserFiles/File/Policy_Monitor/ON_01_04_14_-

_renewedVision.pdf

Ontario Ministry of Education. (2016a). Ontario schools kindergarten to grade 12: Policy and

program requirements 2016. In *Ontario Ministry of Education*. Queen's Printer, Ontario.

http://www.edu.gov.on.ca/eng/document/policy/os/onschools_2016e.pdf

Ontario Ministry of Education. (2016b). Ontario's well-being strategy for education discussion

document. In *Ontario Ministry of Education* (pp. 1–8). Ontario Ministry of Education.

https://collections.ola.org/mon/30005/334837.pdf

Ontario Ministry of Education. (2016c). *Towards defining 21st century competencies for

Ontario*. Ontario Ministry of Education.

http://www.edugains.ca/resources21CL/About21stCentury/21CL_21stCenturyCompetencie

s.pdf

Ontario Ministry of Education. (2017). *Ontario's Education Equity Action Plan*.

http://www.edu.gov.on.ca/eng/about/education_equity_plan_en.pdf

Ontario Ministry of Education. (2019, September 9). *Health and Physical Education (2019)*. The

Ontario Curriculum, Grades 1-8: Health and Physical Education 2019.

http://www.edu.gov.on.ca/eng/curriculum/elementary/2019-health-physical-education-grades-1to8.pdf

Ontario Ministry of Education. (2020, September 9). *Mathematics 2020*. The Ontario Curriculum, Grades 1-8: Mathematics, 2020. https://www.dcp.edu.gov.on.ca/en/curriculum/elementary-mathematics

Ontario Ministry of Education. (2021, September 9). *Mathematics 2021*. The Ontario Curriculum, Mathematics Grade 9. https://www.dcp.edu.gov.on.ca/en/curriculum/secondary-mathematics/courses/mth1w

Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change: A 60-year review of quantitative studies. *The Journal of Applied Behavioral Science*, *47*(4), 461–524. https://doi.org/10.1177/0021886310396550

Organization for Economic Cooperation and Development. (2021). *Beyond Academic Learning: First results from the survey of social and emotional skills*. Organization for Economic Cooperation and Development. https://doi.org/10.1787/92a11084-en

Organization for Economic Development and Cooperation. (2019). *OECD Future of education and skills 2030 conceptual learning framework: Learning compass 2030*. https://www.oecd.org/education/2030-project/teaching-and-learning/learning/

Osmond-Johnson, P., & Campbell, C. (2018). Transforming an education system through professional learning: developing educational change at scale in Ontario. *Educational Research for Policy and Practice*, *17*(3), 241–256. https://doi.org/10.1007/s10671-018-9233-7

Panero, N. S. (2021). Shifting team culture: An analysis of effective facilitator moves in inquiry-based reform. *Leadership and Policy in Schools*, 1–13. https://doi.org/10.1080/15700763.2021.1977334

Perry, G., & Richardson, J. (2022). *Equity Warriors: Creating Schools that students deserve*. Corwin Press.

Pope, D. (2001). *Doing school - How we are creating a generation of stressed out, materialistic, and miseducated students*. Yale University Press.

Pope, D. (2010). Beyond "doing school": From "stressed-out" to "engaged in learning." *Education Canada*, *50*(1), 4–8. http://www.cea-ace.ca/pub.cfm?subsection=edu&page=cur

Printy, S. M. (2014). Insights for an integrated leadership school. *Journal of School Public Relations*, *35*(2), 298+. https://link.gale.com/apps/doc/A430548654/AONE?u=lond95336&sid=AONE&xid=3c97e952

Quinn, J., McEachen, J., Fullan, M., Gardner, M., & Drummy, M. (2020). *Dive into deep learning: Tools for engagement*. Corwin Press.

Reeves, D. (2021). *Deep change leadership: A model for renewing and strengthening schools and districts*. Solution Tree Press.

Reimers, F., & Opertti. (2021). *Learning to build back better futures for education*. UNESCO International Bureau of Education. https://doi.org/10.1007.978-0-030-82159-3

Rifkin, M., & Sibbett, L. (2020). Can an independent school teacher be socially just? *Independent Teacher*, 1–9. https://www.nais.org/magazine/independent-teacher/fall-2020/can-an-independent-school-teacher-be-socially-just/

Riordan, M., Klein, E. J., & Gaynor, C. (2019). Teaching for equity and deeper learning: How does professional learning transfer to teachers' practice and influence students' experiences? *Equity & Excellence in Education*, *52*(2–3), 327–345. https://doi.org/10.1080/10665684.2019.1647808

Ritchhart, R. (2015). *Creating cultures of thinking the 8 forces we must master to truly transform our schools*. Jossey Bass.

Robinson, V. (2010). From instructional leadership to leadership capabilities: Empirical findings and methodological challenges. *Leadership and Policy in Schools*, *9*(1), 1–26. https://doi.org/10.1080/15700760903026748

Robinson, V. (2011). *Student-centered leadership*. Jossey Bass.

Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School Leadership and student outcomes: Identifying what works and why best evidence synthesis iteration (BES)*. http://educationcounts.govt.nz/goto/BES

Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, *44*(5), 635–674. https://doi.org/10.1177/0013161X08321509

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Ross, J., & Bruce, C. (2007). Professional development effects on teacher efficacy: Results of randomized field trial. *The Journal of Educational Research*, *101*(1), 50–60. http://www.jstor.org.proxy1.lib.uwo.ca/stable/27548214

Ryan, R., & Deci, E. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 101860. https://doi.org/https://doi.org/10.1016/j.cedpsych.2020.101860

Schein, E. (2016). *Organizational culture and leadership* (5th ed.). Wiley.

Schulz-Knappe, C., Koch, T., & Beckert, J. (2019). The importance of communicating change. *Corporate Communications: An International Journal*, *24*(4), 670–685. https://doi.org/10.1108/CCIJ-04-2019-0039

Schwabsky, N., Erdogan, U., & Tschannen-Moran, M. (2019). Predicting school innovation. *Journal of Educational Administration*, *58*(2), 246–262. https://doi.org/10.1108/JEA-02-2019-0029

Sergiovanni, T., & MacBeath, J. (2001). *Leadership: What's in it for schools?* Taylor & Francis Group.

Shields, C. M. (2018). *Transformative leadership in education: Equitable change in an uncertain and complex world*. Routledge.

Shirley, D., & Hargreaves, A. (2021). *Five paths of student engagement: Blazing the trail to learning and success*. Solution Tree.

Simons, H. (2006). Ethics in Evaluation. In *The SAGE Handbook of Evaluation* (pp. 244–265). SAGE Publications Ltd. https://doi.org/10.4135/9781848608078.n11

Sinnema, C. E. L., & Robinson, V. M. J. (2007). The leadership of teaching and learning: Implications for teacher evaluation. *Leadership and Policy in Schools*, *6*(4), 319–343. https://doi.org/10.1080/15700760701431603

Smith, D., Pumpian, I., Frey, N., & Fisher, D. (2017). *Building equity: Policies and practices to empower all learners*. Association for Supervision and Curriculum Development.

Smith, I. (2005a). Continuing professional development and workplace learning 11 Managing the people side of organisational change. *Library Management*, *26*(3), 152–155. https://doi.org/10.1108/01435120510580898

Smith, I. (2005b). Continuing professional development and workplace learning 13 Resistance to

change - recognition and response. *Library Management*, *26*(8/9), 519–522.

https://doi.org/10.1108/01435120510631800

Soulé, H., & Warrick, T. (2015). Defining 21st century readiness for all students: What we know

and how to get there. *Psychology of Aesthetics, Creativity, and the Arts*, *9*(2), 178–186.

https://doi.org/10.1037/aca0000017

Starratt, R. (1991). Building an Ethical School: A Theory for Practice in Educational Leadership.

