

Luis Fernando González-Beltrán
(Organizador)

Educação no Século XXI:

Perspectivas
Contemporâneas
sobre
Ensino-Aprendizagem

VOL IX



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PRÓLOGO

Los procesos de enseñanza y aprendizaje se desarrollan actualmente en escenarios caracterizados por una creciente diversidad estudiantil, nuevas formas de producción y acceso al conocimiento, transformaciones tecnológicas aceleradas y demandas profesionales cada vez más complejas. En este contexto, las instituciones educativas enfrentan el desafío de promover aprendizajes significativos e inclusivos y, al mismo tiempo, desarrollar prácticas pedagógicas capaces de incluir dimensiones cognitivas, motivacionales, sociales, corporales y tecnológicas.

El volumen *Educação no século XXI: Perspectivas Contemporâneas sobre Ensino-Aprendizagem IX* reúne investigaciones que permiten aproximarse a estos desafíos desde diferentes perspectivas. Sus contenidos destacan el análisis de los procesos de aprendizaje y acompañamiento de los estudiantes, las estrategias y metodologías utilizadas en distintos contextos formativos y las oportunidades y tensiones derivadas de la transformación digital y del creciente uso de la inteligencia artificial en la educación.

La obra se organiza en tres ejes temáticos. El primero, **Aprendizaje, Inclusión y Desarrollo del Estudiante**, concentra la atención en los sujetos que aprenden y en las condiciones necesarias para favorecer trayectorias educativas más equitativas y significativas. Los capítulos exploran la diversidad del estudiantado y las prácticas de acompañamiento universitario, la construcción de entornos neuroinclusivos en la educación superior, el desarrollo de estrategias de aprendizaje autorregulado, la relación entre interés situacional, motivación y permanencia académica, las competencias cognitivas necesarias para afrontar las exigencias del aprendizaje universitario y el papel del cuerpo y de la cognición incorporada en la construcción de aprendizajes significativos. En conjunto, estas investigaciones muestran que aprender es un proceso multidimensional que requiere atender tanto a las capacidades cognitivas como a las diferencias individuales, las motivaciones y las condiciones institucionales. Con ello se pueden estudiar, explicar y resolver problemas como los bajos desempeños en lectura y matemáticas en la prueba PISA 2025, la correlación negativa entre procrastinación y aprendizaje autorregulado, y el creciente abandono escolar.

El segundo eje, **Prácticas Pedagógicas y Formación Profesional**, muestra un sólido equilibrio al reunir experiencias y estudios centrados en las estrategias mediante las cuales la enseñanza se concreta en contextos educativos y profesionales diversos. La alfabetización académica y el aprendizaje de lenguas extranjeras, la creación de materiales por parte de los propios estudiantes, las estrategias para la enseñanza de las artes visuales, la formación deportiva en edades tempranas y el aprendizaje basado

en retos y procesos de mejora continua muestran distintas posibilidades de innovación metodológica. Más allá de sus particularidades disciplinares, estos trabajos comparten la búsqueda de experiencias educativas capaces de promover participación, autonomía, motivación y desarrollo de competencias.

El tercer eje, **Tecnologías, Inteligencia Artificial e Innovación en la Educación Superior**, aborda uno de los campos que actualmente experimenta transformaciones más aceleradas. Los capítulos analizan la relación entre experiencia digital y uso académico de herramientas de inteligencia artificial, la necesidad de una formación crítica frente a los sistemas generativos, los retos y oportunidades de la articulación entre aprendizaje presencial y virtual, las nuevas competencias profesionales demandadas por la transformación tecnológica, el empleo de Design Thinking y simulaciones gamificadas como arquitecturas de aprendizaje, el desarrollo de chatbots educativos con arquitecturas de recuperación de información y apoyo socioemocional para la tutoría universitaria, y las posibilidades de la inteligencia artificial aplicada a la formación docente y a la simulación clínica.

La tecnología, en estos estudios, no se reduce a un fin en sí misma, sino a un elemento que modifica las formas de aprender, enseñar y ejercer profesionalmente. Su incorporación educativa exige, por ello, reflexión pedagógica, desarrollo de nuevas competencias, análisis crítico y capacidad para reconocer tanto sus posibilidades como sus límites.

Los tres ejes que componen este volumen convergen en una misma preocupación: comprender cómo ofrecer experiencias educativas pertinentes ante estudiantes, contextos y formas de conocimiento que están cambiando rápidamente. Inclusión, autorregulación, innovación pedagógica, formación profesional, cultura digital e inteligencia artificial forman parte de un escenario en el que la educación debe seguir colocando en el centro los procesos humanos de aprendizaje, pensamiento y construcción de conocimiento.

Esperamos que los trabajos reunidos en esta obra contribuyan al intercambio académico y profesional y estimulen nuevas investigaciones, experiencias y propuestas capaces de responder de manera crítica, creativa e inclusiva a los desafíos educativos del siglo XXI.

