

Educational Leadership:
Exploring the Influence of Managed and Living Systems in Educational Leadership
Discourse

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Abstract

A conceptual analysis of educational leadership explored the influence of managed and living systems on 21st century leadership discourse. Drawing on a detailed understanding of managed and living systems theory compiled from the work of Capra (2002), Morgan (1997), Mitchell and Sackney (2009), and Wheatley (2007), this study draws attention to the managed systems systemic concepts of efficiency, control, and standardization, and the living systems concepts of collaboration, shared meaning, change, and interconnection as markers of systems theory that find resonance within leadership literature. Using these systemic concepts as a framework, this study provides important insights into the espousal of managed and living systems concepts within the leadership discourse.

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CHAPTER ONE: POSITIONING THE STUDY

Educational leadership is a vast topic filled with many theories and models that espouse the norms and expectations associated with being an administrator of a school. These leadership models serve to inform principals in their daily practices to ensure that our education system is benefiting from the wealth of knowledge surrounding education. However, the volume of scholarly work in this field of study may be proving to be problematic for educational leaders due to the number of conflicting or differing theories regarding leadership. Therefore, a challenge facing school administrators in this instance is to know how to sift through the conflicting theories to inform their practices.

This conceptual analysis is grounded in the tension surrounding two opposing narratives regarding organizational leadership. The conceptual study will explore the impact of managed and living systems theory on leadership literature in the 21st century. More specifically, it aims to uncover the influence of managed and living systems theory within the leadership discourse.

Background of the Study

The leadership literature reflects a complex and complicated field of study that is influenced by many factors. This study will uncover the extent to which educational leadership is influenced by managed and living systems theory. School administrators operate in a regulated field composed of laws, standards, and regulations that define the education system. They are also in a position to impact the culture and purpose of their individual schools.

Kelley and Peterson (2007) posit that strong educational leadership is the backbone of a school community. They contend that school leadership can ensure (a) the

quality of instructional strategies, (b) carefully conceived curriculum, (c) management of complex issues and school systems, (d) school improvements, and (e) proper and meaningful assessment. The authors argue that, unfortunately, school administrators are finding their roles more and more complex due to the new demands of an ever-changing education system. Kelley and Peterson suggest that principals are facing new responsibilities such as promoting the decentralization of decision-making, increasing accountability within schools, and meeting the needs of diverse communities. The authors contend that administrators must possess certain skills to help them address the complex demands of educational leadership, skills such as (a) fostering growth in students and teachers, (b) providing clear goals for the school, (c) monitoring the attainment of the outlined goals, (d) promoting a trusting and inclusive environment, and (e) making professional development a top priority.

Kelley and Peterson (2007) argue that there are many leadership models that may be used to guide school principals in their quest to become effective educational leaders. They contend that some leadership models emphasize the importance of positive teacher behaviours in promoting the growth of their students. Some models value the role of the principal as the moral/ethical leader and the manner in which a strong value system can influence the decision-making processes in schools. Other educational leadership models emphasize the importance of strong problem-solving skills and the ability to adapt to complex problems, while still other leadership models place a strong emphasis on the ability to promote shared decision-making processes.

Tschannen-Moran (2007) argues that trust is the central determinant for creating successful schools as school leaders forge strong relationships with teachers, parents,

students, other administrators, and the public (the five constituencies in schools). She contends that the absence of trust impedes the progress and effectiveness of schools because a rift can form between the administrator and any or all of the five constituencies. Once a divide is formed, Tschannen-Moran argues, the loss of trust can spread through the school community like a cancer and erode the academic integrity of the school. She posits that teachers are facing changes in the education system that call on them to be more accountable for the instructional techniques and strategies with regards to student success. Therefore, their professional communities must be rooted in trust to ensure that teachers feel supported. Furthermore, Tschannen-Morin contends, students seek trusting school environments to connect productively to their learning community. Without trust, students divert their energies away from their studies and towards a self-protection mentality. Tschannen-Moran posits that trust is an essential ingredient to ensure that parents and the general community are more actively engaged in the education process. Asking parents for assistance in school governance and seeking additional resources from the community requires trust in school leaders. Lastly, she notes that school leaders need trust to build a strong relationship with the school community and the public in order to establish shared vision and goals and to inspire their constituencies.

According to Sergiovanni (2007), the type of leadership that most people seek is leadership that appeals to values and emotions, that is grounded in strong connections, and that is morally driven. This kind of leadership, which Sergiovanni calls “servant leadership,” balances the need to serve the people within the organization with the need to serve the values and ideals that form the basis of the school community. Sergiovanni

contends that schools have the capacity to improve because they are communities of learners. As such, the more crucial role of a school administrator is to be the head learner who models, experiences, and displays an eagerness to learn. The school leader gains legitimacy and trust by serving the needs of the schools and its constituents. The school community then has confidence that the school administrator possesses the proper skill set to lead because the leader is providing the proper direction for the school.

This brief review illustrates the differing perspectives associated with educational theory literature, but more importantly, it demonstrates how both managed and living systems scripts influence the literature regarding educational leadership. The managed systems theory of organization was at one time the dominant theory of organization. That theory espouses the need for highly monitored and tested environments, clearly defined standards and norms, and centralized decision making within organizations (Morgan, 1997). The educational leadership theories presented by Kelley and Peterson (2007) and Tschannen-Morin (2007) are grounded in part in the managed systems theory because their theories speak to the importance of performance outcomes and clearly measurable targets. However, living systems scripts are also visible within their work as both articles speak to the importance of devolved leadership and strong relationships among stakeholders.

By contrast, the educational leadership theory promoted by Sergiovanni (2007) does not support the tenets of the managed systems theory because it speaks to the importance of not only serving the needs of stakeholders in the organizations but also the values and objectives that shape the organization. This leadership theory has found traction by being grounded in the living systems theory. Living systems theory speaks to

the importance of connections and mutual influences. The theory espouses the need for a shared vision within an organization and for all stakeholders to be working towards the same core values (Wheatley, 2006). This alternative theory of organization is making its way into the literature regarding educational leadership due to a shift in the discourse surrounding both educational leadership and organization. According to Wheatley (2006), we can no longer look at organizations as separate entities or just as the sum of individual parts. She contends that organizations are defined by the interactions within their webs of relations. She posits that making an organization stronger requires strengthening relationships and connections and forging a new meaning that is shared by all members.

Komives, Lucas, and McMahon (2007) posit that leadership is in constant flux due to unprecedented change in the way we live our lives. We are routinely faced with political, economic, technological, and ethical change at any given time in our society, and the presence of change has led us to adopt various leadership approaches throughout time. According to Komives et al., there have been times in our history when people believed that great men were chosen by God to rule over the earth. There were times when we valued leaders who possessed certain traits, such as height or self-confidence, or we embraced leaders who understood the importance of varying their leadership approaches based on the situation and the context. There were instances in our history where servant leaders enjoyed the limelight due to their unwavering support for a social or civil rights movement, while at other times leaders have enjoyed our support due to their charismatic and confident public personas. The authors contend that there is no right way to lead. There are times where organizations need to function like machines to

ensure that certain procedures are followed and that some operations are predictable. Like the weather, there will be times when organizational crises are uncontrollable and come without warning. Komives et al. posit that the new research forming around leadership suggests that leaders should be authentic individuals capable of modeling the behaviours and traits that we currently value. They suggest that we now recognize the powerful impact of trust and hope, and the importance of leadership that can understand the attitudes and behaviours of others.

Context of the Study

My desire to explore educational leadership through a conceptual analysis was derived from my interest in exploring the impact of managed and living systems theory on the leadership discourse. My experiences as an educator and my professional development had shown me that the field of education is undergoing significant change. School systems once defined by their hierarchical structure, adherence to strict norms, and pursuit of performance outcomes are now being asked to embrace change due to a strong emphasis on collaboration through the devolution of leadership, creation of shared organizational meaning, and the encouragement to involve all stakeholders. Through my analysis, I hoped to uncover whether the leadership discourse is responding to the shift I saw in my day-to-day work, and to address the tension that is forming as school boards pursue managed outcomes through living systems practices.

Purpose of the Study

The purpose of this exploration was to uncover the influence of managed and living systems theory within the scholarly literature on educational leadership. Specifically, I identified the key scripts or systemic concepts associated with managed

and living systems theory by reviewing the work of Capra (2002), Morgan (1997), Mitchell and Sackney (2009), and Wheatley (2007). I analyzed current educational leadership literature for their espousal of the main systemic scripts of the managed and living systems theories. The conceptual analysis was intended to identify the key systemic anchors and shifts that pertain to both managed and living systems theory within the educational leadership discourse.

Conceptual Framework

My conceptualization of managed and living systems theory is grounded in the work of Capra (2002), Morgan (1997), Mitchell and Sackney (2009), and Wheatley (2007). For the purposes of the study, I drew on their work to identify the key systemic concepts or scripts associated with managed and living systems theory.