Educational Administration Quarterly, *27*(2), 185–202.

https://doi.org/10.1177/0013161X91027002005

Starratt, R. (1994). *Building an ethical school: A practical response to the moral crisis in

schools*. Taylor & Francis Group.

http://ebookcentral.proquest.com/lib/west/detail.action?docID=235099

Starratt, R. (2005). Responsible Leadership. *The Educational Forum*, *69*(2), 124–133.

https://doi.org/10.1080/00131720508984676

Starratt, R. (2010). Developing ethical leadership. In B. Davies & M. Brundrett (Eds.),

Developing Successful Leadership (pp. 27–37). Springer Netherlands.

https://doi.org/10.1007/978-90-481-9106-2_3

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning

communities: A review of the literature. *Journal of Educational Change*, *7*(4), 221–258.

https://doi.org/10.1007/s10833-006-0001-8

Sull, D., Turconi, S., Sull, C., & Yoder, J. (2018). Turning strategy into results. *MIT Sloan

Management Review*, *59*(3), 1–12. https://sloanreview.mit.edu/article/turning-strategy-into-

results/

Swalwell, K. (2013a). *Educating activist allies: Social justice pedagogy with the suburban and urban elite*. Routledge.

Swalwell, K. (2013b). With great power comes great responsibility: Privileged students' conceptions of justice-oriented citizenship. *Democracy and Education*, *21*(1), 1–11. https://democracyeducationjournal.org/cgi/viewcontent.cgi?article=1051&context=home

Timperley, H. (2011). *Realizing the power of professional learning*. Open University Press.

Timperley, H., Ell, F., le Fevre, D., & Twyford, K. (2020). *Leading professional learning: Practical strategies in schools*. Australian Council for Educational Research Press.

Timperley, H., & Parr, J. (2005). Theory competition and the process of change. *Journal of Educational Change*, *6*(3), 227–251. https://doi.org/10.1007/s10833-005-5065-3

Timperley, H., & Robinson, V. (2000). Workload and the professional culture of teachers. *Educational Management & Administration*, *28*(1). https://doi.org/10.1177/0263211X000281005

Timperley, H. S., & Phillips, G. (2003). Changing and sustaining teachers' expectations through professional development in literacy. *Teaching and Teacher Education*, *19*(6), 627–641. https://doi.org/10.1016/S0742-051X(03)00058-1

Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development best evidence synthesis*. https://www.educationcounts.govt.nz/__data/assets/pdf_file/0017/16901/TPLandDBESentireWeb.pdf

Tranter, D., Carson, L., & Boland, T. (2018). *The third path: A relationship-based approach to student well-being and achievement]*. Nelson Education Ltd.

Trilling, B., & Fadel, C. (2009). *21 st century skills: Learning for life in our times*. John Wiley and Sons.

Truth and Reconciliation Commission. (2015). Truth and reconciliation commission of Canada: Calls to Action. In *Truth and Reconciliation Commission Calls to Action*. Truth and Reconciliation Commission of Canada.

http://trc.ca/assets/pdf/Calls_to_Action_English2.pdf

Tschannen-Moran, M. (2001). Collaboration and the need for trust. *Journal of Educational Administration*, *39*(4), 308–331. https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com/scholarly-journals/collaboration-need-trust/docview/220459933/se-2?accountid=15115

Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly*, *45*(2), 217–247. https://doi.org/10.1177/0013161X08330501

Tschannen-Moran, M. (2014). *Trust matters: Leadership for successful schools* (2nd ed.). Jossey-Bass.

Tschannen-Moran, M., & Chen, J. (2014). Fostering attention on beliefs about capability and knowledge in teachers' professional development. In L. Martin, D. Kragler, K. Quatroche, K. Bauserman, & A. Hargreaves (Eds.), *Handbook of professional development in education: Successful models and practices, pre K-12* (pp. 246–263). Guilford Publications. https://ebookcentral.proquest.com/lib/west/reader.action?docID=1675657&ppg=278

Tschannen-Moran, M., & Gareis, C. (2015). Principals, trust, and cultivating vibrant schools. *Societies (Basel, Switzerland)*, *5*(2), 256–276. https://doi.org/10.3390/soc5020256

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs

of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944–956.

https://doi.org/10.1016/j.tate.2006.05.003

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and

measure. *Review of Educational Research*, *68*(2), 202–248.

https://doi.org/10.3102/00346543068002202

Tschannen-Moran, M., Hoy, A. W., Mackley, T., & Uline, C. (2000). Creating smarter schools

through collaboration. *Journal of Educational Administration*, *38*(3), 247–271.

https://doi.org/10.1108/09578230010342312

Tschannen-Moran, M., & McMaster, P. (2009). Sources of self efficacy: Four professional

development formats and their relationship to self efficacy and implementation of a new

teaching strategy. *The Elementary School Journal*, *110*(2), 228–245.

https://doi.org/10.1086/605771

UNESCO. (2021). *Reimagining our futures together: A new social contract for education*.

https://unesdoc.unesco.org/ark:/48223/pf0000379707

van Pelt, D., Hunt, D., & Wolfert, J. (2019). *Who chooses Ontario independent schools and

why?* https://www.cardus.ca/research/education/reports/who-chooses-ontario-independent-

schools-and-why/

van Vuuren, M., & Elving, W. J. L. (2008). Communication, sensemaking and change as a chord

of three strands. *Corporate Communications: An International Journal*, *13*(3), 349–359.

https://doi.org/10.1108/13563280810893706

vander Ark, T., & Schneider, C. (2014). *Deeper learning for every student every day*. Getting

Smart; Hewett Foundation. https://www.hewlett.org/wp-

content/uploads/2016/08/Deeper%20Learning%20for%20Every%20Student%20EVery%20Day_GETTING%20SMART_1.2014.pdf

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, *24*(1), 80–91. https://doi.org/10.1016/j.tate.2007.01.004

Vosniadou, S., Lawson, M., Stephenson, H., & Bodner, E. (2021). *Teaching students how to learn: Setting the stage for lifelong learning*. http://www.ibe.unesco.org/en/news/teaching-students-how-learn-setting-stage-lifelong-learning-educational-practices-series-33

Wagner, T. (2008). *The global achievement gap: Why even our best schools don't teach the new survival skills our children need and what we can do about it*. Basic Books.

Wagner, T., & Compton, R. (2012). *Creating innovators: The making of young people who will change the world*. Scribner.

Wagner, T., & Dintersmith, T. (2015). *Most likely to succeed: Preparing our kids for the innovation era*. Scribner.

Walker, J., Armenakis, A. A., & Bernerth, J. B. (2007). Factors influencing organizational change efforts. *Journal of Organizational Change Management*, *20*(6), 761–773. https://doi.org/10.1108/09534810710831000

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science*, *4*(1), 67. https://doi.org/10.1186/1748-5908-4-67

Wheatley, M. (2006). *Leadership and the new science: Discovering order in a chaotic world* (Third edit). Berrett-Koehler.

Whelan-Berry, K. S., Gordon, J. R., & Hinings, C. R. (2003). The relative effect of change drivers in large-scale organizational change: An empirical study. In *Research in*

Organizational Change and Development (Vol. 14, pp. 99–146). Emerald Group Publishing

Limited. https://doi.org/10.1016/S0897-3016(03)14081-5

Whelan-Berry, K. S., & Somerville, K. A. (2010). Linking change drivers and the organizational

change process: A review and synthesis. *Journal of Change Management*, *10*(2).

https://doi.org/10.1080/14697011003795651

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (Second ed.). ASCD.

World Economic Forum. (2020). Schools of the future: Defining new models of education for

the fourth industrial revolution. In *World Economic Forum Reports 2020* (Issue January).

www.weforum.org

Yendol-Hoppey, Diane., & Dana, N. F. (2010). *Powerful professional development: Building

expertise within the four walls of your school*. Corwin.

Appendix A: Table 6 Stages of Concern

Table 6

Stages of Concern

	Stages of concern	Expression of Concern	Focus
Impact	Refocusing	I have some ideas about something that would work better.	Explores universal benefits of the change.
	Collaboration	I am concerned about relating what I am doing with what my co-workers are doing.	Coordination and cooperation with others
	Consequence	How is my use of this idea affecting students?	Impact of the change on students
Task	Management	I spend all my time getting materials ready.	Processes and tasks related to the change
Self	Personal	How will using this idea affect me?	Impact of change on self
	Informational	I would like to learn more about this idea.	Information about the change
Unrelated	Unconcerned	I am more concerned about other things.	On other things

Note: The stages of concern table describes typical expressions of concern (feelings, perceptions and attitudes) about change. Teachers can use this map as a self-assessment tool. School leaders can use individual teacher results to create a school stages of concern graph (Hall & Hord, 2020).

