Chapter 13

Toward Social Justice: Leadership's Crucial Role in an Increasingly Expansive TechnologyDependent Context

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ABSTRACT

This chapter asserts that transformative leadership is essential to educational organizations. The authors identify andragogical leadership as synonymous with transformative leadership, with critical attributes hinged upon activism, praxis, technology, and social justice supporting adult learning. The transformative leader can engage in dialogue with their learners/employees to facilitate critical consciousness through a constructivist framework and provide evidenced-based feedback. The orientation of this chapter focuses on what social justice is and why it is central to leadership, access and use of technology as a form of social justice, the essential role of dialogue and inquiry for the andragogical leader, where learning takes place, and the necessity of transformative leadership to move organizations further along the social justice continuum to enact change for the modern world. This chapter contributes to the knowledge base of transformative leadership as a promising vehicle to address the growing need for humane (expansive/accessible) learning spaces.

BACKGROUND

Educational technology use continues to expand; it thereby impacts learning by both increasing access to knowledge and altering the way we learn. At both the K-12 level and the post-secondary level, some students and instructors/employees may not yet see technology as an opportunity. Leaders must recognize technology as a tool and refrain from being reactionary. For example, adopting all new technology

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every year is rarely the right option without examining outcomes from extant tools and practices. If we consider technology a tool, we must understand learning; learners; curricular decisions based on learning theory; and people. Considering all of these facets, leaders must be able to "...promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources" (ISTE, 2023).

As an advocate for citizenship and equity and given that technology can expand access for all, leaders must be able to envision technology uses for social justice. Holding this vision while embracing the potentiality of contemporary technologies and digital resources, the leader's ability to facilitate the use of technology will be crucial to moving employees, learners, and staff forward. To do so, leaders must (in part): know about whom they are supporting; be courageous; encourage creativity; and support others by making decisions based on learning theory.

This chapter was written to support the educational leader in promoting professional learning and innovation. To do so, the chapter provides theoretical understanding so leaders may consider and form the rationale for their leadership decisions. The chapter also guides leaders who are navigating new technologies as well as the management of transitions for learners/employees. Some examples of these decisions are how to allocate budgets for hardware and teacher training (Scghaffhauser, 2016). The leader must consider what they know about themselves as a learner, what they believe about learning, and the leadership practices they will enact. These practices include creating a culture learners/employees are empowered to use technology in innovative ways to enrich learning.

The authors' purpose for writing this chapter is to support leaders committed to social justice. These leaders realize the crucial role of technology in expanding access, recognize the importance of supporting the growth of others, and are concurrently developing their own capacities to engage, connect, and lead (Drago-Severson et al., 2023). Expansive, liberating use of technology must include the leaders' ability to move beyond technology management toward a transformative leadership style. In contrast to transformational or transactional leadership, transformative leadership begins with the end in mind and fiercely advocates for justice and democracy (Shields, 2010).

INTRODUCTION

Leadership is known to impact educational organizations; those with dynamic skill sets can lead to an organization's success (Bass, 2008; Collins, 2001). The authors assert that dynamic skill sets for the modern world reflect the beliefs and praxis of a transformative leader. Transformative leadership is grounded in social justice; such leaders demonstrate the potential to engage in equitable and inclusive democratic practices. "Transformative educational leadership begins by challenging inappropriate uses of power and privilege that create or perpetuate inequity and injustice" (Shields, 2010). The modern world also reflects increased access to and use of technology as the educational landscape shifts and changes to adapt to the assets and needs of learners/employees. The transformative leader uses technology as a tool to support adult learners and the growth of the organization.

This chapter will provide insights and practical strategies for individuals participating in graduate leadership programs, graduate faculty, students, researchers, and librarians in leadership programs, and any other leader interested in learning more about transformative leadership and the integration of technology. The focus is to present the authors' perspectives and ideas, encourage the reader to think

critically and broaden their views on learners, learning, and leadership. As the reader moves through the chapter, reflect on your beliefs and perspectives on leadership and technology integration.

Leaders in various organizations will find the content of this chapter relevant and informative. Whether you seek to improve your leadership abilities or support the development of others, this chapter is an essential resource. It will support leaders in advancing their understanding of transformative leadership's role in increasingly technology-dependent contexts and moving an organization forward on the social justice continuum. As one moves their organization forward, the function of this chapter is also to move this conversation forward.

In this chapter, the authors conceptualize social justice using a definition from Furman (2012), understanding this to be a key feature of educational organizations despite often differing perceptions. This is followed by Vygotsky's (1934; 1986) theory of social constructivism and how this theory provides opportunities for technology to be used as a pathway for knowledge acquisition and as a promoter of social justice. Freire's (2000) understanding of praxis is then introduced, as well as humanizing spaces by way of the transformative leader. Learning and motivation theories are introduced to provide a timeline and progression for the reader, and adult learning theory is then expanded upon. Next, leadership styles are introduced, with detailed insight into transformative leadership, including beliefs and praxis. Finally, evidence-based feedback is discussed in addition to innovative technology integration. In addition to the written content and reference tables, the authors present a conceptual framework for further consideration.

Two key questions are provided to guide one's thinking during this chapter:

- What beliefs and behaviors of the transformative leader create space for evidence-based reflection and digital transformation in education?
- How can increased expertise in technology implementation impact social justice?

CONCEPTUALIZING SOCIAL JUSTICE

Educational literature is replete with definitions for social justice (Bertrand & Rodela, 2018; Hytten & Bettez, 2011; North, 2008; Shields, 2004). Increasingly, one is hard-pressed to engage with an educational program that omits "social justice" from its mission, vision, or diversity statements. While the term "social justice" may be used or even promulgated in organizational mission statements, faculty, teachers, leaders, and support staff often do not share a common understanding of social justice (Hytten & Bettez, 2011). Towards the goal of creating a consistent vernacular, and to move the discussion ahead throughout this chapter, we will rely on Furman's (2012) definition to support our mutual understanding. Therefore, in this chapter, social justice centers on "the experiences of marginalized groups and addresses inequities in educational opportunities and outcomes." Marginalized groups represent the most underserved, underrepresented, and undereducated; addressing these inequities demands purposeful, complete, and equal participation of all societal groups. The authors believe educational leaders can impact change when they facilitate these efforts by mutually shaping society to meet their needs (Bell, 2016). To that end, educational leaders for social justice must create and demand spaces and opportunities for all voices to be heard (Bogotch, 2002).