Capra (2002) contends that managed systems are an assembly of interlocking parts. They are defined in terms of functional departments that are linked together by clearly defined lines of command and communication. A managed system possesses a clear hierarchy of control where the responsibilities and procedures within the organization are highly specialized and organized through formal structures that are routinely tested. Capra argues that the fast-food industry is an example of the managed system, in which the predictable approach to an organization promotes efficiency and productivity. This mechanistic philosophy, he argues, breeds animosity within the organization due to the highly controlled nature of managed systems; stakeholders become cogs in a machine where their contributions are normalized and orderly.

Capra (2002) posits that living systems are composed of formal structures and informal networks. The formal structures define the rules and regulations that govern the

living system, and informal networks form organically to establish networks of communication that evolve based on the people within the organization. This self-generating system works collaboratively to create a collective identity and common purpose. The distribution of power, organizational policies, strategies, and procedures are articulated through the interactions between communities of people or networks. Capra argues that living systems are ever-changing; they create and re-create themselves in response to meaningful disturbances that challenge the organization to respond creatively to ensure the maintenance of the tangled web of networks and relationships.

Morgan (1997) contends that managed systems are expected to operate with mechanical precision where day-to-day operations are routinized like clockwork. He argues that managed organizations operate like machines whereby they perform a set of predetermined activities and rest at specifically outlined times until the daily tasks are done. The work is repetitive, and employees from one shift are replaced by workers from other shifts day after day, week after week. Morgan posits that modern managed systems theory is based on the classic management models whereby organizations are defined by their hierarchical supervision, detailed rules and regulations that outline employee behaviour and organizational practices and standards, precise lines of communication, division of tasks, and structured departments. He likens these managed system principles to the automotive industry where companies such as Ford Motor Company and General Motors seek to promote reliability, predictability, and efficiency through these forms of mechanical precision.

Morgan (1997) suggests that living systems are like organisms rather than machines because organizations look to establish relationships between the various

groups and populations tied to a living system. He links organizational theory to biology whereby organizational processes function much like biological relationships among cells and organisms. He notes that employees in living systems form relationships between individuals to work more effectively with one another. He presents the notion that people within organizations are motivated by a hierarchy of personal needs whereby they feel valued and recognized. Employees feel important by being given some autonomy, a shared leadership environment, and opportunities for enrichment in their work. Morgan posits that living systems also understand and respond to their environment. Organisms are open to their environment, which creates a relationship that encourages their survival. Living systems create organic interrelated subsystems made up of all stakeholders to position themselves to respond to their environment in an effective and innovative manner.

Mitchell and Sackney (2009) contend that a managed organization is rooted in a clearly defined hierarchy. They argue that managed systems grew out of the 19th and 20th centuries during which factory-based economies relied on centralized decision making and strong standards and regulations. In that environment, workplaces require compliance, predictability, and efficiency, which are achieved through authoritarian hierarchy and routine testing. If the organization is not performing properly, broken parts are identified and repaired or replaced to maintain the expected level of functionality. They argue that managed systems are controlled and standardized to ensure that the task-specific roles produce the prescribed outcomes. Employees are bound by explicit rules that outline their functionality and behaviour.

With respect to living systems theory, Mitchell and Sackney (2009) posit that it is defined by strong interconnections or relationships within and across the organization. They contend that living systems theory is rooted in deep ecology whereby organizations are defined by their interactions and mutual influences. From this perspective, organizations are not composed of independent entities functioning apart from one another, but rather they are a strong collective in which individuals share a common purpose. Living systems are understood by their relationships and interactions because in ecosystems nothing works in isolation. Organizations grow, change, and are sustained by the strong interdependence that exists between groups of people.

Finally, Wheatley (2007) argues that managed systems are defined as command and control models. Managed organizations are power-focused entities that look to their leaders to impose power across the organization to promote change. She contends that managed systems are governed by strict protocols and procedures that paralyze employees and hinder productivity. The centralized decision-making model serves to increase employee disengagement through routine work assignments, which limits problem solving and intelligent work.

Wheatley (2007) posits that the living systems model is a naturally occurring model found in all living things. Living systems develop complex networks and structures to promote productivity in a manner that engages all employees to participate and collaborate to accomplish their work. The self-managed structure of living systems theory encourages the development of lines of communication between networks of co-workers in order to solve challenges and crises as they arise. She contends that living systems generate effective workplaces that are flexible, intelligent, and resilient because

employees can monitor the changing environment, apply their experience and perceptions to the issue, and collaborate and invent solutions. The role of the leader in living systems is to ensure that members have an excellent understanding of their organization through strong communication and involvement by all members. Leaders engage the intelligence of all employees, and they invite them to define the purpose of the organization.

Method of Conceptual Analysis

This exploration of educational leadership within managed and living systems approaches comes in the form of a conceptual analysis. It is important to note at the outset that this research method is not clearly defined in the educational research literature. That is, conceptual analyses lack definable frameworks and strategies that can be implemented to explore a given topic. In relation to this study, it is a research method that is influenced by history and philosophy because I draw on historical and philosophical perceptions of leadership within managed and living systems approaches with the intent of evaluating the role and impact of leadership in education (both private and public education systems). For the historical aspect, this investigation matches the method of conducting research that Neuman (2000) calls “historiography.” Neuman posits that researchers conduct historical research to understand past events, concepts, theories, and/or principles. The research data are collected from previously written documents and analyzed to explain or understand the developmental history of any given phenomenon. With respect to the philosophical aspect, Soltis (1978) argues that philosophical analysis enables an individual to search for the true meaning of a given phenomenon. He contends that educational philosophizing can produce a true analysis of

educational concepts, and can provide a richer, more sophisticated understanding of common ideas regarding education.

These research methods provide an appropriate framework for this conceptual analysis because they are rooted in understanding and analysis. Through my conceptual analysis, I explored the connection between organizational models and authentic leadership in schools. In essence, I argue that educational leadership is partly dependent upon the structure of the organization. My research requires a blend of both historiography and philosophical analysis because I explored historical explanations of educational leadership in the available literature. Historiographies examine pre-existing theories to provide a clearer picture of a given phenomenon, whereas philosophical inquiries enable an author to draw connections between ideas to promote greater understanding of the phenomenon. My research regarding managed and living systems and leadership is typified by my desire to identify a relationship between the theories and their influence on leadership.

Methodological Procedures

To position the analysis of managed and living systems, I selected literature based on the author's expertise regarding systems theory, and through recommendations from my advisors. Capra (2002), Morgan (1997), Mitchell and Sackney (2009), and Wheatley (2007) have written extensively about systems theory and their impact on education. I, therefore, selected their work to position my understanding of managed and living systems to form a comprehensive framework of the main tenets of managed and living systems. The leadership literature under analysis was selected based on convenience and relevancy. I selected journal articles from on-line databases that possessed complete

electronic versions of the author's work. I chose articles that were written in the 21st century to ensure that they are representative of the current leadership discourse. The sources that were subjected to analysis included Bush (2009); Dinham, Anderson, Caldwell, and Weldon (2011); Eacott (2011); Gronn (2003); Hargreaves and Fink (2006); Harris and Day (2003); Niesche and Keddie (2011); Rayner and Gunter (2005); Townsend (2011); and Williams and Johnson (2013).

The work of Capra (2002), Morgan (1997), Mitchell and Sackney (2009), and Wheatley (2007) served to inform my understanding of my managed and living systems and the creation of my theoretical framework. I reviewed their work to identify the main tenets of managed and living systems theory. I created a matrix (see Appendix A) summarizing each author's view of managed and living systems. From this analysis, I created a detailed table (see Appendix B) that itemized the 10 most commonly referenced managed and living systems systemic concepts within the matrix. This table served as the framework for analyzing the leadership literature.

My leadership analysis was accomplished by reviewing 10 articles that explored the topic of educational leadership. I examined the articles for references to the managed and living systems scripts outlined from the framework. I pulled direct quotations from each of the articles that cited the identified markers of managed and living systems theory, and I cross-referenced each quotation with a systemic concept from the framework. This process enabled me to track every reference to the systemic concepts in the leadership literature, and more importantly, to determine the most commonly cited managed and living systems markers. Through this process, I identified the main

systemic shifts and anchors associated with managed and living systems theory vis-à-vis their influence on educational leadership.

Rationale

Through my professional development in the Master of Education program, I uncovered two separate theories for the structure of organizations: managed systems and living systems. I have come to see that managed systems are generally concerned with control and performance outcomes, whereas living systems theory describes an organization as a series of interconnected relationships that share a common purpose or vision. My desire to explore educational leadership vis-à-vis managed and living systems theory is derived from my belief that research can inform practical experiences and help clarify the influence of managed and living system theory on 21st century leadership discourse.