From: "Measuring implementation in schools: The stages of concern questionnaire," by A.A. George, G.E. Hall, and S.M. Stiegelbaurer. 2013,

SEDL. https://sedl.org/cbam/socq_manual_201410.pdf. Adapted and printed with permission.

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Appendix B: Table 7 Levels of Use

Table 7

Levels of Use

	Level	Name	Description
Users	VI	Renewal	Exploring modifications to using the deep learning framework, global competencies or collaborative inquiry process to improve student learning.
	V	Integration	Collaborating with others to use the deep learning framework, global competencies or collaborative inquiry process to impact students positively.
	IVB	Refinement	Using the deep learning framework, global competencies or collaborative inquiry process with some modifications to improve the impact on students.
	IVA	Routine	Using the deep learning framework, global competencies or collaborative inquiry without making changes.
	III	Mechanical Use	Beginning to use any part of the deep learning framework, global competencies or collaborative inquiry focusing on what the teacher needs day to day.
Non-Users	II	Preparation	Preparing to implement any part of the deep learning framework, global competencies or collaborative inquiry process in the classroom with students.
	I	Orientation	Beginning to learn about the deep learning framework, global competencies and collaborative inquiry process.
	O	Non-use	Little or no knowledge or involvement in learning about the deep learning framework, global competencies and collaborative inquiry process. Not engaged in deep learning.

Note: The levels of use map are behaviours that people demonstrate as they adopt and implement new ideas. Teachers can use this map as a self-assessment tool. School leaders can use individual teacher results to create a levels of use school graph (Hall & Hord, 2020). From "Measuring implementation in Schools: Levels of Use" by G.E. Hall, D.J. Dirksen and A.A. George, 2013, SEDL. https://www.air.org/resource/levels-use-concerns-based-adoption-model. Adapted and printed with permission.

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Appendix C: Table 8 Detailed Evaluation of Change Models

Table 8

Detailed Evaluation of Change Models

Criteria and indicators 0-5 scale (0 is not present, 5 strongly present)	Institutionalizing Change	Change Path Model	Dynamic Change Model
Focus on People Criterion 1: Uses SCT to develop efficacy			
1a. Opportunities for Active Participation	5	2	5
1b. Leveraging Triadic Reciprocal Causation to change beliefs	5	2	5
1c. Persuasive Communication	5	5	5
Total Score	15	9	15
Focus on People Criterion 2: Aligns to leadership principles and practices			
2a. Builds relationships (trust and respect)	4	3	5
2b. Builds capacity: developing people and the organization	4	4	5
2c. Support learning: lead instruction and create positive environment	2	2	5
Total Score	10	9	15
Focus on Content Criterion 3: Supports the change vision			
3a. Development of learning environment to support deep learning	4	4	5
3b. Teachers as learning activators	2	1	5
3c. Leadership as lead learners	2	2	5
3d. Supports culture building	3	2	5
Total Score	11	9	20
Focus on Process Criterion 4: Leverages the change drivers and supports the process			
4a. Leadership actions	4	4	5
4b. Middle leaders	3	2	4
4c. Supporting documents/ external expertise	5	5	5
4c. Structures the change process	3	4	2
4d. Aligned to organizational structure	3	5	1
Total Score	18	20	17

Note: This detailed evaluation of the three possible change models focuses on the alignment of the change model to the focus on people, content and process. It aligns with the theoretical framework, social cognitive theory, leadership principles and practices, the change vision and change drivers. The evaluation is the opinion of the author.

Appendix D: Table 9 School Conditions Innovation Configuration Map

Table 9

School Conditions Innovation Configuration Map

Component 1: Vision and Deep Learning Goals			
1	**2**	**3**	**4**
Clear and thoughtful deep learning goals with a clear purpose and vision for student learning	Small number of goals focus on deep learning	Deep learning goals exist but there is no clarity around what they mean	Deep learning goals are unclear or absent and the focus is on what currently exists
Clear strategy to achieve deep learning goals that everyone can articulate	Strategy to achieve deep learning can be articulated by leaders and some teachers	Strategy to achieve deep learning is not clear or well understood	There is no strategy for deep learning or it is unclear
Resources are aligned to achieve deep learning goals	Resources are somewhat aligned to achieve deep learning goals	Some resources support deep learning	Resources are not supporting deep learning

Component 2: Leadership			
1	**2**	**3**	**4**
Strong leadership is present and working to shift practices	Capable leadership is working to shift thinking	There are some strong leaders who can implement deep learning	There are too few leaders to lead deep learning
Distributed leadership exists	Leaders are committed to moving to more distributed style	Engagement in deep learning is conceptual but is supported	Engagement in deep learning is low.
Community is engaged, informed and influential in driving deep learning	Community is informed and starting to influence the move to deep learning	Opportunities to engage the community are present but not activated	Few or no opportunities to engage the community are present

Component 3 Collaborative Cultures			
1	**2**	**3**	**4**
A genuine and effective collaborative learning culture is present	A collaborative learning culture is present in most classes.	School leaders and teachers are beginning to create a learning culture.	The traditional school teaching culture is present
Effective collaborative structures and processes have built a deep learning culture	Capacity building is based on the knowledge and skills to build deep learning	Collective capacity building is beginning and there are some structures in place	There is little capacity building or questioning of how things are done.
Capacity building is focused and precise and across the system using collaborative inquiry cycles	Capacity building is supporting collaboration, trust and collaborative inquiry cycles	School level inquiry is beginning with leaders and teachers and some resources	There is no real inquiry into questions.

Component 4 Deepening the Learning			
1	**2**	**3**	**4**
Rich learning goals are present and integrated	Learning goal are present and linked to practices.	Learning goals connected to deep learning are emerging.	Learning goals connected to deep learning are absent.
Deep learning framework is used consistently by everyone	Deep learning framework is used by most teachers.	Some teachers are using the deep learning framework.	Teachers are not using the deep learning framework.
Collaborative inquiry is used consistently in classes and teacher inquiry teams	Collaborative inquiry is used in most classes and teams.	Collaborative inquiry is inconsistently used	Collaborative inquiry is not embedded in the school.

Components 5: New Measures and Evaluation			
1	**2**	**3**	**4**
There is a systematic approach to evaluate progress in developing deep learning	There is an approach to evaluate progress in developing deep learning using appropriate tools	Some mixed assessment practices are evident.	The school uses a traditional model of assessment for student learning.
Teachers are adept at using deep learning assessment tools and measures	Teachers know how to use deep learning assessment tools and measures and are using them with some fidelity	Some support is available to teachers to learn how to use new assessment structures	There is little formal support available for assessment.
Success is shared and celebrated to support commitment to deep learning	Teachers are sharing successes in their teams.	Some teachers are beginning to use new assessment structures to measure deep learning outcomes.	Teachers are beginning to develop a shared learning about deep learning but are not using it for assessment

Note: The school conditions innovation configuration map describes the necessary conditions to support deep learning within the school. The school conditions innovation configuration map describes the third level of change within the dynamic change model. This innovation configuration map is adapted. From "Deep Learning: Engage the world, change the world" by M. Fullan, J. Quinn, J. McEachen, 2018, Corwin p. 121 Copyright 2017 by New Pedagogies for Deep Learning (NPDL). Adapted with permission of the author.