Reviews of research and journal publications provide evidence that the past century has shown an increased effort on the part of educators and educational leaders to increase their understanding of social justice related to power, identity, and social construction (Quin, 2009). A leader grounded in social justice

believes in respect, care, recognition, and empathy (Theoharis, 2007). They actively work to create safe and affirming spaces for individuals who have been "othered" (Kumashiro, 2000). Consequently, social justice educational leaders empower other educators, learners, and employees to act in anti-oppressive ways (Quin, 2009). However, leadership programs can be hesitant to engage in these efforts given the broad definition (Cambron-McCabe & McCarthy, 2005). Social justice work requires ongoing investigative dialogue and continuous growth; it is not a fixed point.

The principles and practices of social justice include ongoing discourse and actions for both leaders and aspiring leaders. Thus, advocacy must be part of leadership preparation programs (Cambron-McCabe & McCarthy, 2005; Theoharis, 2007); it cannot be separated from the role of educational leadership. This concern includes the omnipresent role of systemic racism and marginalization (Bertrand & Rodela, 2018). Leaders must be intentionally taught to look within the margins and identify who is being ignored and how to address what is being missed (Kumashiro, 2000).

EXPANDED ACCESS TO EDUCATION: ONE FORM OF SOCIAL JUSTICE

This chapter argues that transformative leadership is essential to educational organizations. To unpack meaningful, actionable practices, the authors begin by reviewing learning theories in order to then move forward to discuss the expanded use, management, and access to technology toward increased social justice. And thus, we begin with how learners/employees' access and build knowledge, which is often grounded in social constructivism. Vygotsky's (1934; 1986) cultural-historical social activity theory emerged in the 1920s and 30s and provided a system and process by which we understand the world. In part, Vygotsky suggested that knowledge construction and organization are generative. The development occurs first on a social level and later on an individual level; therefore, the potential for development occurs when children participate in social behavior. This understanding is labeled as the Zone of Proximal Development (ZPD) and has been a foundational building block for classroom instruction with a focus on language development. Vygotsky proposed three aspects that are significant to cognitive development. First, knowledge is a historical process; our unique social and cultural backgrounds shape our cognitive development. Second, knowledge cognition is social; as such we rely on discourse, dialogue, and processing with others to support understanding and meaning-making. Finally, language, numbers, and tools support the mediation of knowledge acquisition (Aubrey & Riley, 2015).

Moving beyond Vygotsky's work in the early 20th Century, with an adjusted focus on adults, Mezirow (1991) conceptualized a different understanding of adult learners and how they build and shape meaning; he also suggests three factors to cognitive development. The first is an epistemic perspective which acknowledges patterns, abstract thinking, and scope of awareness, to name a few. Second is a sociolinguistic perspective which includes, but is not limited to, cultural and language codes, socialization, and differing philosophies. The third perspective is psychological; this includes self-concept, inhibitions, neurotic needs, including others. The theory and process of learning and acquiring knowledge are complex.

Adult development is seen as an adult's progression toward an enhanced capacity to validate prior learning through reflective discourse and to act upon the resulting insights. Anything that moves the learner/employee toward a more "inclusive, differentiated, permeable, and integrated meaning perspective, the validity of which has been established through rational discourse, aids an adult's development" (Mezirow, 1991, p. 7). Engaging in discourse through technology allows learners to engage in a (virtual) community of practice. Lave and Wenger (1991) suggest that members within a community of practice

learn to gradually take up space as they engage in knowledge generation, application, and reproduction. The theories of Mezirow and Lave and Wenger are explored more in subsequent sections of this chapter to provide increased understanding.

Increasingly, technology has become a tool to facilitate meaning-making and process values and beliefs during learning construction. Growth-focused technology leaders explore their meaning-making systems considering how they affect leaders' understandings of diversity, equity, and social justice (Drago-Severson et al., 2023). Technology allows for increased access to continued education as we consider ways individuals engage in discourse to support knowledge acquisition and development. In its many and varied forms, technology can promote social justice. Examples of positive impact can be traced back to the fourteenth century with the invention of book printing, to more recent technologies, including sewage treatment for clean water. The invention and use of technology is a form of social justice (Dyson, 1997). Online capabilities enable all individuals to access, connect, and gain knowledge of events worldwide (Dyson, 1997). Online access is now embedded into our daily lives, providing flexible opportunities to learners/employees (Neiman & Wang, 2017). Use and access to technology address inequities in educational outcomes and opportunities, allowing equal participation to all groups in society. The use of technology facilitates knowledge organization through individual and community discourse (Lowyck, 2014) and active inquiry (Weis et al., 2002). Technology has shifted learning from instructor or program controlled to learner controlled (Lowyck, 2014). A shift from instructor to learner-centered is what educational theorist John Dewey argues results in a more democratic, community foundation of learning (Aubrey & Riley, 2015)

With advances in the availability of technology, increased media speed, and deep media catalogs, learners can increasingly engage in authentic, real-world problems (Reiser, 2001). Learning at one's own pace and under conditions more favorable to the learner allows the learner/employee a safer learning environment and the opportunity to take breaks as needed (Ladson-Billings, 2021). Previous generations of media allowed for minimal interpersonal engagement; television, phone, and radio (Schejter & Tirosh, 2015). Current iterations are interactive, mobile, abundant, and multi-media, facilitating immediate and personal connections and allowing for increased access and distribution of knowledge and information (Schejter & Tirosh, 2014). Recent work in the field has also produced the cognitive theory of multimedia learning; virtual reality experiences have demonstrated promising learning outcomes (Kyaw et al., 2019).

One such example of increased access is digital connectivism via online learning. Over time, online learning opportunities have progressed from reliance on recording lessons with companion worksheet packets to the ever-growing demand for synchronous (real-time interactions with instructors) and asynchronous (learning on their own schedules) instruction. As online learning has continued to expand, researchers interested in the topic have increased in numbers; so too have the number of studies focused on technology use and, more specifically, online learning. The term 'ubiquitous' is often used now to describe technology. Identifying technology as 'being everywhere' may not be incorrect. Following the acknowledgment that technology is ubiquitous, how do leaders process this? How do leaders move forward from this noticing to making sense of online learning and its potentiality? Again, exploration and shared definitions can aid learners and leaders alike. Corbett and Spinello (2020) identify four online learning and leadership principles, which they associate as the fundamentals of digital connectivism. Digital connectivism is described as the axis between knowledge and the technological environment. The ability to access facts and information, answer questions, and solve problems, which technology allows individuals to do, provides for more significant social capital (Saunders, 2017), a form of social justice.