I also felt compelled to investigate educational leadership due to my past experiences working in private and public schools. In the private school, which is a client-based or service-based environment, I tried to come to terms with the type of leadership wherein parental satisfaction or customer satisfaction was the top priority. Less emphasis was placed on learning or on supporting faculty. In the public sector, I noticed that schools are characterized by a hierarchical structure. They are more concerned with identifying the roles of all the stakeholders than with identifying and promoting a shared vision for the organization. Specifically, both private and public schools often fail to value the importance of forging strong connections between all stakeholders and, therefore, fail to promote a set of core values that define their purpose.

Educational leadership is an important educational phenomenon that is well supported by a large volume of literature. However, that large literature base is both complex and contradictory. Educational leaders are bound by their individual strengths and weaknesses, but also by the structure of the organization and the rules and norms associated with the position. This tension generates a wealth of knowledge about educational leadership that can be complementary but also competing. My conceptual study uses the work of Capra (2002), Morgan (1997), Mitchell and Sackney (2009), and Wheatley (2007) to formulate an understanding of managed and living systems to create a framework for exploring the influence of managed and living systems theory on 21st century leadership discourse. I used this research to create a detailed table itemizing the mostly commonly referenced systemic concepts associated with managed and living systems theory. The table acted as a framework for analyzing current leadership articles. I examined the leadership literature for references to managed and living systems markers. These direct quotations were cross-referenced with the framework to identify the most commonly used systemic concepts in the leadership literature. My aim was to uncover the depth of influence of managed and living systems theory on educational leadership, and to highlight the change that is taking place in the leadership discourse.

CHAPTER TWO: RESULTS OF THE STUDY

The purpose of this study was to uncover the influence of managed and living systems theories within the scholarly literature on educational leadership. My analysis followed a conceptual analysis methodology whereby I reviewed 10 journal articles with the intent of uncovering the key systemic concepts that pertain to managed and living systems. With the aid of a matrix, I identified seven conceptual ideas or systemic markers that were present in all 10 articles with regards to their espousal of the main tenets of managed and living systems theory. In this chapter, I present the results of the analysis by presenting the main systemic concepts of managed systems, the main systemic concepts of living systems, and the systemic anchors and shifts found within the articles.

Managed Systems Systemic Concepts

Managed systems are concerned with the ability to increase levels of efficiency while remaining predictable and accountable through a strict hierarchical structure and high-stakes evaluative processes. My analysis of the concepts pertaining to the managed system theory revealed three systemic markers: efficiency, control, and standardization. For the purposes of this study, efficiency was defined by the use of market practices (the attainment of performance outcomes and targets) to measure a school's level of productivity. Control was defined by the use of a formal centralized decision-making model, while standardization was characterized by the creation, evaluation, and reporting of specific performance targets. These concepts are hallmarks of managed systems theory due to their promotion of a highly structured and monitored organization. In this section, I present the results related to each of these markers.

Efficiency

Efficiency was the third most commonly referenced systemic concept derived from my analysis pertaining to a managed system. The educational leadership literature spoke to an education system that is informed by market practices as a means of evaluating its efficiency. Although the marker labelled efficiency was not explicitly stated, the literature suggested that school leaders determine a school's efficiency by reviewing performance outcomes and targets. Efficiency was thereby evaluated by a school's ability to meet or exceed its performance targets in the same manner we would expect a business to increase its profit. Townsend (2011) confirmed this notion by stating:

One global trend that impacts on all the countries in this volume, is the move towards a market orientation for education, with an underlying rationale that if schools compete for students, for resources and for achievements, then this will lead to an increase in the general level of education achievement. (p. 97)

He contended:

We have seen a shift towards a market approach, towards high levels of accountability, towards more responsibility in decision-making and performance at the individual school and towards a better understanding of the importance of leadership for these approaches to be maximised. (p. 99)

However, other scholars note that the market approach to education and the demand for schools to be efficient is harmful to meaningful learning and school leadership. Hargreaves and Fink (2006), for example, argued, "Failure is not an option. If

results do fall short, the answer is to tighten control of teachers and the curriculum, change the leader, or close the school. Fast change. Quick fixes. No limits” (p. 10). They contended, “An insatiable hunger for increasing quarterly returns undermines long-term investments in the training, leadership development, and research infrastructure that produces long-lasting, sustainable growth” (p. 8). However, Hargreaves and Fink argued that there is a place for measuring a school’s efficiency within the education system.

They posited that:

Continuing to collect standardized test data will maintain system-wide measures of effectiveness, but doing this through a sample rather than a census will also reduce the negative instructional impact on schools as well as the overall cost to the system. (p. 254)

My analysis shows that the systemic concept of efficiency is present in the education system due to a global trend that espouses the benefits of an efficient measurement-based school system. Meaningful learning and strong school leadership is replaced by a drive to attain higher performance targets.

Control

Control was the second most commonly referenced systemic concept in educational leadership literature that pertains to managed systems theory. Scholars spoke to the importance placed on performance outcomes, and their effect on leadership and control in school systems. The articles suggested that schools are evaluated based on the attainment of academic targets, and as such, school leadership moves to a centralized control model where decisions are made from a top-down approach. Harris and Day

(2003) pointed out that there are times when control and centralized decision making are needed. They posited:

It was acknowledged that while this distributed approach to leadership was generally desirable, at certain times in a school's development it was neither feasible nor appropriate. All the heads had adopted autocratic and 'top-down' leadership approaches at critical times in their school's development. (p. 93)

Hargreaves and Fink (2006) contended that degrees of control are necessary for meaningful learning. They suggested that maintaining control over performance results, engagement indicators, and learning styles are beneficial for schools because it ensures that the focus is directed towards improving the learning environment. They argued that:

Many kinds of data matter – test scores and achievement results; attendance and suspension figures; data on student satisfaction, engagement, and learning styles; data on teacher recruitment, retention, motivation, and morale; as well as qualitative samples of student work. What is important is that such data are used not only for marketing appearances or for appeasement of public opinion but also to ensure preservation and improvement of the overall learning environment. (p. 254)

Gronn (2003) spoke to the level of control within leadership itself, and he argued that the pre-existing structures of control are strategically placed to ensure that school leaders maintain the desired practices within the school. He contended:

Designs for leaders intrude significantly into the domain of school leaders' work because they operate through highly structured and externally imposed regimes of assessment and accreditation, the intention of which is to license or authorize the

initial appointments of education professionals and to guarantee their continuing engagement in professional practice in conformity with sets of desired norms. (p. 70)

Harris and Day confirmed the existence of a culture that is concerned with control as they argued that:

Yet the orthodoxy of school leadership that promotes the “cult of the individual” stubbornly prevails. Fuelled by a view of organizational change that is inherently rational, stable and predictable, it persists because it offers the seductive possibility of prescribing neatly packaged leadership solutions. It also persists because it reinforces the status quo of the leadership [sic]-follower relationship, creating dependency cultures and an ownership divide. It is easier, far easier, to point the finger of accountability in the direction of one person than to acknowledge that leadership is collective, shared and distributed throughout the organization. (p. 96)

However, my analysis revealed some criticisms of control within the education system. Rayner and Gunter (2005), for example, argued, “School leadership as transformational or performance organizational leadership is disconnected from working lives and so is hollow. It denies agency in ways that recognize bottom-up approaches through dispersed and democratic leadership” (p. 153). Eacott (2011) echoed these sentiments, and argued that:

Despite the rhetoric of participation and empowerment at the school level, the Trojan horse from which strategic planning is sold to schools and the wider community, the state through systemic authorities continues to set the targets

which trickle down, or in some cases ‘are forced down’, to the school level and in doing so defines what is an ‘effective school’. That is, through legitimising of a particular model – defining what strategy in schools is and the normalizing effects of what makes a good school – by defining the criteria for evaluation – the dominant group has shaped the ontological reality which it is focused on. (p. 37)

The literature pertaining to managed systems suggests that control is a systemic concept that is used to bring accountability to the education system. My analysis indicates that a top-down system prevails in the education system because it perpetuates and promotes the normalizing process regarding performance targets. In the end, control is exercised in the school system because it promotes predictability and reliability over the system.