Appendix E: Table 10 Evaluation of Solutions

Table 10

Evaluation of Solutions

Criteria and indicators 0-5 scale for Solutions	PGP	PD	Inquiry
Focus on People Criterion 1: Uses SCT to develop efficacy through opportunities for:			
1a. Enactive Mastery	2	2	4
1b. Vicarious persuasion	2	2	4
1c. Verbal Persuasion	3	3	4
1d. Affective States	3	3	4
Total Score	10	10	16
Focus on People Criterion 2: Aligns to leadership principles and practices			
2a. Builds relationships (trust and respect)	1	2	4
2b. Builds capacity: developing people and the organization	2	3	4
2c. Support learning: lead instruction and create positive environment	1	2	4
Total Score	4	7	12
Focus on Content Criterion 3: Supports the change vision			
3a. Focus on student learning outcomes	3	3	5
3b. Integration of theory and practice	1	2	5
3c. Engages and challenges existing theories of learning	1	2	5
3d. Regular use of collaborative inquiry	0	0	5
3e. Multiple opportunities to apply learning	1	2	5
3f. De-privatization of practice and processing learning together	0	1	5
3g. Differentiated for teachers	5	0	5
3h. Development of self-regulatory learning skills	2	3	5
Total Score	13	13	40
Focus on Process Criterion 4: Addresses the needed changes from school condition innovation configuration map			
4a. Vision and goals	2	4	4
4b. Leadership	1	3	4
4c. Collaborative cultures	0	2	5
4d. Deepening the learning	3	3	5
4e. New measures and evaluation	3	3	5
Total Score	9	15	23
Focus on Process Criterion 5: Leverages the change drivers			
5a. Leadership actions	1	3	5
5b. Middle leaders	1	3	5
5c. Supporting documents/ external expertise	3	5	5
Total Score	5	11	15
Focus on Resources (0 no resources to 5 highly resource dependent			
6a. Time	1	3	5
6b. Materials	3	3	3
6c. People	1	5	5
6d. Information (new pedagogies)	3	4	5
6e. Budget	1	5	5
Total Resource Score	9	20	23

Note: This table evaluates the solutions based on the opinions and knowledge of the author. The

solutions are evaluated based on their alignment to people, content and process of the change.

Appendix F: Table 11 Integrated Change Plan

Table 11

Integrated Change Plan

Implementation Focus	Monitoring focus on individuals and CI groups	Evaluation Focus on the organization as a whole	Communication Focus
Readiness Phase: Focus on change readiness and preparation			
Change vision and change plan presented and reviewed (discrepancy, appropriateness)	Attitude: engagement, interest, curiosity, commitment (SoC)	Organizational readiness Stakeholder analysis	Discrepancy, appropriateness Face to face meeting Tactic: Persuasive communication
Teachers are introduced to the change vision and plan, and the first implementation team is formed	Teacher attitude (SoC) Exit ticket – what excites you, what worries you, what suggestions do you have, what do you need to know?		Discrepancy, appropriateness, efficacy, principal support, valence Face to face presentation Tactic: Active participation and persuasive communication
Update parent communication			Discrepancy, appropriateness Face to face presentation Tactic: Persuasive communication by director of education to community
Clarity Phase: Short term focus on introducing deep learning to teachers			
The implementation team learning about deep learning using collaborative inquiry (CI)	Skills/behaviour: Observation of classes by change agent (LoU) Structure: CI cycles Attitude: (SoC)	Innovation configuration map to map fidelity	Efficacy, principal support, valence Face to face communication between the change agent and director with a progress report
Teachers are introduced to deep learning elements	Attitude: SoC Skills/Behaviour: LoU		Efficacy, valence, principal support Face to face presentation Tactic: Active participation and persuasive communication introducing the deep learning elements
Teachers implement two global competencies into lessons	Skills/behaviour: integration of 2 competencies (LoU)	IC mapping on a selection of plans	
Teacher introduction to collaborative inquiry	Structure- CI elements present		
Learning showcase by the implementation team	Skills/ behaviour (LoU) Attitude: (SoC)	IC mapping for fidelity	
Update school and parent communication			Discrepancy, appropriateness, valence, support Face to face presentation by change agent or director Tactic: persuasive communication
Depth Phase: Medium-term focus on developing deep learning with teachers			
Formation of collaborative inquiry teams	Skill: and behaviour: group norms (LoU) Structure: CI process Attitude: engagement, commitment (SoC)		

Implementation Focus	Monitoring focus on individuals and CI groups	Evaluation Focus on the organization as a whole	Communication Focus
Teachers integrate 4 of the 6 C's into lessons, two collaborative inquiry cycles, incorporate two design elements	Skills/behaviour: unit and lesson review (LoU) Structure: CI cycles present Student feedback on lesson changes	IC mapping on a selection of lessons, unit plans SoC, LoU	Efficacy, valence A written report by change agent to director reporting on progress
Learning showcase	Skills and behaviour: student work (LoU) Attitude: engagement, commitment (SoC)	School conditions rubric IC mapping Student impact Review of evaluation questions at the organization level	
Update school and parent communication			Discrepancy, appropriateness, valence, support Face to face presentation by change agent or director Tactic: persuasive communication
Sustainability: Long term focus on consolidating deep learning in teacher practice			
Collaborative inquiry group meetings	Skills and behaviour: LoU Attitudes: SoC Structure: CI elements		
Teachers implement all elements into current lessons	Skills and behaviour: LoU data Student feedback Student marks	IC mapping	
Teachers use collaborative inquiry cycles with students	Structure: CI elements Skills and behaviour: LoU Attitude: SoC Student achievement and engagement	IC mapping SoC, LoU mapping Student marks and climate survey	
Student and teacher learning showcases	Skills: Student work Behaviour: LoU Attitude: SoC,	IC mapping School rubric assessment Evaluation questions	Valence: written report by change agent to director reporting on progress Tactic: Persuasive communication
Update school and parent communication			Discrepancy, appropriateness, valence, support Face to face presentation by change agent or director Tactic: persuasive communication

Note: This table shows the integrated change plan illustrating how the implementation,

monitoring and evaluation framework and communication plan are aligned.

Appendix G: Table 12 Theory of Action

Table 12

Theory of Action

Goal	Strategy	Tactics	SCT/SC elements
Readiness - Outcome is organizational change readiness			
Creating readiness for change through changing Attitude; encourage voluntary participation in the first implementation team	Five change belief messages (discrepancy, appropriateness, efficacy, principal support, valence)	Persuasive communication: face to face, video, written documentation Active participation: reviewing data; viewing other schools	Environment: vicarious persuasion, affective states Beliefs: discrepancy and appropriateness
Clarity – Team Outcome is getting ready to lead			
Attitude: support deep learning Skills/behaviour: prepare the implementation team leaders (facilitators) building their knowledge (content) and skills (process) Structure: CI process	Team meetings to develop deep learning content knowledge, collaborative inquiry process skill and facilitation skills	Persuasive communication: face to face meetings (Content) Active participation in collaborative inquiry cycles to develop process and facilitation skills	Environment: enactive mastery, vicarious persuasion, verbal persuasion, affective states Beliefs: efficacy. valence, principal support
Clarity – Teachers Outcome is familiarity with new ideas			
Attitude: support deep learning Skills/behaviour: understand deep learning components and process Structure: CI elements	Introduction of deep learning global competencies, learning elements and collaborative inquiry cycles	Persuasive communication: face to face meetings Active participation: activities to introduce ideas; video to watch other schools	Environment: vicarious persuasion, affective states Beliefs: efficacy, valence, principal support
Depth – Teacher outcome is beginning practice			
Attitude: support deep learning Skills/Behaviour: implement two global competencies, two learning design elements Structure: complete two collaborative inquiry cycles	Learning in collaborative inquiry teams	Active participation activities	Environment: enactive mastery, vicarious persuasion, verbal persuasion, affective states Beliefs: efficacy, valence, principal support
Sustainability – Teacher outcome is permanent change in practice			
Structure: CI elements Skills/behaviour: competencies and framework Attitudes: beliefs about deep learning improved	Learning in collaborative inquiry groups	Active participation activities through permanent changes to the environment.	Environment: enactive mastery, vicarious persuasion, verbal persuasion affective states Beliefs: efficacy, valence, principal support

Note: This table shows how triadic reciprocal causation is integrated into the change implementation plan.