Four Principles of Digital Connectivism (as adapted from Corbett & Spinello, 2020):

- **Autonomy:** Learners/employees are given freedom and choice of technological tools; no sole person is the source of knowledge in the learning process.
- **Connectedness:** Connections and contributions are encouraged via digital platforms, including blogs, social media, Youtube, Ted Talks, Coursera, and substacks.
- **Diversity:** Learners/employees are encouraged to seek the opinions of others; there are many sources of knowledge and expertise.
- Openness: Such as Massive Online Open Communities (MOOCs) attract thousands of participants worldwide. Massive Online Open Communities are courses available for free or minimal charge for anyone to enroll in to advance or deepen their skills, understanding, and knowledge.

Accessing and acquiring new skills via technology is available to all learners worldwide. Technology is a cornerstone of our daily lives; individuals access it for work, play, and socialization. "Today, more than at any other time in history, thanks to Web-based learning platforms, such as social media tools, TED Talks, YouTube, open courseware, blogs, and various phone Apps that interact with the Internet, it is possible for anyone to become knowledgeable and expert in a broad range of content topics" (Neiman & Wang, 2017, p. 39). Therefore, it can be argued that educational leaders for social justice must provide access to technological platforms and opportunities for their learners/employees, intentionally evaluate access and address inequities to personal and professional growth and consider learning and motivation theories when examining their leadership styles. All of these combined wills result in actions that positively move organizations.

HUMANIZING PRAXIS: LEADERSHIP, DIALOGUE, AND INQUIRY

In the opening paragraphs of this chapter, the authors bring forth the importance of a shared understanding of terms. Beginning with defining social justice, the educational leader must also support their learners/employees to move beyond understanding terms to making new connections that are only sometimes consciously formed (Costa & Garmston, 2016). Experienced practitioners are both thinkers and observers. They create a sense of possibility, build on existing expertise, and build learning and reflection into all they do. To be precise, this is not about micromanaging but rather about "uplifting leaders" who are both leaders and players. While it may seem that this notion is oxymoronic, the dual roles work interdependently in an educational setting. To humanize the profession and, by extension, leaders, individuals who can model and create supportive organizations are sought for educative leadership roles.

As leaders emphasize and model the practices of social justice, the theoretical framework of Paulo Freire provides conceptual understandings to move concept development toward praxis. Praxis, in short, is an action or conduct based on theory and the practical application of a theory. Freire (2000) defined praxis as "critical reflection which leads to action." Most often, praxis is applied to an art, science, or skill. Certainly, it can be argued that teaching includes all three; art, science, and skill. Essential to the development of meaningful praxis is dialogue. The dialogue should center on a genuine, authentic discourse between individuals (such as leader and learner/employee) for conscious reflection to occur. Such conscious reflection is the catalyst for creation and action (Freire, 2000). As noted previously, technology expands the allowance for dialogue and reflection and functions as an impetus for social justice when promoted and utilized by educational leaders. At the same time, it is also true that educational leaders are necessary to their organizations in order to bring the through-line of humanizing spaces and

places, dialogue, connections, and communities. Therefore, it is not an overstatement to assert: leaders are crucial to a learner/employee's growth toward social justice.

What does it mean to humanize education or the educational setting? A humanized space is a space in which less of us is hidden, and more of us are known. Students feel valued, seen, respected, and safe in humanized school classrooms. The same applies to a humanized school campus or an online learning environment. A learner's/employee's identity and intersectionalities influence how one shows up on campus or in shared spaces. Identity and intersectionalities embody beliefs and values; it is crucial to understand our identity and that of others, given that perceptions and critical consciousness of ourselves, others, and the environment flow from this sense of identity (del Carmen Salazar, 2013). This principle applies to learners, employees, and leaders. Because values and beliefs are evident to others through our actions, a self-exploration of our universal human needs is essential and is how we interpret the actions of others. There is value in exploring and embracing emotions and needs, even when these can be messy and unpredictable. Bettez (2008) outlines seven humanizing practices grounded in critical reflection, dialogue, and activism:

- Promoting a mind/body connection
- Conducting artful facilitation that promotes critical thinking
- Engaging in explicit discussions of power, privilege, and oppression
- Maintaining compassion for students (learners/employees)
- Believing that change toward social justice is possible
- Exercising self-care
- Building critical communities

The role of an educational leader is demanding and complex; it is highly contextualized and personalized (Khilji, 2022). A leader who authentically knows their learners/employees provides a more humanizing space for promoting social justice. The social justice leader engages in praxis, supporting fellowship through purposeful and critical dialogue (Freire, 2000). The following section provides an overview of learning and motivation theories, leading to a comprehensive review of adult learning, central to the knowledge base of educational leaders.

LEARNING AND MOTIVATION THEORIES

This section begins with Table 1 to organize the reader's review of learning and motivation theory. Upon initial reading, the reader may identify the omission of a known or favorite theorist. The authors acknowledge at the onset that this table is not exhaustively comprehensive. Rather, the timeline of learning and motivation theorists is meant to serve as an organizational tool for educational leaders so that they may think about their leadership style and how best to move their learners/employees toward social justice. Researchers recognize the broad number of those who have contributed and those who continue to contribute to the refinement of our understanding. To all, the field remains ever appreciative.

Table 1. Timeline of learning and motivation theories progression of theory development

Theory	Theorists	Timeframe	Central Concepts	
Behaviorism	Watson Skinner	1900- 1930 1940 - 1980	Objective behavior - Learning is a <i>response</i> to negative or positive stimuli	
Cognitive Constructivism	Freud Erickson Piaget Bruner Bloom Lave and Wenger	1880 1959 1920 1950 1965 1990	Stages of life cycle Took Freud's work which ended with adolescence and extended into late adulthood Four stages of development - knowledge is constructed through individual experiences Found that learners construct ideas based on previous knowledge Learning occurs both cognitively and affectively (beliefs, values, attitudes) Communities of Practice Focused on situated learning for adults with engagement in communities of practice	
Social Constructivism	Vygotsky and Social Cognition Bandura	1920 1960	Development of the individual occurs first on a social level and later on an individual level. The potential for development occurs when children participate in social behavior. The Zone of Proximal Development (ZPD) Four steps to an operant view of learning	
Humanism	Maslow	1930	Experiential learning with an emphasis on choice, creativity, values, self-realization, and dignity	
Motivation	Dewey Brown Gilligan	1930 1980 1980	Experiential learning leads us to more learning. Internal and external LOC factors that influence how we view ourselves and others. The Feminist voice and perspective are added to adult learning and cognition	
Adult Learning	Knowles Cronbach and Snow Friere	1970 1970 1970	Founding father of adult learning views learning as cyclical: Experience leads to reflection, which leads to action, which leads to concrete reflection, and so on. Andragogy refers to adult learning while pedagogy focuses on children. Importance of strategies geared to learner's specific abilities. The critical analysis of experience and acting on that analysis lead to more learning.	
Adult Learning in Professional/ Educative Settings	Joyce and Showers Schön Feiman-Nemser	1980 1983 1992	The importance of coaches to support teacher's implementation, included the importance of feedback. The reflective practitioner engages in reflection both during and after practice Professionals support and guide the enhancement of the new teacher through reflection, collaboration and shared inquiry	

Note. Based on a model by Papa (2010). This version by Meetze-Hall includes the addition of theories and practice in educative settings.