Dr. Luis Fernando González Beltrán

Universidad Nacional Autónoma de México (UNAM)

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A CONCEPTUAL FRAMEWORK FOR ENHANCING NEUROINCLUSIVITY IN HIGHER EDUCATION¹

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ABSTRACT: As the number of neurodiverse students attending Canada's colleges and universities increases, there is a growing awareness of the need for greater neuroinclusivity within the postsecondary education sector. This paper is a theory-building essay that proposes a conceptual framework for enhancing neuroinclusivity across British Columbia's post-secondary system. The proposed conceptual framework consists of four main components: institutional theory, organizational sensemaking, compassionate systems leadership and organizational responses. Bridging the micro, meso, and macro levels, the conceptual framework provides a comprehensive model that demonstrates how organizations interpret institutional contexts and pressures

¹ A previous version of this work was published in the The IAFOR International Conference on Education in Hawaii 2026 Official Conference Proceedings.

through internal sensemaking processes. Compassionate systems leadership provides a lens to inform and shape these sensemaking processes to produce substantive organizational responses that are innovative, generative, and inclusive.

KEYWORDS: neurodiversity; neuroinclusive; institutional theory; compassionate systems leadership; higher education.

UM MODELO CONCEITUAL PARA PROMOVER A NEUROINCLUSÃO NO ENSINO SUPERIOR

RESUMO: À medida que aumenta o número de estudantes neurodivergentes matriculados em faculdades e universidades do Canadá, cresce também a conscientização sobre a necessidade de promover uma maior **neuroinclusão** no ensino superior. Este artigo consiste em um ensaio de construção teórica que propõe um **modelo conceitual** para fortalecer a neuroinclusão em todo o sistema de educação pós-secundária da Colúmbia Britânica. O modelo conceitual proposto é composto por quatro elementos principais: **teoria institucional, construção de sentido organizacional (organizational sensemaking), liderança compassiva em sistemas e respostas organizacionais**. Integrando os níveis micro, meso e macro, o modelo oferece uma abordagem abrangente que demonstra como as organizações interpretam os contextos e as pressões

institucionais por meio de processos internos de construção de sentido. A liderança compassiva em sistemas constitui uma perspectiva para orientar e moldar esses processos de construção de sentido, favorecendo respostas organizacionais substanciais, inovadoras, generativas e inclusivas.

PALAVRAS-CHAVE: neurodiversidade; neuroinclusão; teoria institucional; liderança compassiva em sistemas; ensino superior.

1. INTRODUCTION

As the number of neurodiverse students attending Canada's colleges and universities increases, there is a growing awareness of the need for greater neuroinclusivity within the postsecondary education sector. This paper is a theory building essay that proposes a conceptual framework for analyzing and enhancing neuroinclusivity in British Columbia's post-secondary education system. The conceptual framework consists of four components: institutional theory, organizational sensemaking, compassionate systems leadership, and organizational responses. Bridging the micro, meso, and macro levels, the conceptual framework provides a comprehensive model that examines how organizations interpret institutional contexts and pressures through internal sensemaking processes to inform organizational decisions and actions. Compassionate systems leadership provides a lens to inform and shape these sensemaking processes to produce substantive organizational responses that are innovative, generative, and inclusive. The conceptual framework provided may be applicable in future research to analyze other issues within the field of higher education organizational studies. The paper consists of three sections. The first section provides the background and context for the topic of neuroinclusivity in the British Columbia post-secondary system. The second section outlines the conceptual framework. The third section applies the conceptual framework to the issue of enhancing neuroinclusivity in British Columbia's post-secondary system.

Neuroinclusivity encapsulates the attitudes and social practices that allow individuals identifying as neurodiverse to flourish within a given environment. VanDaalen et al. (2025) explain that the term *neurodiversity* emerged in the 1990s from online autism self-advocacy communities, promoting respect for neurological variation. Further, VanDaalen et al. discusses that the definitions of neurodiversity vary among scholars and advocates, with no single universally accepted definition. Moreover, definitions of neurodiversity continue to shift depending on the sociocultural context and who is participating in the conversation (McLennan et al., 2025). Neurodiversity may include autistic individuals or individuals identifying with attention deficit disorder, dyslexia, developmental language disorder, or developmental coordination disorder (Hamilton & Petty, 2023; Spaeth

& Pearson, 2023). The neurodiversity paradigm rejects seeing neurodevelopmental differences as disorders (Dwyer, 2022). Instead, the neurodiversity paradigm views differences in processing social and sensory information, focusing, sustaining attention, and managing movements as natural variations offering unique strengths and challenges that are akin to biodiversity in nature (Singer, 2017).

Current research on neuroinclusivity in higher education highlights three interconnected themes: rising identification of neurodivergent students, persistent systemic barriers, and the growing call for affirming, institution-wide practices. In recent years, the number of students identifying as neurodivergent in higher education has increased (Dobson Waters & Torgerson, 2021; Fane, 2025), yet neurodivergent learners remain underrepresented in Canadian postsecondary contexts (McGowan, 2025). This gap is intensified by low disclosure rates, with fewer than half of neurodiverse students sharing their identities or diagnoses due to stigma, fear, and institutional barriers (McGowan, 2025). Despite estimates that 10–20% of the general population is neurodivergent, the absence of comprehensive Canadian data limits institutions' capacity to design responsive, evidence-based policies (McGowan, 2025).