Appendix H: Table 13 Change Implementation Plan Overview

Table 13

Change Implementation Plan Overview

Goal	Tactic	Participants	Outcome
Readiness (before Sept 2023) Focus on change readiness and preparation (initial goals)			
Change vision and change plan presented and reviewed (attitude)	Direct communication and discussion (discrepancy, appropriateness)	Change agent, director of education and school leaders	Change vision and plan are approved by the director, change plan adjusted
Teachers are introduced to the change vision and plan The first implementation team is formed (attitude)	Active participation in professional learning time (discrepancy, appropriateness, efficacy, valence, support)	Change agent, school leaders, teachers	Teachers understand change vision (discrepancy, appropriateness, efficacy, valence, support) The first implementation team is created
Clarity (Sept 2023-June 2024) Focus on preparing the implementation team and introducing deep learning to teachers (Short term goals)			
Implementation team on-going learning about deep learning (attitude, skills, behaviours and structures)	Collaborative inquiry cycles Structure providing enactive mastery, vicarious experience, verbal persuasion (efficacy, attitudes, beliefs and skills)	School leaders, academic department heads, interested teachers	Develop facilitation skills Develop an understanding of deep learning components and pedagogy
The implementation team prepare teacher PD modules (skills)	Introduction of elements of deep learning – active participation (efficacy)	School leaders, academic department heads, interested teachers	Preparation to support teacher learning
Teacher introduction to deep learning elements (attitude, skills)	Structure: active participation – enactive mastery (efficacy)	Implementation team leaders, Teachers	Teachers integrate two global competencies into lessons
Teacher introduction to collaborative inquiry (Structure)	Structure: Fishbowl activity – vicarious experience (efficacy)	Implementation team leaders, teachers	Familiarity with collaborative inquiry as a structure
Learning Showcase implementation team learning (skills, behaviour, attitude and structure)	Presentation of learning and student work (valence)	Implementation team leaders, teachers	Celebration of learning (valence, efficacy)
Depth (Sept 2024–June 2025) Focus on developing deep learning with teachers (medium-term goals)			
Formation of collaborative inquiry groups - structure	Structure: cycles of collaborative inquiry into deep learning implementation (efficacy, attitude and skills)	Implementation team leaders, teachers	Teachers integrate 4 of the 6 C's into lessons, complete two collaborative inquiry cycles, integrate two design elements
Learning Showcase – all teams (skills, attitude, behaviour)	Presentation of team learning and student work (valence)	Implementation team leaders, teachers	Celebration of learning (valence, efficacy)

Sustainability (Sept 2025-June 2026) Focus on consolidating deep learning in teacher practice (long term goals)			
Collaborative inquiry groups continue - structure	Structure - cycles of collaborative inquiry into deep learning implementation	Implementation team leaders Teachers	Teachers integrate 6 C's into lessons, complete multiple collaborative inquiry cycles, integrate all design elements
Learning Showcase (skills, behaviour, attitude and structure)	Presentation of student work	Implementation team leaders, teachers and students	Valence and efficacy - teachers and students

Note: This table shows the details of the change implementation plan by phase.

Appendix I: Sample Collaborative Inquiry Tracking Sheet

Date:
Inquiry Team members:

Assess
What are the current strengths and needs of these students? Consider curriculum expectations, established learning goals and success criteria, student interests.
Design
What do I want to change (e.g. global competency, learning framework element)? What are the next best learning experiences I want to try to engage students to meet the learning goals and success criteria?
What knowledge and skills do I need (teacher) to understand what to change and how to change it?
Implement
What am I going to monitor during the learning? Ask yourself: How well are students learning? What evidence do I have of that learning? What do students need next?
Measure, reflect and change
How will I document student learning using formal and informal evidence (product, conversation, observation)?   *How much did students grow, and in what ways?*   *What does student learning tell me about my next best step?*

Note: Collaborative inquiry team members use this tracking sheet. The questions are adapted from "Dive into deep learning: Tools for engagement" by J. Quinn, J. McEachen, M. Fullan, M. Gardner, and M. Drummy, 2020, Corwin pp. 102-103 Copyright 2019 by Education in Motion (New Pedagogies for Deep Learning)

Appendix J: Table 14 Deep Learning Innovation Configuration Map

Table 14

Deep Learning Innovation Configuration

Component 1: Learning Partnership – by design			
1	**2**	**3**	**4**
Collaborative partnership among students, teachers and others, with a clear focus on achieving deep learning outcomes	A clear strategy to achieve deep learning outcomes for students	Some students, teachers, and others working together to ensure deep learning outcomes.	Does not yet actively promote students and teachers working in partnership
Student voice, choice, agency and contribution are critical to improving the learning design	Student voice, choice and agency contribute to the learning design	Student voice, choice, and agency are beginning to be part of the learning design	Student voice, choice, and agency are limited
All students have a genuine sense of belonging with high levels of equity, transparency and mutual benefit and accountability	Students have a sense of belonging, and there is equity in the relationships between students and teachers	There is growing equity in the learning partnerships	Student belonging is beginning with some limited demonstration of equity between teachers and students
Transparent, collaborative learning outcomes and success criteria enable students to persevere and encounter success.	Learning outcomes, and success criteria support student success	Learning outcomes are transparent to students with an increased understanding of success criteria	Learning outcomes and success criteria are unclear or not present
Component 2: Learning Environments – by design			
1	**2**	**3**	**4**
An equitable and interactive learning environment	Interactive and equitable learning environment	Includes strategies to engage most students	Does not yet take advantage of the interaction of student's voice
All students are deeply engaged and committed to collaborative processes.	Strategies to develop collaborative processes with and between students are evident.	It does not yet have precise approaches to ensure equity or generate student influence.	Unclear how students can contribute to the learning opportunities.
Students' voice drives learning and improvement.	Student's voice is incorporated to influence how we work together	Does not yet have precise approaches to use student voice effectively	Unclear how student voice is used.
Physical and virtual environments within and beyond the classroom provide rich, authentic contexts for learning.	Physical and virtual environments provide diverse contexts for learning.	Physical and virtual environments provide new contexts for learning.	Opportunities to optimize the physical or virtual environment have not yet been employed

Component 3: Pedagogical Practices: Learning and Teaching Strategies By design			
1	**2**	**3**	**4**
Student strengths, interests and needs, voice and agency are incorporated	Addresses student strengths, interests, and needs and invites student voice and agency.	Includes some practices to advance deep learning goals.	Traditional pedagogical practices
The most appropriate pedagogy is used at the right time to respond to learners' needs.	Uses pedagogical practices that generally match the learning goals and needs of students.	Includes opportunities for active engagement but may not be based on all students' needs, interests, and abilities.	Teacher-directed and does not consider the needs, interests, or voices of students in the learning process.
Thinking is scaffolded, and levels of complexity enable the learning outcomes to be realized by all students.	Uses thinking models, scaffolds thinking to personalizes learning.	May not be informed by proven models.	Not present
Large number of strategies generates authentic experiences, personalized learning and increased engagement.	Engages students through choice and authentic tasks	Limited opportunities for choice and authentic tasks	Opportunities are teacher directed
Continuous cycles of self and peer feedback and various learning and assessment strategies	Range of assessment approaches with self and peer feedback	Limited use of assessment approaches beyond inconsistent use of self and peer feedback	Assessment is traditional

Component 4: Leveraging Digital environments- The learning design			
1	**2**	**3**	**4**
Digital tools are used authentically encourage student motivation, engagement, and local and global connections	Digital tools are used to encourages student motivation, engagement, and local and global connections	Access to digital tools encourages student motivation, engagement, and local and global connections	Limited student access and use of digital tools or shallow uses as a substitute for traditional approaches.
Digital tools increase innovation and include reflection, sharing, communication, and knowledge-building	Digital tools provide flexible opportunities for students to reflect, share, communicate, and develop deep learning outcomes.	Digital tools provide some opportunities for students to reflect, share, communicate, and further develop deep learning outcomes.	Digital tools do not allow students to interact with each other or enhance deep learning outcomes.
Students demonstrate a high degree of digital citizenship and online safety	Students demonstrate an appropriate degree of digital citizenship and personal safety rules	Students demonstrate a limited degree of digital citizenship and personal safety	Students do not demonstrate digital citizenship and personal safety

Note: This deep learning framework innovation configuration map describes what deep learning looks like from its most advanced to simplest version. The innovation configuration map is adapted from "Dive into deep learning: Tools for engagement" by J. Quinn, J. McEachen, M. Fullan, M. Gardner, and M. Drummy, 2020, Corwin pp. 148-149 Copyright 2019 by Education in Motion (New Pedagogies for Deep Learning). Adapted with the permission of Michael Fullan.