ADULT LEARNING THEORY

The understanding of adult learning theory/theorists, whether it be based upon long held beliefs, or something recently learned, focuses on how adults learn. This focus on *how adults learn* then informs how we engage adult learners. One might further surmise that adult learning theory also impacts or sets the stage for managing and using technology. Sounds simple enough: what one believes impacts management and leading decisions.

If this sounds so simple, why then, are leaders so often challenged in regard to providing meaningful professional development or guiding groups to explore their ability to embrace new learning? The

dilemma may be, as Papa (2010) states, "The maze of learning theories provides no single answer to define how one learns but does permit a substantial perspective to the process of learning." As leaders, learners, and authors, we concur; there are significant numbers of learning theories that educational leaders should consider. Therefore, this section provides an overview of learning and motivation theories for consideration, including questions regarding attention and motivation.

Based on a leader's observations and analysis, they may determine that they are working with powerful examples of highly functional teams. Contrastively, the leader may realize that they are not there, yet. The path forward will require continued observation, analysis, and intentional instructional decisions. Our instructional decisions are complex and may be multi-faceted. Most assuredly, there are social-political and learning theory perspectives that may both support or confound potential solutions.

Many of the theories reviewed in the chapter thus far rely on learners' motivations as the central theme when considering teaching and learning approaches and strategies. This includes first the notion of intrinsic and extrinsic motivation. It may be important to affirm that it is also possible for a learner to be concurrently both. There may be times when, what a person wants most at a given point in time, is external recognition. That same person may experience a psychological re-orientation; this transition is internal as they come to terms with change and could result in an increased focus on intrinsic motivators. As educational leaders, we may imagine that our learners/employees are intrinsically motivated and naturally curious. If so, then, as the leader, we might decide to present information by providing resources and allowing for time for personal exploration. Contrastively, we may consider delivering the content with a focus on external motivation.

In this section we provide a review and connection between seminal theories. By definition, these are the theories that keenly influenced later developments. The reader will not find the latest research in this section, rather, this is a reminder of the progression of theory development; all to support understanding of learning. The newest research and theories are included in subsequent discussion points regarding technology.

Knowles (1970) is often identified as the "founding father" of adult learning theory, a facet of which views learning as cyclical. This cycle includes the starting point of experience, leading to reflection and action, which more precisely informs the next round of evidence-based reflection. Cronbach and Snow's *Attitude Treatment Interaction* (1970) added a learner-focused perspective and then proffered that learning is best achieved when strategies are geared directly to the learner's specific abilities. We might think of this as similar to Vygotsky's Zone of Proximal Development (ZPD) or Krashen's i+1. While similar, the difference between these two concepts is that the ZPD focuses on what learners can accomplish with the help of others, and Krashen's i+1 seeks to describe a learner's language improvement with a change of input slightly more advanced than the existing or current level.

Based on this admittedly brief review of learning theory, it may now be apparent that adult learning theory is complex and continues to evolve. While adult learning theory is grounded in both cognitive and social constructivism (Papa, 2010) much weight is placed on the decisions that the leader will make based on their understandings. Leaders must acknowledge that education is part of a complex set of systems while also recognizing the reality of their context-dependent organization. Considering that adult learners accept responsibility for their learning, engage in critical analysis of experience, and acting upon that analysis leads to more learning; the leader must model the pursuit of knowledge and can affect change by providing space for conversations. These conversations may be organized or structured to include the acknowledgment that we are navigating a changing system. For some, this may be disorienting. At the same time, it will be essential to consider that as we grow older, engaging in communities of practice

increases our ability to analyze our experiences (Lave and Wenger, 1991). Lave and Wenger call this *intentional reflection*, which is becoming an increasingly enacted practice in adult learning.

Following this review of learning theory and theorists, this subsequent section will briefly compare three leadership styles and explore which style aligns with a leader grounded in activism, humanity, and social justice, the type of leadership needed for the modern world.

LEADERSHIP STYLES

Leadership plays a crucial role in shaping the success of organizations and their learners/employees (Bass, 2008; Collins, 2001). Three widely recognized leadership styles include transactional, transformational, and transformative. Table 2 (adapted from Shields, 2009; 2010) summarizes these leadership styles and highlights their focus, operational process, key values, and leadership dispositions. As noted in the table, transformative leadership prioritizes "deep and equitable change in social conditions."

Table 2. Leadership styles distinctions among three leadership styles

	Transactional Leadership Transformational Leadership		Transformative Leadership
Emphasis of Focus	Means	Organization	Deep & equitable change in social conditions
Process	Immediate cooperation through mutual agreement and benefit	Understanding of organizational culture; setting directions, developing people, redesigning the organization, and managing the instructional program.	Deconstruction and reconstruction of social/cultural knowledge frameworks that generate inequity; acknowledgement of power & privilege; dialogue between individual & social
Key Values	Honesty, responsibility, fairness and honoring commitments	Liberty, justice, equality	Liberation, emancipation, democracy, equity, justice
Leader	Ensures smooth and efficient organizational operation through transactions	Looks for motive, develops commons purpose, focuses on organizations goals	Lives with tension & challenge; requires moral courage, activism

Note. Adapted from Shields (2009; 2010).

TRANSFORMATIVE LEADERSHIP

Transformative leadership, not to be confused with transformational leadership, focuses on adult learners/employees, and provides a conceptual framework for best supporting learning outcomes (Dirkx, 1998). Critical attributes of transformative leadership include: a combination of critique and promise, attempts to effect profound and equitable change, deconstruction and reconstruction of knowledge inquiry, acknowledgment of power and privilege, emphasis on individual and community achievements, focus on liberation, equity and justice, and evidence of moral courage (Shields, 2010; Shields & Hesbol, 2020). Transformative leadership is grounded in an activist agenda and has come into being through the work of multiple scholars; in this section, the authors examine two notable scholars' throughlines: Paulo Freire and Jack Mezirow.