Neurodivergent postsecondary students experience disproportionately high dropout rates, with long-term implications for quality of life (Anderson et al., 2019; Dobson Waters & Torgerson, 2021). Academic demands, social transitions, and unsupportive learning environments contribute to these outcomes, particularly when cognitive differences are met with negative social feedback (Clouder et al., 2020; Dwyer, 2022; Spaeth & Pearson, 2023). Barriers to accommodations – including financial costs, complex procedures, and privacy concerns – further restrict access to support (Dinç & Kohler, 2025), while social isolation and exclusion persist due to communication differences and widespread misunderstandings of neurodiversity (Dinç & Kohler, 2025). For autistic students, the transition to higher education is frequently associated with deteriorating mental health, underscoring the need for targeted transition supports (Goddard & Cook, 2022; Horlin et al., 2024).

Evidence increasingly points to the value of holistic approaches, including support, peer mentorship, and universal design learning initiatives (Fane, 2025). Findings from Canada's first national survey on neurodivergent students further identify executive functioning challenges as common yet under-addressed barriers, while showing that disclosure is linked to improved access and satisfaction with supports (Fane, 2024). Hybrid learning, counselling, and relational supports emerge as key enablers, reinforcing recommendations for campus-wide training and wrap-around service models to advance neuroinclusivity across Canadian postsecondary institutions (Fane, 2024).

2. CONCEPTUAL FRAMEWORK

We propose a conceptual framework to analyze and enhance neuroinclusivity within the British Columbia higher education system. The conceptual framework consists of four key components: institutional theory, organizational sensemaking, compassionate systems leadership, and organizational responses (see Figure 1). Institutional theory focuses on external contexts and pressures that act on and shape organizations. Organizations interpret these pressures through processes of internal sensemaking. Compassionate systems leadership can inform this organizational sensemaking by providing a lens through which these institutional pressures are interpreted, mediated, or transformed to inform organizational responses. By combining institutional theory, organizational sensemaking, and compassionate systems leadership the conceptual framework integrates the macro, meso, and micro levels. The proposed framework can be used as a diagnostic tool to analyze the current state as well as a design tool to propose leverage points for action.

2.1. INSTITUTIONAL THEORY

The first component of our conceptual framework is institutional theory. Institutional theory draws an important distinction between the terms “organization” and “institution”. While within the context of higher education the word “organization” may be understood to refer to a particular college or university, “institution” refers to the broader external context of social and cultural rules, policies, norms, and values that exert influence over an organization. In sum, “institutions are broadly understood as the ‘rules of the game’ that direct and circumscribe organizational behaviour” (Karatz & Block, 2008, as cited in Manning, 2017, p. 147). These rules, and organizational actors’ interpretations of them, represent the institutional logics that guide organizational decision-making and action. Through the process of “institutionalization” these structures, practices, and norms become embedded across an organizational field and over time are accepted as taken for granted. Institutionalization produces isomorphic pressures that push organizations toward greater homogenization and conformity. Organizations succumb to these isomorphic pressures to secure legitimacy. In the case of higher education, institutional isomorphism refers to the phenomenon by which colleges and universities come to resemble each other increasingly as time and norms influence the organization (Manning, 2017).

In their seminal work, DiMaggio and Powell (1983) outlined three pressures that drive institutional isomorphism: coercive, mimetic, and normative. Coercive isomorphic

pressures are requirements imposed from outside the organization by parties the organization relies on for resources and support and by cultural expectations in the society within which the organizations function (DiMaggio & Powell, 1983; Manning, 2017). In the case of higher education, coercive isomorphic pressures could include government policies, funding requirements, and accreditation standards as well as the expectations of prospective students and society at large. Mimetic isomorphic pressures drive organizations to model themselves after peer organizations perceived to be successful or prestigious, especially in times of uncertainty. Mimetic isomorphism can lead institutions to adopt best practices, for example, from successful peer organizations. Within the higher education sector colleges often model universities; universities model themselves after their more prestigious peers, such as Ivy League schools (Manning, 2017). Mimetic isomorphism can take place through direct observation of other organizations, advice from consultants, or through professional networks (Manning, 2017). Normative isomorphic pressures stem from the sharing of norms or values among people who belong to the same professional networks. Employees with similar educational backgrounds, employed in the same organizational field, and with similar industry experiences often share similar perspectives. DiMaggio and Powell (1983) identify two channels of normative isomorphism through professionalization: formal education through universities and professional associations spanning organizations. Faculty and administrators in colleges or universities share similar educational backgrounds and participation in professional associations with their peers across the higher education organizational field. While DiMaggio and Powell (1983) identify coercive, mimetic, and normative isomorphic pressures as three distinct phenomena, they are careful to note that they are not necessarily mutually exclusive and may overlap (DiMaggio & Powell, 1983; Mizruchi & Fein, 1999).

Over time, institutional rules, norms, and values may change. Old rules, norms, and values may lose their legitimacy. As they do, they are abandoned or replaced through a process of “de-institutionalization”, the counterpart to institutionalization. The process of de-institutionalization is necessary for organizations to adapt to changes within their environments.