Appendix K: Table 15 Monitoring Framework

Table 15

Monitoring Framework

Focus & Stakeholders	Indicators	Targets & timing	Data Sources & Tool
Readiness: Focus on change readiness and preparation			
School leaders and academic team introduction to the change vision and plan	Attitude: engagement, interest, curiosity and commitment (SoC)	100% on board After introduction	Exit ticket – What excites you, what worries you, what suggestions do you have, what do you need to know? Stage of concern questionnaire
Teachers introduction to change vision and change plan (attitudes)	Attitude: engagement, interest, curiosity and commitment (SoC)	100% participation in the session After introduction	Exit ticket – what excites you, what worries you, what suggestions do you have, what do you need to know? Stage of concern questions
Clarity (Sept 2023-June 2024) Focus on preparing the implementation team and introducing deep learning to teachers (Short term goals)			
Implementation team learning about collaborative inquiry facilitation (skills, attitudes)	Structure and skills: collaborative inquiry cycles frame meetings (LoU) Attitude: engagement, commitment (SoC)	75% fidelity Three times/year	Observation of CI cycles by change agent Levels of use analysis Stages of concern questions
Implementation team understanding of deep learning pedagogy	Skills: integration of 6 competencies and learning framework (LoU) Attitude: engagement, commitment (SoC)	75% fidelity Three times/year	Observation of unit, lesson plans and classes (LoU) Use IC map SoC questions
Teacher introduction to deep learning elements	Attitude: SoC Skills: LoU Structure: pedagogy	Baseline Initial measure	SoC questions LoU analysis
Teacher inclusion of 2 global competencies in lessons	Skills: integration of 2 competencies present (LoU)	75% fidelity During the year	Unit and lesson review – LoU
Learning showcase: implementation team learning	Skills and behaviour: student work show integration of competencies and learning framework (LoU) Attitude: engagement, commitment (SoC)	75% fidelity End of Year	Showcase artifacts – LoU SoC questions
Depth (Sept 2024-June 2025) Focus on developing deep learning with teachers (medium-term goals)			
Implementation team group meetings	Skills: facilitation tools (LoU) Structure – collaborative inquiry Behaviour: structures support learning Attitude: engagement, commitment (SoC)	85% fidelity Three times/year	Meeting notes LoU analysis SoC questions
Formation of teacher collaborative inquiry teams (structure)	Structure: group norms, regular meetings using collaborative inquiry cycles (LoU)	Norms, structures and discussions	Review of team meeting notes – LoU analysis SoC questions

Focus & Stakeholders	Indicators	Targets & timing	Data Sources & Tool
	Attitude: engagement, commitment (SoC)	focused on deep learning Twice/year	
Teacher implementation	Skills: 4 of 6 global competencies, two collaborative inquiry cycles, two design elements (LoU)	85% fidelity During the year	Lesson observation, unit and lesson review, team meeting notes, student feedback- LoU analysis
Learning showcase implementation team learning (skills, attitudes, behaviour)	Skills, behaviour: student work integration competencies and learning framework (LoU) Attitude: (SoC)	85% fidelity End of Year	Showcase artifacts LoU analysis SoC questions
Sustainability: Long term focus on consolidating deep learning in teacher practice			
Collaborative inquiry group meetings	Structure: CI cycles Skills: 6 global competencies, all learning design elements (LoU) Behaviour: (LoU) Attitude: engagement, commitment (SoC)	95% fidelity Three times/year	Lesson observation, unit and lesson review, team meeting notes – LoU analysis SoC questions
Teachers use collaborative inquiry cycles in their teams and with students	Structure: collaborative inquiry in planning and lessons (LoU) Attitude: student engagement in lesson activities (SoC) Skills: Student achievement data Student wellbeing data Behaviour: pedagogy	Continued growth from baseline Three times/year	Lesson observation SoC, LoU questions and analysis
Student and teacher learning showcases	Skills: Student work highlights the integration of competencies and framework (LoU) Behaviour: teacher learning highlights the depth of knowledge (LoU) Attitude: engagement, commitment (SoC)	95% fidelity End of year	Showcase artifacts for LoU analysis SoC questions Student assessment data, feedback, student wellbeing questionnaire

Note: This table shows the monitoring framework over the change implementation plan.

Appendix L: Table 16 Evaluation Framework

Table 16

Evaluation Framework

Focus on results and learning The change plan: to what extent was the change plan	Methods	Tool	Responsibility	Timing
Appropriate: built teacher capacity for deep learning, e.g. do we see the elements of deep learning in the collaborative inquiry teams in classrooms?	Observation Questionnaire Interview	Classroom walkthrough SoC LoU	Implementation team leaders	Walkthrough monthly Questionnaire once/year Interviews monthly
Effective: implemented as intended - do we see fidelity to the deep learning elements?	Class observation-video or live	IC map	Implementation team leaders	Twice/year
Efficient: worked with available resources, e.g. did the plan use resources appropriately	Interview with CI leaders	Resource needs notes	Change agent	Once/year
Impactful: changed pedagogy and student experience, e.g. do we see the elements of deep learning in the classroom?	Class observation-video or live	IC map	Implementation team leaders	Twice/year
Sustainable: deep learning elements persist. do we see deep learning in all classes?	Class observation-video or live	School conditions rubric, IC map	Change agent	Once/year
The teachers: to what extent did the teachers demonstrate				
Skills/Behaviours: deep learning elements are embedded in teacher practice creating student centred classes	Observation Questionnaire Interview	Classroom walkthrough LoU	Implementation team leaders	Walkthrough monthly Questionnaire once/year
Attitudes/beliefs: understand why deep learning is important for student success Self-efficacy changes are measurable	Questionnaire Individual interviews	SoC Interview questions Self-efficacy scale	Implementation team leaders	Walkthrough monthly Questionnaire once/year
Environment/Structure: CI cycles are embedded in classes and teacher inquiry teams; deep learning pedagogy is embedded in practice	Observation Questionnaire Interview	School conditions rubric	Implementation team leaders	Walkthrough monthly Questionnaire once/year
The students: to what extent did the students demonstrate				
Academics: results have improved	Report card analysis	Report cards statistics	Change agent	Twice/year
Wellbeing outcomes are improved	Questionnaire	Climate survey	Change agent	Twice/year
Engagement outcomes are improved	Class observation Student interviews	Engagement observation Student focus group	Implementation team leaders	Twice/year

Note: This table shows the evaluation framework for the change implementation plan.

Appendix M: Table 17 Communication Plan

Table 17

The Communication Plan

Communication Content	Lead	Communication Channels and Tactics	Stakeholders	Timing	Outcome
Readiness September 2022- June 2023					
The need for change Key messages focus on: discrepancy, appropriateness, efficacy, principal support and valence as change belief messages	Change Agent	Face to face meetings Written documentation Tactics: Persuasive communication and active participation	Director of education, senior leaders, school leaders, teachers, parents	Fall 2022- Winter 2023	Plan approved The community knows about the change vision and plan
Clarity September 2023-June 2024					
What is deep learning, how do we do it, and what is the impact? Key messages focus on efficacy, principal support and valence	Change agent Implementation team leads	Face to face meetings Written documentation Tactics: Persuasive communication and active participation	Teachers Senior Leaders Parents Students	On-going	Teachers are introduced to deep learning and have tried it out Parents and students are updated on progress at the end of the year
Depth September 2024-June 2025					
How is the plan progressing, and what are the teams learning? Key messages focus on efficacy, principal support and valence	Change agent Implementation team leads	Face to face meetings Written documentation Tactics: Persuasive communication and active participation	Teachers Senior Leaders Parents Students	On-going	Monitoring and evaluation data used to adjust the plan Deep learning is being implemented Parents and students are updated on progress
Sustainability September 2025-June 2026					
What is the outcome of deep learning? Key message: efficacy, valence and celebration of success	Change agent Implementation team leads	Face to face meetings Written documentation Tactics: Persuasive communication and active participation	Teachers Senior Leaders	On-going	Monitoring and evaluation data used to adjust the plan Deep learning is embedded in pedagogy
Celebrating the success of the plan	Change agent and Director of education	Written documentation Face to face meetings	Teachers, Senior Leaders Parents, Students Board of trustees	Spring 2025	Community celebrates the success of deep learning and improvements in student experiences
Final Evaluation Summary	Change agent	Written report Face to face presentation	All stakeholders	June 2026	Plan is completed, evaluated and the next steps are articulated

Note: This table provides the details of the communication plan.