Standardization

Finally, standardization was the most commonly referenced marker pertaining to managed systems in my analysis of the systemic concepts in educational leadership literature. The literature spoke to the need to strive for or to maintain certain standards within education as a means of evaluating schools in terms of their targets, performance, and decision-making capacity. Some of the authors referenced standardization as a means to bring about more accountability to schools, their leaders, and educators. By setting targets and collecting data, schools were seen as able to evaluate their performance in a manner that is transparent, measurable, and observable. Townsend (2011) addressed the concept of standardization in relation to school level decision making and accountability by stating:

School leaders now need to be able to oversee (if not do themselves) the identification and collection of relevant data associated with a wide range of

student achievements and environmental conditions, to be able to analyse and report on this data in a meaningful way that identifies successes, trends over time, and things that need to be improved and then make decisions about how to allocate resources, staffing, material and financial, in ways that will maximise the school's performance in the future. (p. 97)

In some instances, the systemic concept of standardization was used as a means of evaluating the performance of school leaders with respect to school targets. Eacott (2011), for example, addressed the link between measurable information regarding standardized data and performance targets for school leaders:

As schools and consequently principals are being evaluated on the meeting of targets and value added data, there is a persuasive rationale for school leaders to structure their leadership and management around adding value to school performance data. Simply put, if principal performance is being evaluated on the basis of quantifiable data from standardised tests (currently literacy and numeracy only) and the system is delivering a linear rational model of decision-making and goal setting, the policy context is shaping the way principals conceptualise their work. (p. 38)

The analysis also revealed that some scholars saw a negative impact on the education system from the emphasis on quantifiable data and measurable outcomes. Hargreaves and Fink (2006) argued that standardization has had a detrimental effect on schools and educators because it sacrifices real learning and engagement. They claimed, "Our consuming obsession with reaching higher and higher standards in literacy and mathematics within shorter and shorter time lines is exhausting our teachers and leaders"

(p. 2). They argued that “short-term targets seem expedient to politicians and appealing to some parts of the public, but they undermine almost every goal of sustainable improvement” (p. 253). The authors contended that the focus on standardized testing jeopardized meaningful learning: “imposed, short-term targets turn the deserved focus on deep standards into a damaging fixation with standardized testing” (p. 254). Furthermore, they posited, “all-consuming standardized education reforms leaves plagues of exhausted educators and joyless learning in its wake” (p. 4). They argued that the target-driven approach to education is draining the creativity and passion from the teaching profession. The authors posited that “they [targets] short-circuit teacher learning and replace it with paint-by-numbers training” (p. 253). Moreover,

short-term targets force us to think and work in the present and future tense. Their creative destruction makes it hard for us to take the time to acknowledge, learn from, and recombine elements from the past, then move beyond them. (p. 254)

The authors described this destruction in detail as they took aim at the negative impact on learning communities by stating that “acceleration and standardization of imposed change and its targets reduce teachers’ time for working together and for learning from one another slowly and sustainably, as real learning communities” (p. 254).

Gronn (2003) supported much of what has been said about standardization, and he offered a specific reference to how school leaders are burdened by a standards-based system that invariably hinders their engagement. He offered this insight:

Standards-based designs for school leaders, with their extensive bullet-point lists of performance norms, are likely to exacerbate the experience of an intensified work order and consolidate teachers’ leadership disengagement. This is because,

by ‘raising the bar’ of heroic performance expectations even higher, standards provide yet another strong disincentive for teachers to aspire to leadership as a career goal. (p. 71)

Lastly, Hargreaves and Fink (2006) argued that “despite or perhaps even because of its apparent initial success, imposed short-term, target-driven standardization is ultimately unsustainable” (p. 14). From this analysis of the concept of standardization, it is evident that the managed system value of standardized testing and quantifiable data still exists and has created a tension within the education system.

Living Systems Systemic Concepts

Living systems are concerned with their ability to promote interconnected networks of people that collectively strive to meet their organizational purpose and goals while adapting to their changing environment. My analysis of the systemic concepts pertaining to living systems theory revealed the presence of four systemic markers: collaboration, shared meaning, change, and interconnection. For the purposes of this study, collaboration was defined by an organization’s encouragement of teamwork and process of building capacity within the organization. Shared meaning was defined as a process by which all members influence the purpose and direction of an organization, while change was characterized by an organization’s ability and willingness to respond to its environment. Lastly, interconnection was defined as the networks and relationships that exist and are encouraged and maintained within the organization. These concepts are cornerstones of living systems theory because they promote interaction and communication between all members within the organization. In this section, I present

the results related to each of these markers. My analysis will begin with the living systems concept of collaboration.

Collaboration

This marker of living systems theory was the fourth most common concept that emerged from the literature. The educational leadership literature spoke to a shift away from the command and control model towards a working environment where all stakeholders contribute to the direction of the organization. A living system strives to build capacity within the organization by sharing the leadership responsibilities among all parties to ensure that the school (or organization) accomplishes its goal(s). Bush (2009), for example, contended that organizations must broaden their leadership base and give educators time and capacity to share what they have learned and done in their schools. He argued, “The critical leadership skill in the establishment of a broader leadership base is the way in which the school leader builds capacity for leadership in other people” (p. 98). He posited:

One other element that seems to be coming into focus is the need for leaders to share what they know and what they can do, not only with the teachers within their schools, but also outside of their schools with other leaders from different schools, different states, different countries. Instead of lowering our sights to what is happening in my school, we need to raise them to see what we might learn from (and what we might offer to) colleagues from other schools, other towns, other places. (p. 101)

Harris and Day (2003) argued that educators must be given time to collaborate with one another to strengthen teaching practices and build new approaches to professional development. They observed that:

It was considered important by the heads that teachers were given the time and opportunity to collaborate. Opportunities and new approaches to professional development such as mentoring, coaching and peer review were put in place. Where teaching practices were poor, improvements were achieved through investing in forms of professional development and collaboration that raised teachers' knowledge base and skill. (p. 93)

They suggested that collaboration not only promoted shared leadership, but also a creative and flexible work environment where people feel valued. They contended:

Successful heads had adopted a shared or 'distributed' approach to leadership which was demonstrated in several important ways. First, they gave central attention to involving teachers in decision-making and setting priorities. Secondly, they kept issues of teaching and learning at the forefront of innovation and change within the school and in doing so provided opportunities for teachers to take an active role in development work. Thirdly, they created 'resonance' by consistently expressing the norms and values of sharing and collaboration that defined the school's vision. Finally, and most importantly, they placed an emphasis upon people over systems and created a climate of enthusiasm, flexibility and social trust where people felt valued and respected. (p. 95)

Finally, Hargreaves and Fink (2006) argued that collaboration is a prerequisite for the creation of school targets. They suggested that positive leadership engages all potential

stakeholders when creating school targets to create foster meaningful learning. They contended, “Sustainable school leadership for learning is not opposed to targets. It encourages and insists on targets developed together, as a shared and continuing responsibility, between teacher and student and among the teachers and parents in the school’s community” (p. 266). Collaboration is a vital component of living system theory because it engages stakeholders in significant ways that foster community and build capacity. My analysis indicated that the literature sees collaboration as strengthening a school community by sharing leadership and decision-making responsibilities across the school to bring about meaningful learning.

Shared Meaning

Shared meaning was the third most commonly referenced marker of living systems theory in the analysis. The literature suggested that shared meaning brings direction and vision to an organization or school by outlining specific goals and purpose. What set this living system concept apart from its managed system counterpart is that a shared meaning was seen as being developed from input from all stakeholders tied to the organization (or school). Shared meaning, therefore, brought direction and defined the purpose of the organization in a significant manner because the stakeholders were tied to the overall vision of the school. The educational leadership literature also spoke to the dangers associated with the lack of a shared purpose. In managed systems, the purpose of the organization is overruled by the need to obtain short-term targets. Simply put, Hargreaves and Fink (2006) argued that we need to “put purpose before profit” (p. 5). They contended, “Sustainable school leadership begins with the moral purpose of the product integrity. It puts learning first, before achievement or testing” (p. 266). Bush

(2009) echoed these sentiments: “In many organizations staff do not share a sense of purpose above and beyond the short-term unit performance, because most organisations are over-managed and under-led. Strategic intent provides clarity about ends, but is unspecific about means” (p. 99). Townsend (2011) argued that strategic intent outlines the direction or purpose of an organization that fosters creativity. He posited, “Strategic intent offers staff an enticing spectacle of a new destination. It is broad enough to leave room for considerable experimentation in how to reach the destination. It contains the ‘where’ but not the ‘how’, so creativity is unbridled” (p. 100). Therefore, according to the educational leadership literature, shared meaning must come from all stakeholders connected to the organization. Williams and Johnson (2013) contended, “The ideal vision is authored by all members of an organization. It represents important personal values, and speaks to the heart” (p. 351). They went on to say, “The process of the creation of a vision for a school is as important as the product, because ideally every stakeholder should be involved” (p. 351). They concluded by saying:

A characteristic of strategic leadership is that the vision is based upon what the school needs to do best to respond to future needs for its stakeholders. Because the future is uncertain, the vision at times needs to be adapted or completely altered to meet the needs of a changing world. (p. 351)

Shared meaning is an important marker of living systems theory because it is defined by the people tied to the organization. The articulation of this meaning is derived from dialogue between all stakeholders to determine the direction and purpose of the organization. My analysis of the educational leadership literature shows that shared

meaning encourages creativity because it empowers the people within the organization to carry out their purpose in whatever way they see fit.