Freire

As noted above, the work of Freire (2000) is central to the role of an educational leader, social justice, and humanizing the modern world. The transformative leader's role is to dialogue with the learners/employees to develop mutual respect and better understand their backgrounds, cultures, and lived experiences. Through these dialogues, greater awareness emerges; individuals can move forward with a deeper conscientiousness regarding knowledge, critique, community, activism, and self-direction. In Freire's (2000) words:

As women and men, simultaneously reflecting on themselves and on the world, increase the scope of their perception, they begin to direct their observations toward previously inconspicuous phenomena... That which had existed objectively but had not been perceived in its deeper implications (if indeed it was perceived at all) begins to "stand out," assuming the character of a problem and, therefore, a challenge. Thus, men and women begin to single out elements from their "background awareness" and to reflect upon them. These elements are now objects of their consideration and, as such, objects of their action and cognition. (pp. 82-83, italics added for emphasis)

Core to Freire's work is the understanding of praxis; this process consists of reflection followed by action rooted in changing the world for the better. Dialogic relationships allow for critical reflection of our spaces and organizational communities, followed by the ability to remake them more humane and equitable; the transformative leader stimulates these relationships. An educational leader must clearly understand power and equity at the intellectual level to lead with and model transformative practices (Shields, 2010).

Mezirow

Mezirow's (1990, 1991,1997, 2008) contributions to transformative leadership are well-established. His early understanding of this theory demonstrated the importance of dialogue with others to identify different perspectives and provide empathy and support as individuals navigated and negotiated new interpretations (Mezirow & Associates, 1990). Critical to his work are reflexivity and meaning-making, the ability of a learner/employee to reflect on problem-solving and problem-posing to make meaning; Mezirow has identified ways in which leaders can support growth within their organizations.

Transformative learning involves an enhanced level of awareness of the context of one's beliefs and feelings, a critique of their assumptions and particularly premises, an assessment of alternative perspectives, a decision to negate an older perspective in favor of a new one or to make a synthesis of old and new, an ability to take action based upon the new perspective, and a desire to fit the new perspective into the broader context of one's life. (Mezirow, 1991, p. 161)

One's frames of reference influence meaning-making. These are cultural and linguistic backgrounds or funds of knowledge from which learners/employees attribute coherence and significance to an experience. Mezirow's (2008) five structures for transformative learning include:

- Reflecting critically on the source, nature, and consequences of relevant assumptions our own and those of others;
- In instrumental learning, determining that something is true (is as it is purported to be) by using empirical research methods;
- In Communicative learning, arriving at more justified beliefs by participating freely in an informed continued discourse;
- Taking action on our transformed perspective we make a decision and live what we have come
 to believe until we encounter new evidence, argument or a perspective that renders this orientation
 problematic and requires reassessment;
- Acquiring a disposition to become more critically reflective of our own assumptions and those
 of others, to seek validation or our transformative insights through more freely participating in
 discourse and to follow through on our decision to act upon transformed insight.

It is important to highlight again that Freire and Mezirow have made significant contributions to the educational leadership field with their theoretical stance of transformative leadership. Their work focuses on supporting individuals and communities through praxis, empathy, reflection, dialogue, and meaning making. These collaborative efforts provide space and opportunity for promoting social justice and engaging in advocacy. The social justice leader assumes an activist role for educational organizations and social change (Cambron-McCabe & McCarthy, 2005); the works of Freire and Mezirow provide language, beliefs, and actions to support these intentions. In the following section, the authors highlight the conditions and locations for learning.

CONDITIONS AND LOCATIONS FOR LEARNING

Technology-driven learning opportunities are created or thwarted based on both access and use. Particularly when considering dimensions related to technology use, the transformative leader must consider locations for learning. The notion of learning being impacted by contexts and perspectives is connected to researchers such as Mezirow and Merriam. Mezirow (1991) identified the importance of understanding the conditions and locations for learning; these contexts shape the learner's/employee's frames of reference. Frames of reference are influenced by a range of perspectives, including epistemic, sociolinguistic, and psychological. These frames of reference were identified earlier in the chapter and will now be expanded upon. The transformative leader needs to understand the relationship between these perspectives and the learning process, as they can profoundly impact the outcome of the learning experience.

Epistemic perspectives refer to a learner's/employee's beliefs and attitudes toward knowledge and how knowledge is acquired, processed, and used. Individuals with a social constructivist epistemic perspective may believe that knowledge is subjective and constructed through personal experiences, interactions, and dialogue with others (Mezirow, 1991).

Sociolinguistic perspectives refer to the social and cultural context in which language and communication occur. A learner/employee who is a native English speaker may have a different sociolinguistic perspective compared to an individual who is new to the English language (Mezirow, 1991). Considering an individual's background, language proficiency, and communication style allows the transformative leader the opportunity and access points to design relevant learning experiences.

Psychological perspectives refer to the learner's/employee's cognitive, emotional, and behavioral characteristics that impact the learning process (Mezirow, 1991). Dweck's (1999) research is especially illuminating regarding cognitive-motivational patterns and how these patterns originate in people's self-theories. An individual with a growth mindset may be more apt to take risks and try new things than an individual with a fixed mindset who may resist change (Dweck, 2006). From this work, we learn that when an educational leader is aware of an individual's needs and preferences, it is easier to provide support and encouragement, allowing the learner/employee to reach their full potential.

Additionally, the learner's/employee's position in the sociocultural, physical, and individual sense should also be considered. As Merriam (2008) proposed, a holistic approach to learning recognizes the significance of all experiences and learning, including storytelling, music, dance, folklore, and others. In this space, technology allows for increased access to learning through varied perspectives. These approaches consider the learner's/employee's body, emotions, mind, and spirit and incorporate all aspects of the individual into the learning experience. In this way, the transformative leader ensures a safe, accessible, and humane opportunity for learning.

Mezirow's (1991) and Merriam's (2008) ideas underscore the importance of understanding the contexts and perspectives that shape the learning experience. By considering these elements, the transformative leader can create an inclusive, effective, and meaningful environment. The following section provides the reader with context about the beliefs and praxis of the transformative leader.