Appendix N: Table 18 Knowledge Mobilization Plan

Table 18

Knowledge Mobilization Plan

Framework questions	Readiness	Clarity	Depth	Sustainability
Message: What should be transferred to the decision-makers? (Content: what is changed)	Discrepancy: change is needed Appropriateness: This is the correct change Efficacy: we can be successful Valence: what is in this for me Principal support: leaders are committed to the change	elements of deep learning and their impact on students: Global competencies Learning Framework Collaborative inquiry process	how the plan is progressing what the teams are learning	the outcome of the plan the next steps
Audience: to whom should the information be transferred	Change recipient centric focus – teachers are the primary audience for the message Change agent communicates with CI leaders, teachers, director, parents Implementation team leaders communicate with change agent, teachers, students Teachers communicate with students and parents Director of education communicates to board and parents with overall messaging			
Process and communication structure: How should knowledge be transferred? How is it changed? Environment, culture and support for change	For Teachers: Persuasive Communication Active participation: involving the teachers as the primary change recipient in the process through enactive mastery, vicarious experiences, verbal persuasion, affective stages and the social construction of meaning For students: Persuasive communication Active participation through class activities For board and parents, Persuasive communication: success and next steps			
Messenger: By whom should knowledge be transferred (the messenger	For implementation team leaders: Change agent For teachers: Team leaders and change agent For students: teachers For board and parents: director of education			
Evaluation: With what effect should knowledge be transferred?	For teachers: assessment of change during the process using the five key messages For students: assessing change in lessons For board and parents: provide encouragement and support			

Note: This table illustrates how information is disseminated using the communication plan.

The five questions in the plan are adopted from "How can research organizations more

effectively transfer research knowledge to decision makers," by J. Lavis, D. Robertson, J.

Woodside, C. McLeod, J. Abelson, and T. Group, 2003, *The Milbank Quarterly,81(2), 221-248*

(http://www.jstor.org.proxy1.lib.uwo.ca/stable/3655841) Copyright JSTOR archives.

Appendix O: Sample Communication Plan

Purpose:
The communication strategy will support the approval, launch and implementation of the deep learning change implementation plan

Objectives:
1. To introduce the change vision and change plan
2. To engage teachers in understanding why the change is necessary
3. To enrol teachers in participating in the implementation teams (early adopters)
4. To enrol all teachers in grade or discipline-specific collaborative inquiry teams (year 2)
5. To introduce students and parents to the concept of deep learning and help them understand how deep learning will improve academic success
6. To share our learning with the school community at the end of each year through learning showcases.

Background
The family of independent schools is beginning a three-year change plan to incorporate the elements of deep learning into the academic program of the schools. Deep learning principles will improve student success by developing academics, well-being, global competencies, and equity. The change to deep learning will build on our current practices.

Key Message
To prepare our students to take their place in the world, we will incorporate the deep learning framework and global competencies into our academic program to provide an integrated focus on academics, well-being and equity.

Change Belief Messages
Discrepancy: Academically, our students successfully get into the university of their choice. Our academic program remains strong. Our teachers prepare suitable lessons that are diverse and engaging. However, our school climate data shows that students are less engaged in learning than we want. Our guidance team is telling us that there are rising levels of anxiety, perfectionism and depression among our students, and that is worrying. Our marginalized students have expressed to their counsellors that they do not feel they belong in the school, and we need to address their concerns.
Appropriateness: Deep learning engages students by building authentic inquiry into the classroom using a collaborative inquiry cycle. Deep learning focuses on building global competencies into lessons. These competencies are essential for our students' future as they become adults who manage global problems with no easy solution. Deep learning has been successful in many other schools worldwide and is well supported by research. It will help us create the culture of learning that we have been aiming for and will help us prepare our students for the future.
Efficacy: Deep learning builds on the excellent teaching that already exists. Many of our teachers already use inquiry and student-centred classroom approaches. Deep learning is the next

step in our evolution, building on teaching for understanding. The path to deep learning is staged to allow us to learn together. We can make this change.

Principal Support: The director of education has approved this plan. The SO Academics is leading the plan. The school principals and academic department heads are leading the implementation teams. Over the next three years, the plan will be our key focus.

Valence: The deep learning approach is an engaging way to teach students. You will explore critical questions with your students. You will have the opportunity to work with colleagues in different ways. Deep learning is an important area of professional learning that will connect you with schools and teachers worldwide and build your expertise.

Call to Action: We want you to take the following steps:
1. Read the deep learning book
2. Come to PD and faculty meetings with questions
3. Integrate the global competencies into your lessons
4. Integrate the four elements of learning design (pedagogical practices, learning partnerships, learning environment and digital) into your classrooms)
5. Use collaborative inquiry in your classroom with your students when exploring big questions.
6. Share your experiences, questions, and concerns, so we build deep learning together.

Key Stakeholders: teachers, senior leaders, students, parents, board of governors

Strategy
1. The change agent and implementation team leaders are the primary messengers for formal communication.
2. Teachers in the implementation team are influencers and primary messengers in informal communication.
3. The director of education is the messenger for the board governors and the parents.
4. The change agent manages the details of the communication plan in partnership with the implementation team leaders.

Tactics
Overall Tactics
1. Use face-to-face communication with active participation by participants, persuasive communication and the use of information to engage stakeholders and provide opportunities for enactive mastery, vicarious experiences and verbal persuasion.
2. Use messages related to change beliefs with a different emphasis at different times
   - Readiness phase messages focus on: discrepancy, appropriateness, efficacy, principal support and valence
   - Clarity and depth phase messages efficacy, principal support and valence
   - Sustainability phase messages focus on: celebrating success
3. Use written and visual communication to provide additional details, e.g. PowerPoint presentation slides, summary notes from professional learning sessions or faculty meetings, and classroom videos.
4. Provide opportunities for feedback from participants to adjust the plan or the message.

5. Use current classroom examples when describing elements of deep learning where possible (observational or video) to provide opportunities for vicarious experiences.
6. Provide time for questions and answers during meetings or in one-to-one conversations to build a positive affective stage and verbal persuasion.
7. Use the learning showcases at the end of the year to build vicarious experiences, verbal persuasion and positive affective states.

Phase Tactics
Readiness: preparing to start the change process
1. Create the change vision as an infographic or visual representation.
2. Prepare a written report for the director of education and present it in a face-to-face meeting.
3. Prepare the PowerPoint presentation for the school principals and academic department heads, which outlines the key messages (discrepancy, appropriateness, efficacy, principal support and valence) and present the change vision and plan.
4. Discuss the vision and plan with the school principals and academic department heads and revise as necessary.
5. Prepare and present the professional development workshop to introduce the change vision to the teachers and ask for early volunteers for the implementation team.
6. Provide all teachers with a copy of the Deep learning book to begin to read and consider.

Clarity: elements of deep learning and their impact
1. Implementation teams share their learning at monthly faculty meetings to provide an update (vicarious experiences); using videos of lessons created is optimal.
2. The implementation team "newsletter" follows the face-to-face meeting.
3. Professional development days or faculty meetings introduce the global competencies, the learning framework and collaborative inquiry.
4. Video is used to illustrate examples of the elements of deep learning (vicarious experiences) during meetings.
5. Time is provided at each gathering for questions and answers.
6. Monitoring and evaluation data are used to adjust the plan.
7. The learning showcase is an opportunity for teachers to ask each other questions and observe what is happening in classrooms (vicarious experiences).
8. The director of education updates parents and the board of governors in a face-to-face meeting, followed by a written summary on the website.

Depth: how the plan is progressing and what is being learned
1. Faculty meetings and professional development days are used to communicate progress from each implementation team.
2. Time is provided to share questions and concerns and to work out solutions.
3. Implementation teams provide updates during meetings to share ideas with the broader group.
4. Video is used to illustrate examples of the elements of deep learning (vicarious experiences) during meetings.
5. Time is provided at each gathering for questions and answers.
6. The learning showcase is an opportunity for teachers to ask each other questions and observe what is happening in classrooms (vicarious experiences).