Change

The second most commonly referenced systemic marker of living systems theory was change. This systemic concept refers to an organization's ability to respond to its environment. Living systems theory suggests that living organizations are ever-changing because they adapt to the stimuli they receive from their surroundings, much like an organism. The educational leadership literature suggested that school leaders interact with elements in the environment on a constant basis because it allows them to predict future needs, trends, and demands of the organization. Williams and Johnson (2013), for example, contended:

Educational operations have to change in response to changing times. Responses to change need to be determined by planning processes that anticipate future trends. Plans that respond to trends have to be built around an articulated vision that is developed, fostered, and embraced by the stakeholders in the school. (p. 355)

A living system's approach to change distinguishes it from a managed system because employees are empowered to make decisions that respond appropriately to change in the environment. Hargreaves and Fink (2006) contended, "The most resilient schools don't just react to external and unwanted pressures; they engage assertively with their environment" (p. 257). Harris and Day (2003) supported the need for decentralized leadership to foster a culture that promotes building the capacity of others. They posited,

the emphasis is shifted from creating and managing structures as a means of control to a view of structure as the vehicle for building the learning cultures and through these the learning and achievement capacities of others in the organization. (p. 96)

They argued, “If schools are to become better at providing learning for students, then they must also become better at providing opportunities for teachers to innovate, develop and learn together” (p. 96). Gronn (2003) supported the need for school leaders to be adaptive in order to drive change within the organization. He posited:

School leaders need to be willing to withstand acute personal pressures, display a capacity for emotional containment and acquire a sense of how events coalesce, fuse and flow. They are also likely to find themselves constantly repositioning and aligning themselves and their schools in response to market pressures and movements, and working in increasingly multicultural work environments requiring cultural sensitivity and understanding of cultural norms. (p. 70)

Townsend (2011) argued that leaders have a wide spectrum of responsibilities that drive change and development within the school. He contended:

No longer can they [leaders] simply manage the implementation of decisions made by others, they now have to make a range of decisions themselves, decisions about marketing, about collaboration, about the image the school wishes to project about itself, and about the development of people within the school, all of which may impact on the viability of their school. (p. 97)

This shift in leadership was commonly referenced in the educational leadership literature. Scholars contended that school leadership must shed outdated leadership models that

cling to a centralized leadership structure. They posited that leadership needs to be shared among the people within the organization. Harris and Day argued:

Challenging the orthodoxy of school leadership requires an inevitable and radical shift in our understanding of school development and change. If schools are to be true learning communities this cannot be achieved by clinging to outdated models of leadership. To cope with the unprecedented rate of change in education requires not only challenging the current orthodoxy of school leadership and relinquishing models suited to a previous age but also establishing new models of leadership that locate power with the many rather than the few. (p. 97)

Change is an important marker of living systems because it enables an organization to anticipate future trends and adapt to the environment. Living systems engage the elements within their surroundings to keep pace with change and fulfil their purpose. My analysis indicated that change is signalling a paradigm shift regarding leadership because it brings a decentralized approach to power whereby all the stakeholders within the organization share the leadership role.

Interconnection

Interconnection was the final and most commonly referenced systemic concept pertaining to living system theory. This marker speaks to the interconnected networks and relationships that define a living system. The educational leadership literature portrayed a system characterized by formal and informal structures that were created to carry out its purpose. Scholars contended that systems were structurally created to promote involvement, interaction, and communication among the communities of people within the organization. This was achieved by allowing structures to form organically

through the interactions of all the stakeholders. Formally, the systems possessed leaders who helped to steer and define the purpose of the organization, but informally, all the diverse members within the organization carried out this process. Hargreaves and Fink (2006), for example, argued, “Sustainable leadership reaches out to communities. It invites direct engagement; two-way, jargon-free communication; and meaningful participation by students, parents, and communities in the life of the school” (p. 262). They also contended, “Sustainable leadership fosters and learns from diversity in teaching and learning and moves things forward by creating cohesion and networking among richly varied components” (p. 19). According to Harris and Day (2003), leaders recognize the importance of relationships and networks in pursuing a shared purpose. They argued that the model of the lone leader does not build community and ignores the importance of involving others in school leadership. They contended:

Successful leaders are those who understand relationships and recognize the importance of reciprocal learning processes that lead to shared purposes.

Essentially, they are more connected to people and networks than the ‘traditional’ forms of leadership – ‘the lone chief atop a pyramidal structure’ – would suggest. (p.96)

More specifically, they observed:

Successful heads had adopted a shared or ‘distributed’ approach to leadership which was demonstrated in several important ways. First, they gave central attention to involving teachers in decision-making and setting priorities.

Secondly, they kept issues of teaching and learning at the forefront of innovation and change within the school and in doing so provided opportunities for teachers

to take an active role in development work. Thirdly, they created ‘resonance’ by consistently expressing the norms and values of sharing and collaboration that defined the school’s vision. Finally, and most importantly, they placed emphasis upon people over systems and created a climate of enthusiasm, flexibility, and social trust where people felt valued and respected. (p. 95)

The educational leadership literature supported the marker of interconnection by outlining the importance of shared leadership especially when the demand of the organization intensifies. Gronn (2003) suggested that principals have had to find creative ways to accomplish their work and to address the new demands of schools. He contended,

Colleagues possessing different attributes may find themselves ‘thrown together’ inadvertently to attack common problems. These experiences provide opportunities for brief bursts of synergy which may come to nothing but which, because the individuals discover previously untapped work capacities, may stimulate further collaboration. The effect of colleagues’ co-ordinated effort is to facilitate conjoint agency through their cognitively aligned plans and reciprocally experienced influence patterns. (p. 63)

More specifically, he argued:

The effect of delegation is to create a range of formal and informal working arrangements which may or may not entail democratic power-sharing and opportunities for dispersed or shared leadership, and which are intended at least partly to compensate for role intensification. (p. 68)

Hargreaves and Fink posited that organizations and leadership should be based on ecological and human diversity. Interconnection informs the purpose of the organization, and the school leaders engage other stakeholders in diverse ways to carry the vision of the organization. They stressed the importance of creating vision or purpose through cohesion rather than mechanical alignment. More specifically, they contended:

Sustainability must move from mechanical strategies of excessive alignment, command-and-control administration, and paint-by-numbers instruction to a systemic strategy that can create improvements through diversity in ways that spread and last and that can attract and retain the highest-calibre leaders, who will be responsible for it. (p. 271)

As the most commonly referenced marker of living systems theory, interconnection speaks to the main characteristic that defines a living system. The analyzed articles overwhelmingly pointed to the importance of the involvement, interaction, and communication between all stakeholders within an organization. Living systems aim to build cohesion and a common purpose through their formal and informal structures to carry out the objectives of the organization. My analysis indicated that the literature asks leaders to understand the importance of building relationships and promoting interconnections because it builds community and capacity within the organization and it aligns everyone towards the common organizational vision.

Systemic Anchors and Shifts

My review of managed and living systems theory uncovered a struggle within the literature on educational leadership. In numerous instances, I discovered the pervasiveness of some of the hallmarks of managed systems theory, and yet my analysis

revealed that living systems theory is flooding the leadership literature. I conclude my analysis by identifying the main systemic anchors that pertain to managed systems theory within the leadership discourse. That review will transition into an identification of the systemic shifts rippling through the leadership literature, and will lead into the tensions that exist in the field of educational leadership due to a clash between managed outcomes and living systems processes.

My analysis of the education leadership literature revealed a clear espousal of managed systems theory, more specifically, a promotion of standardization and control grounded in performance targets and measurable data. Although the general influence of managed systems tenets vis-à-vis educational policy is waning, the support for a standardized system through measured outcomes is well-anchored within the leadership discourse. Hargreaves and Fink (2006) outlined the importance of standardized targets because measurable outcomes promote predictability and reliability over the system. These targets or goals are driven by data results and are used to inform educational practices within the education system. These outcomes determine future targets and influence new teaching practices to address and meet the performance goals. Hargreaves and Fink argued that measured outcomes are also very attractive to policy makers because they create a controlled and normalized system that promotes a common evaluative process. Administrators and educators are held accountable to the performance goals and results whereby the performance data are used to evaluate a school's effectiveness. School leadership is thereby measured alongside the performance outcomes whereby school leaders are evaluated on their school's ability to meet their targets.

Control is another managed system concept that is well-anchored in educational leadership discourse. Although the literature surrounding leadership is shifting towards more collaborative models, the emphasis on performance outcomes within the education system is reinforcing a system that is highly controlled and monitored. Gronn (2003) argued that school leaders “operate through a highly structured and externally imposed regime of assessment and accreditation” (p. 70). Administrators and educators alike receive directives surrounding performance outcomes, which, in turn, bolster the line between the leaders and led.