THE TRANSFORMATIVE LEADER: BELIEFS AND PRAXIS

Leadership for social justice is action-oriented and transformative, committed and persistent, inclusive and democratic, relational and caring, reflective, and oriented toward a socially-just pedagogy/ (Furman, 2012)

Transformative leaders are characterized by several beliefs and practices that drive their leadership approach and style. Mountouri & Donnelly (2018) identify four beliefs or orientations that guide the transformative leader: ways of being, relating, knowing, and doing. Central to their belief system is recognizing that learners/employees are creative and always creating (Montuori & Donnelly, 2018), particularly through their understandings based upon interpretations of worldviews, knowledge, and frames of reference (Mezirow, 1991).

With leadership traditionally viewed as a top-down approach, Mountouri & Donnelly (2018) argue that relating to others is a key belief. This style requires following a democratic process and engaging in creativity; the end game is to benefit the community, learners/employees, and the organization as a whole. Winners and losers are not part of the transformative leader's belief system.

Transformative leaders believe in people first. Their beliefs about knowing center on sense-making, humanity, self-reflection, and relationships. Transformative leaders recognize their humanity and are open to uncertainty while focusing on contextualizing, connecting, and engaging in complex thought (Montuori & Donnelly, 2018). While centering on humans and sense-making, the transformative leader believes adults can critique their own assumptions, assess alternative perspectives, take action on a new perspective, and hold a desire to fit a new perspective into a broader understanding (Mezirow, 1991).

The transformative leader believes in identifying multiple ways to achieve desired outcomes; there are no prescribed rules. This includes being open to a broad worldview and drawing on the assets and

skills of the learners/employees. A steady balance remains between listening, collective inquiry, and dialogue (Montuori & Donnelly, 2018). Transformative leaders believe in others taking action; action is integral to transformative learning. Because of this, the transformative leader believes in reflective and transformative learning practices. Reflective learning supports the confirmation, addition, or transformation of ways of interpreting the learner's/employee's experience (Mezirow, 1991).

Lastly, the transformative leader holds firm beliefs about creating a community of practice and is a community builder (Dewey, 1927). Creating a community of practice requires developing an emotionally safe space where learning, growth, and diverse perspectives flourish and are appreciated (Khilji, 2022).

Transformative leaders are people-centered and prioritize relationships, sense-making, and self-reflection. Their beliefs and practices keep social justice at the forefront. They engage in democratic processes, creativity, and collective inquiry to benefit the community, learners/employees, and their organization. Transformative leaders also focus on creating a community of practice that fosters emotional safety and encourages learning, growth, and opportunity. A practice that supports learning and growth is the use of evidence-based feedback.

EVIDENCE-BASED FEEDBACK TO SUPPORT GROWTH

Once again, the specificity of terminology is crucial to move the conversation and practice forward. For example, the term 'feedback' can be understood as information about reactions to a product, a person's performance of a task, etc., which is used as a basis for improvement. With other audiences, the term 'feedback' may indicate the screeching or humming sound from an amplifier. One would hope that when a leader provides feedback to an employee or staff member, the feedback is usable and not received as noise. Here the authors rely on the term to describe information for the basis of improvement.

Multiple theorists and resultant research support the importance of feedback; this frequently includes the contention that such exchanges between learner and coach should include both support and challenge. Other researchers, such as Bruner, add the notion of scaffolding as an essential facet of structured learning. This section asks the leader to consider various ways they may enter into a learning-focused conversation with their learners and the fulcrum of instructional decisions.

Bruner (1960) built upon the theory of active learning with the development of discovery learning and suggestions for scaffolding. One of the guiding principles was that learning takes place "in situ" (p. 28). To support a learner, Bruner suggested the concept of a scaffold, where, supports are in place until they can be removed for greater autonomy. The author argued that educators should consider the difference between learning and thinking and defined thinking as the "operation of utilizing information to go beyond the information" (p. 29). Bruner added to the field the inclusion and importance of dialogue in the learner's discovery and use of reflection.

Bandura's (1977) social learning theory sought to explain the phenomena of how individuals process via observational learning. Bandura contended that behavior modeling could include students observing students for social clues and norms as well as how to function in the school environment. This theory has also been applied to mentor and mentee roles, where the mentor provides the model, and the mentee is the observer. In either of these relationships, reality is reinforced, and the observer can be acculturated to the context. The combined impact of Dewey's constructivism, Bruner's discovery learning, and Bandura's social learning support the important role that observation, feedback, and reflection contribute to successful learning experiences.

Wenger (1998) began describing community of practice (COP) theory by stating the first underlying assumption that humans are social beings. Wenger then contended, "The primary focus of this theory (COP) is on learning as social participation" (p. 4). The claim further contended that communities of practice are groups of people who share a concern or a passion. They develop a shared repertoire of resources: experiences, stories, tools, and ways of addressing recurring problems—in short, a shared practice. This takes time and sustained interaction.

The work of Mezirow (1991) was based on a more generalized population of adult learners, while Schön (1983) was interested in reflective learning by professional practitioners, particularly in the medical field. The field of education quickly adopted the importance of reflection in developing the skills and knowledge of teacher practice. What has perhaps been lost is the distinction that Schön (1983) made between the structure for reflection in action versus reflection on action. Schön argued that professionals learn while doing when they may need to improvise in the moment. For Schön, learning from reflecting on the action of their own professional experiences after an event is especially important in the iterative nature of learning cycles and the resultant application of experience-based learning.

Mezirow's (1991) theoretical distinction centered on knowledge learning versus perspective learning. According to Mezirow, transformational learning (TL) is a change in perspective or beliefs (a paradigm shift). The first step in TL requires a disorienting dilemma and a resulting exploration and action plan. Knowledge and perspective learning are necessary for supporting new teacher development. Without a change in paradigm, educators might not consider the necessity of reflecting on knowledge learning, which represents the how and what of their professional practice.

Built upon these seminal theorists' work, the educator development field has been dramatically altered by the debate about learning as a socially constructed activity and the importance of reflection. The elements of teacher preparation and the attributes of teacher induction have been studied extensively (Cherubini, 2009; Darling-Hammond, 2000; Delaney, 2012; Feiman-Nemser, 2001; Ingersoll, 2014). With constructivism, discovery learning, and social learning as their foundation, studies have used the theories of reflective practice, transformative learning, and communities of practice to understand the perspectives of experienced educators as they engage with teachers new to the profession. Collectively, these learning theories inform leader and coaching development and provide a framework for understanding educative, evidence-based feedback.