Starting in the late 1980s and 1990s, research in institutional theory placed greater emphasis on the possibility of organizational agency and innovation (Cai & Mehari, 2015). Some institutional theorists emphasized the role of institutional entrepreneurs to challenge, adapt, and innovate institutional norms for specific organizational purposes (DiMaggio, 1988; Lawrence & Suddaby, 2006). This organizational agency is not distributed evenly. Organizations with greater status or

prestige may have more legitimacy to pursue innovative changes; those with less status and therefore less legitimacy are often more constrained in their ability to innovate in ways outside of institutional norms (Manning, 2017). Similarly, research on institutional logics focused on how institutions both constrain and enable action. Integrating macro level structures (institutions), local culture, and human agency, the institutional logics perspective emphasized that multiple and competing institutional logics provided the dynamic for organizational change (Cai & Mehari, 2015; Thornton et al., 2012). The research on institutional entrepreneurship and institutional logics suggests a bi-directional relationship between institutions, on the one hand, and organizations and organizational actors, on the other hand. Institutions shape organizations/organizational actors; organizations/organizational actors shape institutions.

2.2. ORGANIZATIONAL SENSE MAKING

The second component of our conceptual framework is organizational sensemaking (Scott, 1995; Weick, 1995). Organizational sensemaking provides a mechanism to bridge institutional context (macro level) and the actions of organizations (meso level) and organizational actors (micro level). While institutional theory and sensemaking have often been treated as separate and distinct, Weber and Glynn (2006) demonstrate how these two perspectives are “ripe with intriguing connections” (p. 1640). Institutions and sensemaking influence each other in “top-down” and “bottom-up” directions. The “top-down” direction refers to how institutions influence organizational sensemaking. Moving beyond the notion that institutions act merely as cognitive constraints on organizational actors, Weber and Glynn (2006) demonstrate that “institutions are part of sensemaking because they shape signification (meaning making) via interpretation and communication” (p. 1643). Elaborating on this argument, they show how institutions prime (provide social cues), edit (through social feedback processes) and trigger (by providing puzzles or contradictions) sensemaking processes within organizations. In short, organizations make sense of institutional contexts and pressures through a process of interpretation. Institutional isomorphic pressures do not automatically dictate specific behaviours or responses. Instead, organizational actors engage in sensemaking to explore what the pressures mean for the organization and how it should respond. Organizational actors filter institutional pressures through organizational culture, professional norms, and existing beliefs and assumptions. According to institutional theory, a central part of this sensemaking is evaluating how different responses will affect the organization's

legitimacy. Sensemaking shapes whether pressures are viewed as threats, obligations, or opportunities for improvement. It also influences whether responses become symbolic gestures or substantive changes.

The “bottom-up” direction focuses on how local actors can shape institutions through sensemaking. Emphasizing the importance of sensemaking in shaping institutions, Weick (1995) described sensemaking as the “feedstock for institutionalization” (p. 35). Research on institutional entrepreneurship indicates how institutional entrepreneurs use sensemaking to re-interpret existing institutional logics, construct new meanings that destabilize old institutions, frame new practices as legitimate, and mobilize others through shared interpretations to pursue institutional transformation (Battilana et al., 2009; Greenwood et al., 2002; Lounsbury & Glynn, 2001).

In sum, the relationship between institutions and sensemaking is bi-directional. Organizational sensemaking provides the mechanism through which institutional contexts and pressures are interpreted and enacted by organizations and organizational actors. Organizational sense making also provides a mechanism for institutional entrepreneurs to exercise agency and challenge, adapt, or innovate institutional norms.

2.3. COMPASSIONATE SYSTEMS LEADERSHIP

The third component of our conceptual framework is compassionate systems leadership. Where organizational sensemaking provides a mechanism to interpret institutional contexts and pressures, compassionate systems leadership provides a lens to inform and shape organizational sensemaking.

Compassionate systems leadership incorporates the work of Peter Senge and Mette Boell at the Center for Systems Awareness at the Massachusetts Institute of Technology (Center for Systems Awareness, n.d.), Thupten Jinpa and others at Stanford University (Center for Compassion and Altruism Research and Education, n.d.) and the Compassion Institute (Compassion Institute, n.d.), and tools such as Otto Scharmer’s TheoryU framework (Scharmer, 2018), and Robert Fritz’s work on creative tension (Fritz, 2013). Compassionate systems leadership is an approach to leadership that builds skills and practices in three interconnected domains: the self, each other, and systems (BC Compassionate Systems Leadership Network, 2026a). The domain of the self focuses on cultivating a practice of personal reflection, mindfulness, and compassion. This emphasis is based on the premise that building an awareness of self as leader will lead to a greater awareness of how one’s leadership approach and behaviours impact others. The second domain of compassionate systems leadership focuses on developing

authentic, trusting relationships among colleagues. Compassionate leadership posits that such relationships will lead to more transformative conversations and innovative and creative problem solving. The third domain focuses on developing the skills and practices of systems thinking.