My analysis of the 21st century educational leadership literature has highlighted some key systemic shifts rippling through the leadership discourse. It is apparent that living systems theory is transforming leadership practices in the education system. Hargreaves and Fink (2006), Harris and Day (2003), Gronn (2003), and Townsend (2011) spoke to a shift in the conceptualization of leadership structure, more specifically in the way the schools articulate their purpose. My analysis of these authors reveals that the living system concepts of shared common meaning and interconnections are transforming the leadership discourse. They suggested that a shared common meaning within an organization promotes collaboration, interaction, and meaningful learning. Unlike the fractured and compartmentalized structure of managed systems, an organization or school defined by a shared meaning builds capacity in all its members through increased engagement and relationships. All members have a vested interest in creating sustainable learning communities because there is balance and equality in the management of its purpose and organizational vision. The articles suggest that a shift is taking place with regards to leadership because collaborative and meaningful

relationships have been encouraged through greater involvement and participation in the vision of the organization. This shared meaning creates meaningful learning because interconnected networks of people within the organization support and endorse it.

Interconnection is another living systems concept that is shifting the leadership landscape in the 21st century. Hargreaves and Fink (2006), Harris and Day (2003), Gronn (2003), and Townsend (2011) contend that organizations are becoming more decentralized and distributive with regards to their leadership roles. The command and control model of administration is shifting towards a more sustainable leadership structure that creates networks of shared leadership practices within the organization. This decentralized approach to leadership fosters collaboration and places organizational relationships and interactions at the forefront. Hierarchical structures are replaced with interconnected networks of people working towards a shared organizational vision.

Chapter Summary

My analysis of educational leadership literature reveals a clear espousal of the tenets of managed systems theory, more specifically, the pervasiveness of the managed system markers of efficiency, control, and standardization. These markers remain as the last vestiges of managed systems theory within the ever-changing leadership landscape. The literature speaks to the importance of performance targets and measured outcomes as a means of evaluating schools and promoting meaningful learning. My analysis also reveals a change in discourse within the realm of educational leadership, more specifically, how living systems markers, such as collaboration, shared-meaning, change, and interconnections, are informing the leadership literature. Administrators and educators engage in shared leadership practices intended to promote and carry out their

organizational purpose. These living systems build capacity through interconnections and shared organizational meanings in an attempt to build sustainable learning communities.

However, many contradictions persist within the leadership discourse. The last vestiges of the managed systems theory are creating tension with the distributive leadership practices favoured under a living systems ideology. Our fixation with performance targets and measurable outcomes undoubtedly bolsters centralized leadership models that favour a more command and control approach. Instead of building capacity within the organization through interconnections and a shared meaning, administrators fall back into their hierarchical roles that preoccupy them with managing standards and performance targets. Clearly, educational leadership is experiencing some transitional tensions. Living systems theory builds capacity within schools to promote meaningful learning, while our obsession with performance targets and measurable outcomes places the focus on testing instead of learning. This tension, the conflict between managed outcomes and living systems processes, is limiting the effectiveness of administrators and educators alike by confounding the purpose of education. Policy makers and politicians are, therefore, charged with the task of reconciling the tension between the management of performance outcomes and meaningful learning.

CHAPTER THREE: DISCUSSION AND IMPLICATIONS OF THE STUDY

The purpose of this chapter is to discuss the findings from this investigation into the impact of managed and living systems theory on leadership theory and practices. I begin with a summary of the study, and move into a review of my findings from the analysis of the impact of managed and living systems theory on educational leadership literature. Next, I address the implications of the study for leadership practices, preparation and policy development, and leadership theory. Finally, I articulate the implications for future research by suggesting new avenues for further study.

Summary of the Study

The purpose of this study was to explore the impact of managed and living systems theory on leadership literature in the 21st century. More specifically, I aimed to uncover the influence of managed and living systems theory within the leadership discourse through a conceptual analysis. My study began with the identification of the main tenets of the managed and living systems ideologies. The goal of the review was to create a detailed summary of managed and living systems theory. I reviewed the work of Capra (2002), Morgan (1997), Mitchell and Sackney (2009) and Wheatley (2007) to articulate the main systemic concepts associated with the managed and living systems theory. From this research, I created a detailed table that itemized the 10 mostly commonly referenced characteristics associated with managed and living systems theory. The table provided me with a framework for analyzing current leadership literature.

This analysis was accomplished by reviewing 10 recent articles that explored the topic of educational leadership. For the purposes of this study, the articles were selected

based on convenience. I examined the articles for references to managed and living systems markers with the aid of the framework. I drew direct quotations from each author that made reference to the managed or living systems concepts identified in the table, and I cross-referenced every quotation to a managed and living systems marker from the framework. This process enabled me to track references to managed and living systems concepts in the literature and to determine the most commonly referenced systemic concepts. From this analysis I was able to determine that the managed systems markers of efficiency, control, and standardization were the most commonly referenced systemic concepts, while the markers of collaboration, shared meaning, change, and interconnections emerged as the most commonly identified markers pertaining to living systems theory.

Discussion

My conceptual analysis of managed and living systems theory vis-à-vis educational leadership has led me to four central findings:

1. The leadership discourse is critical of the influence of managed systems theory over education.
2. The managed system marker of control is still supported in leadership literature.
3. Leadership literature is supportive and actively promoting living systems systemic concepts.
4. The living systems systemic concept of interconnections is triggering a shift in the leadership discourse.

My first central finding of managed and living systems theory within the leadership discourse revealed a significant amount of criticism of managed systems concepts regarding their influence on leadership and education. This is a significant finding for two reasons: first, my analysis revealed minimal references to managed systems systemic concepts overall, and second, I found overwhelming support for living systems systemic concepts. This result seems to be pointing to a paradigm shift within the realm of educational leadership. The leadership discourse is critical of managed systems concepts because they shift the focus away from profound and comprehensive learning towards measurable learning. The dominant criticism evident in the literature was of a global trend in education that seeks to use performance targets and standards as a means of evaluating the effectiveness of schools. The focus on efficiency and performance outcomes was seen to be staining the education system by jeopardizing meaningful learning and teacher satisfaction, and to create disincentives for leadership. Hargreaves and Fink (2006) argued that an obsession with improving standards and targets undermines long-term investments in leadership and training that promote meaningful learning and sustainable growth. They also posited that this fixation with standardized testing and short-term performance targets obstruct our focus on deep standards. The authors contended that short-term targets might seem appealing to politicians and to the public but that it is at the expense of deep and broad learning. They argued, “Short-term targets push most schools to focus on testing before learning; they put a priority only on learning that is easily measured” (p. 253).

A second criticism was that the current focus on efficiency and performance diminishes teacher satisfaction and creates disincentives for leadership by shifting the

focus towards standardized work environments designed to maximize test results and performance outcomes. Dinham et al. (2011) argued,

The pressure on educational leaders to enhance the quality of teaching in their schools and thereby increase student achievement – both in terms of excellence and equity – is increasing under the influence of national and international standardized testing and associated national priorities. (p. 150)

Hargreaves and Fink (2006) posited that our fixation with increasing our standards in mathematics and literacy in short timelines is taxing our educators and school administrators. They contended that this obsession devalues teacher learning and replaces it target-oriented training. The criticism is that teachers find not only that comprehensive learning is being sacrificed in the pursuit of higher test scores, but also that they are receiving fewer opportunities to engage with other educators in meaningful learning communities. Hargreaves and Fink contended, “Acceleration and standardization of imposed change and its targets reduces teachers’ time for working together and for learning from one another slowly and sustainably, as real learning communities” (p.254). Gronn (2003) echoed these sentiments when he argued that target-driven education with extensive performance outcomes is likely to intensify leadership disengagement because the focus on standards and performance expectations act as a strong disincentive for educators. The results confirm that the leadership literature is clearly critical of managed systems systemic concepts within the realm of education. Meaningful learning is being sacrificed to pursue performance outcomes and standardized targets. Measurable learning has become the priority, and our obsession with performance targets has shifted the focus away from profound and comprehensive learning.

In spite of this criticism, however, the analysis of managed systems in the leadership discourse demonstrated that some references to managed systems concepts were favourable. More specifically, the second central finding was that the managed systems marker of control received positive attention within the literature. This finding is significant because the leadership literature, generally speaking, did not support the use of managed systems systemic concepts within education. Control appears to be the only remaining marker present within the current literature base from the managed systems era.

Some of the scholars spoke to the importance of levels of control with regards to meaningful learning. Hargreaves and Fink (2006) argued that maintaining control over performance data, engagement indicators, and learning styles are important measures of control because these statistics and markers impact the learning environment. These indicators direct the focus towards the improvement of the entire school community. They contended that many kinds of data matter such as: information regarding achievement and testing, results on student satisfaction, employee morale, retention and motivation, and attendance and disciplinary figures. These kinds of data can be utilized to sustain and make improvements to the overall learning environment.