While the notion of learning resulting from reflection is connected to theorists such as Mezirow, Dewey, and Schön, the concept of reflective practitioner also extends beyond education to Schön's work in the area of professional knowledge development. Indeed, a broad study of developing educators might be similar to the medical example labeled "situations of practice" (Schön, 1983, p. 16) in which the professional must be knowledgeable and analytical of technical components and be skillful in synthesis and creative in solutions. Markie (1994), too, made the connection to teacher analysis: "The first criterion is intellectual competence . . . but he should have some capacity for analysis. Without this capacity, he cannot develop it in his students" (p. 90). This focus on the analysis of classroom practice will move a teaching practice forward.

As they created their instructional guide for mentors, Lipton, and Wellman (2013) acknowledged and identified challenges for new teachers: "new teachers often have a mistaken belief in the existence of a readily available package that can transform their classes. Lipton and Wellman further claimed that mentoring relationships are central to the success of ongoing learning within induction programs. The necessity of ongoing learning is increasingly true as the educational landscape expands beyond brick and mortar's building-bound constraints into cyber communities.

With an anomalous shift from these learning theorists and their concepts, we focus now on both the technology leader and technology-supported learning. It could be imagined that the leader may be tasked with taking an institution's delivery from a face-to-face delivery model to a hybrid learning model or, on a smaller but no less challenging scale, they may be tasked with helping others to embrace Bring Your Own Device (BYOD) models. As is often the case, leaders face significant challenges as they balance between leadership and management, concepts that are not mutually exclusive. Papa (2010) reminded readers that the leader will need to be reasonably fluent in technology; it is no longer a new frontier but a necessity to bring about systemic improvements to learning experiences. Leaders must consider the strain on learners/employees when adopting technology.

So, what are some of the points a leader may need to consider? Some of the initial studies of technology in education began by identifying technology tools. Built initially for advanced research projects in the 1970s, networks for electronic communication are now commonplace. Originally, the term Computer-Supported Collaborative Learning (CSCL) focused on issues related to learning through collaboration and promoting productive collaborative discourse with the help of the computer and other communications technologies. The term CSCL is not as widely used, but the technology that it brought forth is central to most of today's learning management systems (LMS). This includes relying on such components as discussion boards, electronic whiteboards, and application add-ons for workforce productivity. It also contended that the newest versions experienced today are crucial tools for social justice. While the technology may have changed over time, CSCL studies have continued to inform technology use by educative mentors. One such study is by Baglione and Nastanski (2007), where the research findings provide important information regarding faculty perceptions of technology use by the educational leader.

In addition to Baglione and Nastanski, Klecka et al. (2004) explored the potential of electronic mentoring as distributed communities of practice when they explored asynchronous communication within an Illinois novice teacher program. Relying on open-ended surveys, focus group interviews, field notes, and reviewing posted messages and user login data, after three years of data collection, they found participation depends on much more than providing access to workshops or electronic mentors. With a new medium, such as electronic mentoring, the barriers that prevent or incentives that encourage one to log in and engage in conversations help to define the nature of participation. The nature of participation is an important contextual element of any community.

Moving from these early studies, the field has now moved far beyond the exploration of potential electronic mentoring. As practitioners and the research field have progressed, it is now possible to find a plethora of studies based on the cognitive theory of multimedia learning. This may be an area that a technology leader will need to draw upon, whether leading technology enthusiasts or technology skeptics (Collins & Halverson, 2018).

When reviewing the significant number of technology studies, it becomes evident that significant numbers of skeptics still discount technology as a viable tool for learning and communication. Some of these skeptics include university instructors and school boards (Allen & Seaman, 2013). Many of the studies and arguments by Dixson (2015), Koutropoulos (2011), Surrette and Johnson (2013) and Lineweaver (2010) were positioned to either support or refute the effectiveness of online learning, and they often included measures of engagement. Still, other studies, such as Duncan-Howell (2010), Noroozi et al. (2011), and Quintana and Zambrano (2014) began with the perspective that technology and online mentoring may be helpful where geography creates challenges of access. Collins and Halverson (2018) add useful clarifying language to help with identifying ways that we may need to rethink learning, motivation, and educational leadership (among other topics). Certainly, these considerations are congruent

with the argument contentions laid out in the chapter and remind us to continue to observe and consider how to lead in schooling, learning, and technology.

The nature of participation is an important contextual element of any community and is often addressed in educational studies. The contextual elements are also essential considerations for the educational leader. Of significant consideration to the technology leader are the instances where technology supports access to collaboration and evidence-based instructional practices to support all participants' goals. In a study by Zwart et al. (2009), the analysis indicated that there were characteristics of a mentoring relationship that had a greater impact and caused teachers to try out new teaching strategies while being observed. The characteristics included partnered observation, which reduced the potential embarrassment of "trying something new in front of another when partnered with a peer" (p. 254).

A recent addition to educational terminology is that of a reciprocal coach. The early literature outlines behaviors and skill sets that are congruent with other coaching models. Alger and Kopcha (2011) examined the clinical experiences of preservice teachers supported with technology tools. They found a type of non-reflective coaching described by study participants who were in the preservice level of teacher preparation. Examples of the coded language in the study included the following behaviors grouped under coaching: "experts make comments on lessons; expert feedback on videotape lessons; experts made comments on lessons; feedback provided via templates; triad members shared advice and solutions." From these responses, the study found a preferred differentiation between what the more novice practitioners expected and wanted compared to those more mature in their practice. The more novice practitioners wanted 'advice giving,' which is to a degree contrastive to other adult learners. For more advanced practitioners, the leader or coach facilitates the adult's sense-making and co-creates the generation of solutions.

How transformative leaders guide the adult learner will be impacted by contextual realities, including the strength of existing systems. What do the studies and learning theorists then tell leaders about planning and their actions? In short, what is the starting point and the way forward? A question to consider might be: how does the leader create a space for professional exchanges that support, challenge, and provide evidence-based feedback?

Based on Knowles' work (1990), leaders must acknowledge that relevance to their jobs (or personal life) is as important to adult learners as the need to plan and evaluate their instruction. Because adult learning requires an analysis based on critical reflection, the transformative leader provides experiences and space for reflection so that the adult learner can capitalize on the experience. This also includes creating safety for individuals to be open and honest. The leader will want to include professional growth opportunities centered on positive, evidence-based conversations by including the elements of psychological safety, clear focus, and differentiated support.