Across these three domains, compassionate systems leadership is based on nine core concepts. Rather than prescribing a fixed sequence, these core concepts function as interconnected entry points that can be engaged responsively, depending on specific contexts and needs. At its foundation is compassion, understood as an ongoing leadership practice grounded in courageous kindness (Senge, 2006). Self-compassion is central, as the capacity to notice and respond to one's own challenges supports the ability to recognize and reduce the suffering of others (Schroeder & Rowcliffe, 2019). Closely related is perspective taking, which involves intentionally engaging with experiences beyond one's own (Schroeder & Rowcliffe, 2019). Valuing diverse ways of thinking, learning, and being is essential for inclusion, particularly in academic environments shaped by dominant norms (Böll, 2019). Compassionate systems leadership also emphasizes the creation of generative spaces, intentionally designed environments where individuals feel safe, valued, and energized to collaborate and produce new understanding (Rowcliffe & Schroeder, 2021). Leadership requires attentiveness to the broader system (Senge, 2006), reflective dialogue, and a shift from reactive problem-solving toward co-creating inclusive futures (BC Compassionate Systems Leadership Network, 2026b). Present-moment awareness supports this work by strengthening leaders' ability to listen deeply and respond thoughtfully to evolving conditions (Scharmer, 2018). Meaningful systems change further depends on authentic relationships that foster trust, mutual learning, and shared vision (Senge, 2006). Ongoing reflection and diverse forms of inquiry guide adaptation in complex, non-linear systems (BC Compassionate Systems Leadership Network, 2026b). Together, systems thinking and well-being orient leadership toward sustainable, humane structures that support both individual flourishing and institutional transformation.

There are a few reasons that we have decided to include compassionate systems leadership as part of our conceptual framework. First, it is already in place and well established in British Columbia. In 2021, the British Columbia Ministry of Education and Child Care provided initial funding to foster a compassionate systems leadership network around the province for those working in K-12 education (BC Compassionate Systems Leadership Network, 2026c). The network continues to provide training and learning opportunities and foster communities of practice for compassionate systems

leaders across the province. In addition to the established infrastructure, there is a synergy to having K-12 and post-secondary institutions within the jurisdiction “speaking the same language” on leadership issues across our educational systems. Second, there is currently no established leadership development framework for post-secondary administrators within the province. Leadership development within the post-secondary sector remains largely ad hoc, unintentional, and under-resourced (Benoit, 2024). The adoption of compassionate systems leadership by post-secondary organizations would remedy this situation. Finally, compassionate systems leadership is well suited to addressing the complex issues facing the higher education system, including enhancing neuroinclusivity in post-secondary education.

2.4. ORGANIZATIONAL RESPONSES

The final component of our conceptual framework is organizational responses. Organizational responses represent the range of actions institutions take after interpreting external contexts through their internal sensemaking processes. These responses vary in depth and intention, reflecting both the organization's pursuit of legitimacy and its capacity for adaptation. Organizational responses will vary from organization to organization, and the same organization may respond in different ways according to the specific circumstances. The first type of organizational response is compliance. This takes place when an organization adopts structures or practices to align with dominant norms. The second type of organizational response is adaptive change. This takes place when organizations modify routines to better fit shifting expectations or requirements while maintaining continuity. The third type of organizational response is innovation. This occurs when organizations introduce new practices that depart from institutional norms. Such innovation may eventually influence or re-define macro level norms within the organizational field. The fourth category of organizational response is symbolic action. This takes place when organizations outwardly conform to institutional pressures while internally maintaining different practices, a response known as “decoupling” (Meyer & Rowan, 1977; Westphal & Zajac, 2001). These organizational responses may accumulate into a feedback loop that can reshape the institutional environment itself. This feedback process underlines the bi-directional relationship between institutions and organizational action.

Figure 1. Diagram of Conceptual Framework.



3. DISCUSSION

This section of the paper applies the conceptual framework to the issue of enhancing neuroinclusivity in the British Columbia post-secondary education system. We begin by outlining emerging institutional pressures on colleges and universities within the province to address the needs of neurodiverse students by adopting neuro-affirming practices and increasing neuroinclusivity on campus. We argue that these pressures provide opportunities for organizations and organizational actors to interpret the institutional context through sensemaking processes and enact neuroinclusive policies and practices. Furthermore, we argue that the adoption of a compassionate systems leadership lens increases the likelihood that organizations will implement authentic substantive changes to ameliorate the experience of neurodiverse students. We contend that sensemaking through the lens of compassionate systems leadership also provides a mechanism for organizational actors to exercise agency and act as institutional entrepreneurs to pursue the adoption of neuroinclusivity as an institutional norm. The cumulative impact of organizational responses has the potential to sow the seeds of institutional change within British Columbia higher education by leading to the institutionalization of neuroinclusivity across the organizational field.