The literature also spoke of control as a tool to promote accountability and transparency within the education system due to academic targets and performance standards. Several authors suggested that school leaders sometimes favour more centralized control models due to the evaluative nature of education. Schools are evaluated based on the attainment of performance targets, and, consequently, school leaders choose more hierarchical leadership models that enable them to control the

academic setting through top-down approaches. Harris and Day (2003) pointed out that there are times when control and centralized decision making are needed. They posited that although a devolved leadership strategy is generally preferred, there are times in a school's evolution that it is neither appropriate nor viable. The authors contended that there are critical times when school leaders need to centralize their decision making. The analysis revealed that control is also exerted over school leaders themselves as a means of ensuring that they maintain the desired practices within the system. Gronn (2003) contended that leadership development programs are designed to perpetuate sets of desired norms because school leaders operate in a highly structured system.

These results confirm that control is a managed systems systemic concept that is still supported in the leadership discourse. However, it is important to note that the positive references to control were limited. Control was seen as acceptable if it enabled school leaders to perpetuate desired norms and to promote meaningful learning. Leaders monitor data that improve the learning environment and promote a positive learning community. Moreover, there are times in a school's development that school leaders must turn to top-down leadership models.

The third central finding was that the leadership literature is actively supporting and promoting living systems systemic concepts. This is a significant finding because it signals a shift in the leadership discourse away from managed systems concepts towards their living systems counterparts. My analysis confirms this finding through the overwhelming support found in the literature. Living systems concepts constituted the majority of the references within my research matrix, and each individual systemic concept drawn from living systems was widely acknowledged within the literature. The

leadership discourse described the living systems markers by their ability to bind the schools and organizations together through collaboration and shared meaning. The authors spoke of living systems concepts by their ability to sustain the working environment and the community that supports it through shared leadership and positive relationships. Harris and Day (2003) argued that successful leaders adopt a devolved approach to leadership to build community. They contended that school leaders can accomplish this by: (a) involving educators in setting priorities, and in the decision-making; (b) ensuring that the learning and teaching are drivers of change and innovation within the school; (c) promoting a shared vision of collaboration; (d) emphasizing the importance relationships and people ahead of systems; and (e) creating a climate of trust, flexibility, and enthusiasm where stakeholders feel respected and valued. The notion of positive relationships and shared leadership was also noted by Niesche and Keddie (2011) as they contended,

Rather than normalise the notion of the principal as the only person to exercise leadership in the school, we acknowledge the excellent work that a number of teachers and administrative staff undertake towards the ethos of equity and social justice that permeates the climate at Rosewood. (p. 67)

Another element of living systems concepts that the literature supported was their ability to engage all stakeholders in the school community through shared meaning.

Williams and Johnson (2013) argued:

A characteristic of strategic leadership is that the vision is based on upon what the school needs to do best to respond to future needs for its stakeholders. Because the future is uncertain, the vision at times needs to be adapted or completely

altered to meet the needs of a changing world. When a vision needs to be formed or altered, the experts need to do this work. The experts in a school are those whose work determines the most important outcome, which is student learning. These people should be involved in deciding where the school needs to go to improve the quality of service provided to the students so that they learn and be better prepared for successful futures. (p. 351)

Gronn (2003) also spoke to a high level of participation that is reflective of living systems theory. He posited,

In return for greater participation in decisions about work targets and operations, higher productivity is demanded of organization members, for which they are expected to give more time, to give more energy, to identify strongly with the goals and needs of their organization, and to learn how to collaborate effectively with coworkers. (p. 67)

My results confirm that the living systems concepts being supported and promoted in the leadership literature are those that place people at the forefront within an organization, and, therefore, build capacity through collaboration, shared meaning and leadership, and positive working relationships. Under living systems approaches, stakeholders become more engaged within the organization and actively lead the organization both in its present and future endeavours.

My final central finding was that the awareness of interconnections is triggering a shift in the leadership discourse. This is a significant finding because the concept of interconnections is the one that is seen as significantly influencing change processes. My analysis revealed that interconnections were referenced more than any other living

systems concept. Moreover, the literature contends that interconnections provide the foundation for all over living systems concepts to develop. Hargreaves and Fink (2003) argued, “The first principle of sustainable leadership is leadership for learning and leadership for caring for and among others” (p. 18). They also posited, “Sustainable leadership fosters and learns from diversity in teaching and learning and moves things forward by creating cohesion and networking among its richly varied components” (p. 19). The literature pointed to a shift in thinking, where the stakeholders rather than the end product define the organization. Dinham et al. (2011) argued:

A key theme that took shape in the early stages was that a ‘new enterprise logic’ was driving efforts to transform school. The concept was coined by Zuboff and Maxmin (2004) who proposed that the way an organization should work should be ‘turned on its head’ so that the starting point of the organizational form and function is the needs and aspirations of clients, customers and consumers or, in the case of schools, students and parents. This contrasts with the traditional approach where these actors are seen as the end points in a delivery chain, and operations from start to finish are figured accordingly. (p. 143)

They also contended, “The success of a school depends on its capacity to join networks or federations to share knowledge, address problems and pool resources” (p.143). Other authors, such as Bush (2009), built on this theme when he stated, “leadership is the potential outcome of interactions between groups of people rather than specific traits or skills of a single person” (p. 98). He also argued:

If teachers see themselves as leaders then the gap between the teacher and the school leader is automatically narrowed and encouraging things such as teacher

leadership and involvement may become easier. Having teachers pursue other forms of leadership, from leadership in the classroom to leadership in the department, or the school, may also be outcome of this strategy. (p. 101)

The literature spoke of the decentralization of leadership, and the investment in a leadership model that builds capacity in others through strong interconnections with all stakeholders. Harris and Day (2003) contended:

Their leadership was underpinned by a set of core values that included the modelling and promotion of respect (for individuals), fairness and equality, caring for the well-being, and the development of students and staff. Their commitment to the development of their staff was reflected in their leadership action insofar that they decentralized and devolved leadership responsibilities to others. (p. 92)

They also argued, “The overarching message about successful leadership from this study is one of distributing leadership and building the community of the school through developing and involving others” (p. 96). Gronn (2003) echoed these sentiments when he posited, “In organizations, leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group” (p. 62). This message continued throughout the literature; Rayner and Gunter (2005) stated:

Distributed practice is opening up the possibilities for activism in ways that show the workforce going beyond being merely active through participating in meetings. By including a wider range of the workforce in the difficulties faced in conceptualizing as well as delivering education then leadership becomes something more than what role incumbents do in a school as an efficient and

effective organization. Instead practice is opened up to the challenge and insights of others in ways that are social and political. (p. 160)

My finding of the awareness of interconnections in the leadership discourse is a significant finding because it signals a transformation of how we view organizations and, more specifically, how we define them. The traditional model of evaluating organizations from their output has lost support as scholars contend that organizations should be defined by their networks of stakeholders. The leadership discourse has argued that educational leadership is best conceived when all members of the organization share in decentralized leadership responsibilities and articulate the direction of the organization together.

Implications

The findings from this study contend that living systems systemic concepts are informing the leadership discourse. They suggest that school leaders should turn to living systems theory for guidance in developing leadership models in the 21st century. This section will explore the impact of this shift in thinking by outlining how this change might influence leadership practices and preparation. It will also address how the theories of school leadership could be modified, and how future research should proceed. In doing so, I will outline the implications for practice, theory, and implications for future research.

Implications for Practice

The findings from this study suggest that living systems theory should inform leadership practices in the 21st century. The leadership discourse is clear in its espousal of forming interconnections within an organization. The challenge for future leaders is to

acknowledge the importance of involving all stakeholders, and to ensure that they are given the freedom and responsibility to engage in all the affairs of the school. This process begins at the school level where school administrators create a vision for the school that is rooted in interconnections and collaboration. The research has indicated that devolved leadership builds capacity by creating a network of stakeholders that share in the decision-making responsibilities and that pool their resources and talents. Together they articulate the vision for the school and strive to bring about meaningful learning. School leaders can provide the impetus for change in this regard, but it will be important for them to be mindful to ensure that this process unfolds organically rather than through imposed change.

Another challenge for school leaders will be to reconcile the demands of performance targets with decentralized leadership. Since academic outcomes are evaluative tools for schools and their effectiveness, it is important that decisions regarding standardized tests (e.g., targets, areas of concern, and strategies for improvement) involve all school leaders. It is crucial that educators be given some control over these matters to ensure that teachers do not feel evaluated or ignored when concerns around performance targets arise. Moreover, it is important to limit the influence of standardized testing and targets to ensure that they do not replace meaningful learning with measurable learning in the classroom. Standardized data are important pieces of information that can inform school leaders, but the process by which the data are obtained should be as unobtrusive as possible.