When considering the notion of differentiated support, the educational leader will analyze what they know about the adult learners and use their own theory of action and understanding of learning and social justice to make leadership and learning decisions. For example, the stance and sentence stems of the leader night include coaching, with the use of facilitative language, wherein the leader begins with questions to deepen the learner's thinking. These include examples that are beyond information queries. Rather, facilitative questioning may start with sentence stems, such as:

- As you examine.
- What might it look like if...
- Let's examine...

- On the basis of what you know about your students...
- What do the multiple sources of data...
- What does it mean when...
- What do you see and hear when your students...
- What does it look like when your students...

As the transformative leader and learner/employee enter further into the conversation, psychological safety continues to be provided by using data as the "third point" (Grinder, 1997). In selecting impactful data points for analysis and discussion, the leader and learner will need to determine those data which will be most productive. With careful selection of data, the conversation focuses not on the teaching practice but puts the discussion evidence to the side to explore it together.

Differentiation with learners also depends on the leader's knowledge and awareness of the learner's expertise. As leaders work to move employees toward expanded use and access to technology, the aim is also to develop efficacy and enhance capacities. When needed, the transformative leader may be called to provide information directly. Such might be the case when responding to changes in preferences to learning modalities. Helping learners/employees envision a change of practice that includes a broad range of offerings and flexible learning modalities will necessitate leaders monitoring their approaches carefully. An example of which is the MOOC Pivot (Reich, 2019). Unpacking or making their thinking transparent is helpful to both the leader and learner and can assist the learner in making connections to personal contexts.

As depicted in Figure 1, multi-directional interactions occur during an evidence-based reflective conversation. As previously mentioned, there should be an agreed-upon selection of data points. The third point (for example, video recordings and/or student work samples) may be used as evidence during the conversation. The determination of the topic of focus and data points may take place in a community of practice or between the individuals interested in improvement. As with a community of practice, all parties bring forth evidence as the agreed-upon focus. The communities of practice, which must include conversations that provide both support and challenge, contribute to optimum conditions to propel growth. Said in another manner, evidence-based reflection is at the center of growth-focused conversations.

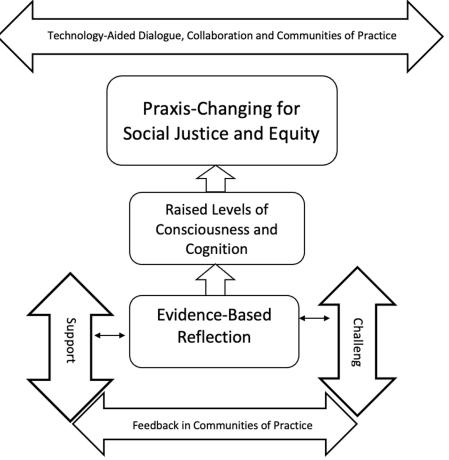
In addition to the studies and considerations above, there has also been increased understanding and research about "the understandings, capacities, and dispositions need to make sense of information" (Carless & Boud, 2018). This schema includes the epistemological dimension (engagement of learners) as well as the ontological dimension (investment related to identity). Again, this is a reinforcement and reminder of the learner/employee's self-identity and how the learner/employee may be poised to be an active participant in growth-focused conversations.

THE TRANSFORMATIVE LEADER: ACCELERATING SOCIAL JUSTICE

Transformative leadership, as with other forms of leadership, is dependent upon the individual and their beliefs and practices. As the authors have set forth in this chapter through research, claims, and a conceptual framework (Figure 1), this work depends upon many connecting and interweaving ideas and practices. Headlining the conceptual framework is the understanding that technology-aided dialogue, collaboration, and communities of practice will consistently be in play within an organization. Moving then to the bottom of the conceptual framework, we work up. As noted by Freire (2000) and Mezirow

(1991), within communities of practice, dialogue is central, as this allows for feedback to occur. Feedback aids in supporting and challenging learners/employees, which leads to evidence-based reflection. Through this reflective practice, knowledge acquisition and cognition occur in addition to raised levels of consciousness. As leaders, learners, and employees continue to elevate their stance of growth, humanity, and self-concept, one reaches a level of intentional praxis. Through praxis, purposeful reflection results in action for social justice and equity. Moreover, we move the needle to a more equitable and just world in this space.

Figure 1. Technology-aided coaching model for social justice



CONCLUSION

Progressing from thinking about learners, learning, and leadership, the authors underscore the importance of perspective and reflection while holding fast to foundational underpinnings of transformative change through individualized and community dialogue. To carry out and support the implementation of new technologies, the leader must be willing to examine and alter existing leadership practices.

A leader who can balance the needs of both learners/employees and the organization is key to promoting growth. This balance between the learner's support and engagement and the leader's experience, inclination, and willingness to experiment has the potential to create a safe, trusting environment where there are opportunities to coach and be coached. While implementing new practices, the leader will be mindful of ways that interactions are increased but also mindful of pitfalls that could further marginalize learners and employees.

This chapter has asserted that transformative leadership is essential to educational organizations. While management is necessary when supporting growth, transformative leadership allows new models to be developed. As the modern world increases in connectivity through shared dialogue and technology, the transformative leader is situated to address the expanding need for humane, socially just learning spaces to move organizations forward.

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KEY TERMS AND DEFINITIONS

Dialogue: Skillful, intentional, and authentic discussion between individuals that produces and facilitates critical consciousness and meaning-making.

Digital Connectivism: Axis between learning and the technological environment. A form of social justice, it allows for autonomy, connectedness, diversity, and openness. Digital connectivism increases one's social capital.

Frames of Reference: Influence an individual's meaning-making. These are cultural and linguistic backgrounds or funds of knowledge from which learners/employees attribute coherence and significance to an experience.

Praxis: An action or conduct which is based on theory. Praxis is the practical application of a theory. Resulting from an understanding of/from reflection turned into action.

Reflective Practice: Refers to an inquiry-based approach to teaching inclusive of critical thinking and personal commitment to continuous learning and improvement.

Social Justice: Centers on the experiences of those who have been "othered," often identified as marginalized groups. Social justice addresses inequities in educational opportunities and outcomes. Marginalized groups represent the most underserved, underrepresented, and undereducated.

Technology: Use of devices, software, and machines that allow individuals and communities to communicate, access information, and acquire/build new knowledge. Available at all times and easily accessible.

Third Point: Refers to the three-point interaction between the facilitator, learner, and item of focus. The third point can be an external artifact, such as student work or videotape.

Transformative Leadership: Synonymous with andragogical leadership; a leader who is action-oriented, technology-centered, and dialogue-focused to move their learners/employees and organization as a whole to a more humane, socially just space in the modern world.