7. The student learning showcase allows parents to view what is happening in classes and ask students and teachers questions.
8. Monitoring and evaluation data are used to adjust the plan.
9. The director of education updates the governors in a face-to-face meeting and a written summary on the website.

Sustainability: Celebrating the success of the plan
1. The elements from the depth phase are repeated.
2. At the end-of-year meeting, the change agent and implementation team leaders share a final summary report of progress to date.
3. The director of education shares the final report with the board of governors and parents. The next steps are determined and shared with teachers.

Appendix P: Table 19 Anticipated Questions and Answers During the Change Process

Table 19

Anticipated Questions and Answers During the Change Process

| Anticipated questions	Anticipated answers	Message component
Students are already successful. Why do we need to change?	Student academic success will continue to be a priority, but we also need to improve their well-being. We want to focus on academics, wellbeing and more significant equity to support our students to live the mission.	Discrepancy (change is needed)
What is the data that is driving this change?	Increasing perfectionism, anxiety and depression among our students are worrying trends that point to a lack of overall health. Lack of authentic engagement in learning is also a concern. The student wellbeing and engagement data we have collected are concerning.	Discrepancy (change is needed)
Our group already works in collaborative teams, so what will be different for us?	Your team will build on its current strengths and learn new protocols and new ways of working together to make your team stronger and more effective and make team meetings more engaging.	Discrepancy (change is needed)
Why are we focused on deep learning?	Deep learning is aligned to what our current practices are and extends them. It builds on our focus on teaching for understanding and is the next logical step.	Appropriateness (change is correct one)
How is this different from our other strategies?	Deep learning is an overarching framework that connects to the pedagogical strategies we are already doing. It builds on our current successes and goes further to allow for greater student agency and engagement in their learning.	Appropriateness (change is correct one)
What are the parents going to think?	The parents want their children to succeed and to be happy at school. They are worried about the mental health of their children. This plan will address academic success and wellbeing, and once parents understand it, they should be happy to support it.	Appropriateness (change is correct one)
I am already busy supporting students. I don't have time to learn this.	We will implement this change over time, and you will be supported to develop greater competency with the components of deep learning. You are already doing many of these components. We are just noticing and naming them and enhancing them. This plan will be supported through our professional learning time, and the implementation is slow and measured.	Efficacy (the belief that we can implement a change)
I teach on my own. I don't have a team, so how will I implement this on my own?	Everyone will be part of a grade level or discipline-specific team. We will put you on a team that understands your subject and challenges. Together the teams will work to support each other. Learning is a social activity, and this will give you a group to work more closely with and share ideas, challenges and successes.	Efficacy (the belief that we can implement a change)
I am an experienced teacher. I don't need to change my practice.	Deep learning builds on your strengths to provide different ways to examine the questions you want to explore with students. It is a framework that we will use to support student academic success and build in more opportunities for student wellbeing and a focus on equity. We are going from strength to greater strength and adding to our toolkits as teachers.	Efficacy (the belief that we can implement a change)

Anticipated questions	Anticipated answers	Message component
Is this going to be ongoing or just part of this strategic plan?	We have focused on teaching for understanding for more than 20 years; it is a fundamental part of our teaching and learning landscape, and this is just enhancing that focus and providing more tools and ways of reaching students. While it is integrated into the strategic plan, it is a permanent addition to our teaching and learning toolkit and approach.	Principal support (the belief that formal leaders support the change)
We have had so many leadership changes; how do we know this will persist?	Deep learning is a change that supports our mission as an organization and supports student success. It is a framework embedded in what we do as an organization. The leadership team is committed to viewing deep learning as an overall teaching and learning framework that will persist. It is not a program but is an overarching approach to learning and engagement in school.	Principal support (the belief that formal leaders support the change)
How will the leaders support this change?	Every school leader will spend a year learning about the deep learning framework and components and how to use collaborative inquiry to support the change process. Then each leader will be part of a collaborative inquiry team as a co-learner. They will be reporting what is happening in their team at regular intervals, and that will help us adjust and modify the plan as we go.	Principal support (the belief that formal leaders support the change)
How will this benefit me as a teacher?	This work will be exciting and engaging and build on your strengths, skills and knowledge. It will help you be more connected to your students and help you answer why we are learning this now.	Valence (belief change has benefit to the recipient)
How will this benefit students?	Students want to be more engaged in learning about their world. They want to understand why they are learning things and how learning will make a difference in their future. Deep learning is more engaging for students as there are more opportunities to apply their learning to current and future problems in their world.	Valence (belief change has benefit to the recipient)
I already teach this way, so what new learning will I do?	Learning is always ongoing. If you already teach in this way, you can join the implementation team and learn coaching skills to support your colleagues further and learn tools and techniques to help students as well	Valence (belief change has benefit to the recipient)

Note: This table outlines possible questions teachers might ask during the change process and the possible answers. The answers and questions align with the five change belief messages described by Armenakis et al. (1993, 2000).

Appendix Q Integrated Organizational Improvement Plan

Figure 4

Integrated Organizational Improvement Plan
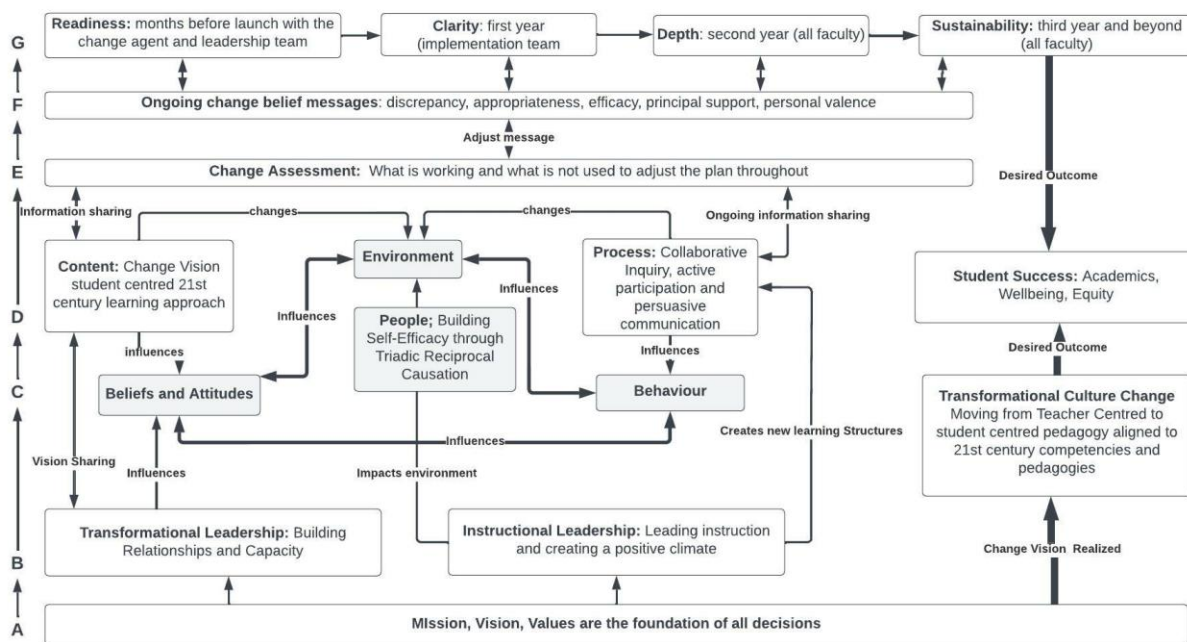
Note: The integrated organizational improvement plan shows how the plan's components come together. The way finders are on the left-hand side. The plan is anchored by the mission, vision, and values of the family of independent schools. The leadership principles are derived from that foundation. The content, people, and process involved in the change are directed by the leadership actions and triadic reciprocal causation to build efficacy. Information from the change process feeds into the change assessment, informing the ongoing change messages. The change messages support the change phases. At the end of the change, student learning has been supported by a transformational culture change.