There is evidence of emerging institutional isomorphic pressures on colleges and universities to address the needs of neurodiverse students in the post-secondary education system. Coercive isomorphic pressures are emerging from changing social expectations, the broader educational system, and government requirements. The Conference Board of Canada research (Fane, 2024, 2025) reflects and contributes to a growing awareness of the experiences and needs of neurodiverse students. As this awareness increases, it will likely contribute to changing social expectations about addressing the needs of neurodiverse students on campus. Meanwhile, there is evidence of changing expectations within the broader educational system around neurodiversity and neuro-inclusivity within the post-secondary sector. In 2024, the British Columbia School Trustees Association wrote a public letter to the Ministry of Education and Child Care calling on the government to increase support for neurodiversity awareness training for employees currently working in the education system and for those in post-secondary education programs (Broady, 2024). As the letter indicates, the goal of this training is to “build a more inclusive and understanding environment in our schools where every student can succeed without the need to conceal their differences” (Broady, 2024, para 3). It is not unreasonable to presume that such expectations could spill over to the post-secondary sector more broadly.

Finally, coercive isomorphic pressures are also emerging from government requirements. The Accessible British Columbia Act (2021) mandates public institutions, including post-secondary institutions, within the province to establish an accessibility plan, a public feedback mechanism, and an accessibility committee. The purpose of the Act is to remove barriers for persons with impairment(s). According to the Act, a barrier is defined as “anything that hinders the full and equal participation in society of a person with an impairment” (Accessible British Columbia Act, 2021, part 1, section 2), and may be caused by “environments, attitudes, practices, policies, information, communications, or technologies” (Accessible British Columbia Act, 2021, part 1, section 2). Likewise, impairment is defined broadly as including “physical, sensory, mental, intellectual or cognitive impairment, whether permanent, temporary, or episodic”. While the Act does not specifically mention neurodiversity, the terms of the Act are sufficiently broad to include neurodivergent persons. The goal of the Act, as it applies to post-secondary education organizations, is, in part, to create more accessible and inclusive learning environments.

There are signs of emerging normative isomorphic pressures to foster greater neuroinclusivity on post-secondary campuses. For example, in 2025–26, BCcampus, whose mission is to advance effective, inclusive, and accessible post-secondary teaching

and learning practices to enhance student experiences in British Columbia (BCcampus, 2026a), delivered a series of workshops, panel discussions, short courses, and podcasts on neurodiversity and neuroinclusive practices available to post-secondary faculty across the province (BCcampus, 2026b). These events serve to establish neuro-affirming and neuroinclusive teaching and learning practices as professional norms for post-secondary educators. As these practices and norms spread and take root, they may be institutionalized across the post-secondary system.

The BCcampus activities may also serve as an emerging mimetic isomorphic pressure. As post-secondary organizations, especially those with greater prestige and legitimacy, embrace and adopt neuroinclusive practices, it is more likely that other post-secondary organizations will mimic their behaviour and adopt similar practices. The Center for Teaching, Learning, and Technology at the University of British Columbia, the largest and most prestigious post-secondary organization in the province, has recently started offering workshops for teaching assistants and faculty on fostering neuroinclusive classrooms (University of British Columbia Center for Teaching, Learning, and Technology, n.d.). It is not unreasonable to expect other organizations to mimic such practices. Other organizations, such as the University of Calgary and Kwantlen Polytechnic University, have received praise for their work in supporting neurodiverse students on campus (Fane, 2025; McGowan, 2025). As the number of examples of organizations adopting neurodiverse practices increases, mimetic isomorphic pressures will increase for others to follow suit.

Broadly speaking, these emerging institutional pressures lead post-secondary organizations to engage in sensemaking processes to interpret what they mean for the organization and how the organization should respond. More specifically, the emerging institutional pressures prime, trigger, and edit sensemaking processes (Weber & Glynn, 2006). Coercive pressures, such as requirements under the Accessible BC Act, trigger sensemaking by introducing explicit demands that require interpretation. Coercive pressures also edit sensemaking by narrowing the range of acceptable interpretations. Organizations must interpret their obligations within the boundaries set by the law. Normative pressures, such as those emerging from BCcampus workshops on neuroinclusive pedagogy, prime sensemaking by making neuroaffirming practices cognitively salient to post-secondary educators and edit sensemaking by establishing neuroaffirming practices as markers of professional legitimacy within the sector. Mimetic pressures, generated as prestigious institutions such as the University of British Columbia and the University of Calgary adopt neuro-affirming practices, prime sensemaking by offering models of “what leading institutions do”. Mimetic pressures also trigger

sensemaking when organizations perceive a risk of losing legitimacy by falling behind emerging sectoral norms. In sum, these institutional pressures do not directly determine organizational behaviour. Rather, they shape the interpretive process through which post-secondary institutions understand neurodiversity, evaluate their obligations, and decide how to act within an evolving institutional environment.

Compassionate systems leadership offers a lens to inform the process of organizational sensemaking and shape organizational responses. With its emphasis on present-moment awareness, perspective taking, and systems thinking, we contend that compassionate systems leadership encourages leaders to approach coercive, normative, and mimetic institutional pressures not as compliance burdens but as invitations to understand the lived experiences of neurodivergent learners and the systemic conditions that shape those experiences. This orientation fosters relational trust, enables faculty and staff to engage in reflective and generative conversations, and collectively re-interpret institutional expectations through a lens of compassion and equity. As a result, the organizational responses that emerge under a compassionate systems approach are more likely to be substantive rather than symbolic. Organizations may engage in adaptive changes, including revising existing accommodation processes to reduce barriers or updating policies to align with accessibility legislation. A compassionate systems leadership approach is also more likely to elicit innovative responses, such as co-creating neuroinclusive policies with neurodiverse students, redesigning courses using Universal Design for Learning (CAST, 2024), or developing new models of student assessment that challenge traditional norms. Compassionate systems leadership also increases the likelihood of institutional entrepreneurship, as leaders and educators feel empowered to challenge entrenched norms, advocate for systemic change, and model practices that could influence the broader organizational field. In sum, compassionate systems leadership would not only shape how organizations and organizational actors make sense of emerging institutional pressures but would also lead to organizational responses that are generative, inclusive, and capable of contributing to long-term institutional change.

4. CONCLUSION

This paper has advanced a conceptual framework for understanding and enhancing neuroinclusivity within British Columbia's post-secondary education system. The conceptual framework consists of four components: institutional theory, organizational sensemaking, compassionate systems leadership, and organizational responses. Bridging the macro, meso, and micro levels, the conceptual framework

demonstrates how institutional contexts and pressures are interpreted by organizations and organizational actors to inform organizational decision-making and actions. We argue that the conceptual model illustrates how organizations can interpret and respond to institutional context and pressures, and how organizations and organizational actors can, in turn, exercise agency and act as institutional entrepreneurs to challenge, adapt and innovate institutional norms. We argue that compassionate systems leadership offers a lens through which institutional pressures can be interpreted as opportunities for relational, ethical, and systemic transformation rather than compliance alone. When sensemaking is informed by compassion, perspective taking, and systems awareness, organizational responses are more likely to be adaptive, innovative, and inclusive. Over time, such responses have the potential to influence the broader organizational field, contributing to the institutionalization of neuroinclusivity as a normative expectation within higher education. This framework thus provides both an analytic tool for examining current practices and a design-oriented guide for leaders seeking to advance equitable and neuro-affirming post-secondary systems. The conceptual framework may provide a model for future research on this and other issues within the field of higher education organizational studies.

REFERENCES

- Accessible British Columbia Act, S.B.C. 2021, c.19. <https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/21019>
- Anderson, A. H., Stephenson, J., Carter, M., & Carlon, S. (2019). A systematic literature review of empirical research on postsecondary students with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 49(4), 1531–1558. <https://doi.org/10.1007/s10803-018-3840-2>
- Battilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *The Academy of Management Annals*, 3(1), 65–107. <https://doi.org/10.5465/19416520903053598>
- BCcampus. (2026a). *About us*. <https://bccampus.ca/about-us/>
- BCcampus. (2026b). *Events*. <https://bccampus.ca/about-us/https://bccampus.ca/events/>
- BC Compassionate Systems Leadership Network. (2026a). *Compassionate systems leadership*. <https://www.compassionatesystems.earlylearning.ubc.ca>
- BC Compassionate Systems Leadership Network. (2026b). *Compassionate systems leadership core concepts*. <https://www.compassionatesystems.earlylearning.ubc.ca/core-concepts/>
- BC Compassionate Systems Leadership Network. (2026c). *Compassionate systems leadership about*. <https://www.compassionatesystems.earlylearning.ubc.ca/about/>
- Benoit, B. E. (2024). *Learning to Lead: Leadership Development for Academic Administrators at a Canadian Community College*. [Doctoral dissertation, Western University] The Dissertation in Practice at Western University, 423. <https://ir.lib.uwo.ca/oip/423>

- Böll, M. (2019, August 26). Cultivating generative social fields with Mette Böll [Audio podcast episode]. In Thorson, D. (Host) *Emerge: Making Sense of What's Next*.
- Broady, C. (2024, September 9). *Advocacy: Neurodiverse training in public education*.
- British Columbia School Trustees Association. <https://bcsta.org/advocacy-neurodiverse-training-in-public-education/>
- Cai, Y., & Mehari, Y. (2015). The use of institutional theory in higher education research. In *Theory and Method in Higher Education Research* (Vol. 1, pp. 1–25). Emerald Group Publishing Limited. <https://doi.org/10.1108/S2056-375220150000001001>
- CAST. (2024). Universal design for learning guidelines version 3.0. <https://udlguidelines.cast.org>
- Center for Compassion and Altruism Research and Education. (n.d.). <https://www.ccare.stanford.edu>
- Center for Systems Awareness. (n.d.). <https://www.systemsawareness.org>
- Clouder, L., Karakus, M., Cinotti, A., Ferreyra, M. V., Fierros, G. A., & Rojo, P. (2020). Neurodiversity in higher education: A narrative synthesis. *Higher Education*, 80(4), 757–778. <https://doi.org/10.1007/s10734-020-00513-6>
- Compassion Institute. (n.d.). <https://www.compassioninstitute.com>
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L.G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment* (pp.3–21). Ballinger.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>
- Diñç, E., & Kohler, M. (2025). Unmasking visible and invisible challenges faced by neurodivergent students in higher education. In *Proceedings of the 19th International Conference of the Learning Sciences-ICLS 2025*, pp. 413-421. International Society of the Learning Sciences. <https://doi.org/10.22318/icls2025.127954>
- Dobson Waters, S., & Torgerson, C. J. (2021). Dyslexia in higher education: A systematic review of interventions used to promote learning. *Journal of Further and Higher Education*, 45(2), 226–256. <https://doi.org/10.1080/0309877X.2020.1744545>
- Dwyer, P. (2022). The neurodiversity approach(es): What are they and what do they mean for researchers? *Human Development*, 66(2), 73–92. <https://doi.org/10.1159/000523723>
- Fane, J. (2024). *Making the Invisible Visible Neurodivergent Students' Experiences in Canadian*. https://www.conferenceboard.ca/product/making-the-invisible-visible_nov2024/
- Fane, J. (2025). *Creating Inclusive Campuses: Neuroinclusive Policies and Practices in Post-Secondary Education*. The Conference Board of Canada.
- Fritz, R. (2013). *The Power of Structural Creative Tension*. World Press.com
- Goddard, H., & Cook, A. (2022). “I spent most of freshers in my room” – A qualitative study of the social experiences of university students on the autistic spectrum. *Journal of Autism and Developmental Disorders*, 52(6), 2701–2716. <https://doi.org/10.1007/s10803-021-05125-2>

Greenwood, R., Suddaby, R., & Hinings, C. R. (2002). Theorizing Change: The Role of Professional Associations in the Transformation of Institutionalized Fields. *Academy of Management Journal*, 45(1), 58–80. <https://doi.org/10.5465/3069285>

Hamilton, L. G., & Petty, S. (2023). Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis. *Frontiers in Psychology*, 14, 1093290. <https://doi.org/10.3389/fpsyg.2023.1093290>

Horlin, C., Almond, K., Bowen, A., & Robertson, A. (2024). Thriving... or just surviving? Autistic journeys in higher education. *Current Psychiatry Reports*, 26(12), 771–776. <https://doi.org/10.1007/s11920-024-01560-x>

Lawrence, T. B., & Suddaby, R. (2006). Institutions and Institutional Work. In T. B. Lawrence, C. Hardy, S. R. Clegg, & W. R. Nord (Eds.), *The SAGE Handbook of Organization Studies* (pp. 215–254). SAGE Publications Limited. <https://doi.org/10.4135/9781848608030.n7>

Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22(6-7), 545–564.

Manning, K. (2017). *Organizational theory in higher education* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315618357>

McGowan, S. (2025, May 15). Neurodiversity in Canadian postsecondary education: More support and recognition needed according to Conference Board of Canada report. *University Affairs*. <https://universityaffairs.ca/news/neurodiversity-in-canadian-postsecondary-education/>

McLennan, H., Aberdein, R., Saggars, B., & Gillett-Swan, J. (2025). Thirty years on from Sinclair: A scoping review of neurodiversity definitions and conceptualisations in empirical research. *Review Journal of Autism and Developmental Disorders*, 1-16. <https://doi.org/10.1007/s40489-025-00493-2>

Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *The American Journal of Sociology*, 83(2), 340–363. <https://doi.org/10.1086/226550>

Mizruchi, M. S., & Fein, L. C. (1999). The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44(4), 653–683. <https://doi.org/10.2307/2667051>

Rowcliffe, P., & Schroeder, J. (2021). Compassionate Systems Leadership: Leveraging disruption for transformative change. *EdCanNetwork*. 61(1).

Scharmer, O. (2018). *The essentials of Theory U: Core principles and applications*. Berret-Koehler Publishers, Inc.

Schroeder, J., & Rowcliffe, P. (2019). *Growing compassionate systems leadership: A toolkit*. The Human Early Learning Partnership.

Scott, W. R. (1995). *Institutions and organizations*. Sage.

Senge, P. (2006). *The fifth discipline: The art and practice of the learning organization*. Crown Business.

Singer, J. (2017). *NeuroDiversity: The birth of an idea*. Judy Singer.

Spaeth, E., & Pearson, A. (2023). A reflective analysis on how to promote a positive learning experience for neurodivergent students. *Journal of Perspectives in Applied Academic Practice*, 11(2). <https://doi.org/10.56433/jpaap.v11i2.517>

Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: a new approach to culture, structure, and process* (1st ed.). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199601936.001.0001>

University of British Columbia Center for Teaching, Learning, and Technology. (n.d.). *Creating neuroinclusive classrooms*. <https://events.ctlt.ubc.ca/events/creating-neuroinclusive-classrooms/>

VanDaalen, R. A., Vallefucio, A. A., Fernandez, M. L., Liu, S. Y., & Lemaire, C. J. (2025). Public perceptions of the neurodiversity movement: A thematic analysis. *Neurodiversity*, 3. <https://doi.org/10.1177/27546330251325973>

Weber, K., & Glynn, M. A. (2006). Making sense with institutions: Context, thought, and action in Karl Weick's theory. *Organization Studies*, 27(11), 1639–1660. <https://doi.org/10.1177/0170840606068343>

Weick, K. (1995). *Sensemaking in organizations*. Sage.

Westphal, J. D., & Zajac, E. J. (2001). Decoupling Policy from Practice: The Case of Stock Repurchase Programs. *Administrative Science Quarterly*, 46(2), 202–228. <https://doi.org/10.2307/266708>

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