The process of leadership preparation begins at the school board level where board administrators create policies that articulate a decentralized leadership model

grounded in interconnections and shared meaning. This can be accomplished through succession planning policies that actively pursue leadership candidates with leadership training from specialized graduate programs. Some school boards have developed their own leadership preparation courses that communicate the values and leadership skills and approaches associated with living systems theory they wish to foster within their respective school boards. These preparation courses serve as excellent supplementary leadership training programs through which school boards can clearly codify the leadership models they wish to see within their schools. Lastly, school boards can reinforce devolved leadership practices through their principal evaluation policies and processes. These evaluation procedures can include surveys and anecdotal comments from staff members that seek to gauge an administrator's ability to encourage living systems processes within their schools. These measures can be over and above the evaluative procedures taken by the school board to cultivate strong interconnections.

Implications for Theory

The findings from this study suggest that there is a paradigm shift taking place within the realm of educational leadership. The traditional model of a managed system is not supported in the leadership literature. The theories for school leadership need to be modified to reflect this shift. The leadership literature was overwhelmingly supportive of living systems systemic concepts and processes, but the school leadership theories lacked information regarding how to transition away from managed system processes. The literature spoke to the importance of interconnections and the cultivation of an environment rooted in collaboration, change, and shared meaning, but there was a lack of guidance and support for accomplishing this change. Therefore, theories for school

leadership need to be modified to illustrate how to achieve and support the school community through this period of change. The literature has hinted that this transformation must originate from the formation of strong interconnections within schools but it fell short of articulating how the change should unfold.

Implications for Future Research

It is clear that further research is needed regarding school leadership and the change occurring regarding living systems processes within the realm of education. First, it will be important to explore the impact of the shift away from managed systems processes towards living systems concepts. The leadership literature is clear in its espousal of living systems theory, but falls short of communicating how the change should unfold. Additionally, the literature lacks a possible methodology for how school leaders can support the school community through this process. Finally, future research should be undertaken to explore the impact of balancing the need to monitor and evaluate achievement targets through living systems processes. Little is known about how this process would take shape or impact the school community. The leadership discourse suggests that school leaders should be more involved in setting, monitoring, and evaluating performance targets, but the literature does not outline the methodology behind a living systems approach to achievement outcomes.

Conclusion

This analysis was conducted to explore the influence of managed and living systems on educational leadership. The study revealed that the leadership discourse does not encourage the use of managed systems processes; in fact, it espoused an overwhelmingly large amount of support for living systems systemic concepts. The

literature supported the collection of performance data as a tool for measuring and monitoring the learning environment and maintaining desired norms within schools. The findings suggested that scholars favour leadership models rooted in interconnections amongst organizational stakeholders. The authors called for devolution of leadership to encourage collaboration and the creation of a shared organizational meaning. Clearly, more needs to be done to encourage these living systems leadership practices in the education system. Succession planning should emphasize and encourage the use of living systems processes to ensure that schools evolve into interconnected stakeholders pursuing a common purpose. School boards need to actively pursue leadership candidates with leadership training from specialized graduate programs. Board officials can also supplement leadership training in-house through leadership modules geared towards the cultivation of living systems processes in schools. Leadership appointments and the support of current school leaders would, therefore, reflect this ideological thinking and ensure that future administrators respect and promote the living systems leadership models in existence.

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Appendix A

Managed and Living Systems Chart

AUTHOR	MANAGED SYSTEM	LIVING SYSTEM
CAPRA	<ul style="list-style-type: none"> -Classical management theory (an assembly of precisely interlocking parts) -Functional departments (i.e. finance, production etc...) linked together by clearly defined lines of command and communication -Taylor's Scientific Management (centralized decision making and command, clear hierarchy, specialized and highly organized responsibilities, highly efficient procedures, formal structures, highly controlled and tested) -Linked to fast-food industry -mechanistic approach successfully increases efficiency and productivity BUT breeds animosity – people don't like being treated like cogs in a machine -Machines can be controlled 	<ul style="list-style-type: none"> -Self-generating system networks of communication – which creates a collective identity and common meaning -Organizations are alive – a network made of smaller networks within its boundaries -Communities of people interacting and building relationships, making meaningful connections -Tangled web of relationships -The living organization is made up of formal structures and informal networks -Formal structures define the rules and regulations between people, determine the distribution of power, policies, strategies and procedures -Informal networks establish networks of communication that evolve based on the people within the organization -Living systems are ever changing, they create and re-create themselves by transforming or replacing their components -They go through continual structural changes while they preserve their network of organization -Members act autonomously, by controlling them we deprive them of their 'aliveness'

		<p>-Structural changes are triggered through meaningful disturbances (organizations respond to disturbances creatively – this is how they assert their freedom to continually re-create themselves)</p>
MORGAN	<p>-Presents the metaphor of organizations as machines: -Organizations are expected to operate with mechanical precision -Organizational life is ‘routinized’ like clockwork, employees arrive at certain times, perform a set of predetermined set of activities, rest at appointed times, and resume their tasks until work is done -Employees on one shift are replaced by workers on other shifts so work can continue uninterrupted all week long -The work is very mechanical and repetitive, employees are expected to behave and work like parts of a machine -Ex. Fast food companies train their staff to interact with customers according to a detailed code of instructions – their performance is monitored -Managed organizations have orderly relations between clearly defined parts -They are efficient, reliable and operate in a predictable way. -Frederick the Great of Prussia introduced normalizing and</p>	<p>-Linkage between organizational theory and biology – argument that organizations are more like organisms than machines -He compares biological processes and relations among molecules, cells, complex organisms, species and ecology and makes parallels to the relationships between individuals, groups, organizations, populations of organizations and their social ecology -He discusses the idea that employees are motivated by personal needs – employees work best when they can achieve these rewards -Like biological organisms, individuals and groups operate most effectively when their needs are satisfied -Abraham Maslow suggests that humans are motivated by a hierarchy of needs (progressing through physiological, social and psychological needs -We are not merely motivated by money and job security -This organizational theory supports the idea that employees must feel important and useful by giving them meaningful jobs, by giving them autonomy,</p>

	<p>standardizing measures to ensure that his military was a more efficient and reliable force.</p> <p>-He introduced uniforms and ranks, specialization of tasks, standardized equipment, command language and systematic training and centralized command</p> <p>-Max Weber and Classical Management theorists speak to organizations as machines through hierarchical supervision, division of tasks, detailed rules and regulations, precise lines of command and communication, and structured departments</p> <p>-Scientific Management (Frederick Taylor) echoes these principles of the managed system by arguing that organizations should centralize their decision-making, use scientific methods to evaluate their way of doing work, proper employee selection, train employees to work efficiently and monitor employees' work to ensure that procedures are being followed and the appropriate results are achieved (Ford and GM metaphors)</p>	<p>employee-centred style of leadership, job enrichment and recognition</p> <p>-The theory of open systems (inspired by Ludwig von Bertalanffy) argues that like organisms, organizations are "open" to their environments and must achieve an appropriate relation with that environment to survive</p> <p>-Organizations therefore need to understand their environment, which is made up of interactions with customers, suppliers, labour unions, competitors etc...</p> <p>-Open systems are also defined by their interrelated subsystems – like Chinese boxes (boxes inside larger boxes), organizations contain individuals who belong to groups or departments that belong to much larger divisions</p> <p>-Organic forms of organizations promote innovation because they are better positioned to respond to their environment due to their open system approach.</p> <p>-Organic organizations also ensure that organizations promote interorganizational relations by stressing the importance of their environment</p>
<p>MITCHELL & SACKNEY</p>	<p>-Grew out of the 19th and 20th centuries where factory-based industrial and technological economies were concerned with predictability, efficiency, production and technology</p> <p>-Workplaces were organized to promote efficiency,</p>	<p>-Living systems are complex organizations in which all things are interconnected, reciprocal and relational</p> <p>-The seed and the tree metaphor – the seed determines the type of tree that will grow but both are reliant on quantity and quality of sustaining resources</p>

	<p>compliance and predictability</p> <ul style="list-style-type: none"> -The scientific scripts associated with managed systems contends that organizations can be understood by breaking them down into its parts and evaluating whether or not each part is performing their given tasks -Broken parts can be identified, repaired or replaced to ensure its expected level of functionality -They reference that organizations behave a machines and carry out their work with precise regularity -The machine metaphor argues that organizations are characterized by their authoritarian hierarchy, which binds all of the parts together – parts that have no relationship or connection to one another -In managed systems, human behaviour is controlled, prescribed, regulated, standardized and employees are given task-specific roles that are bound by explicit rules and are relationally impersonal (organizations then have the required level of control over their workers) -Managed systems lexicon contains words like: expectations, rules, standards, policies, compliance, order, control, centralized decision-making -Managed systems in education: people view schools as mechanical, 	<p>and the environment</p> <ul style="list-style-type: none"> -The tree is not merely an assemblage of is parts, but rather it is made of parts that are continually changing along with its environment/elements -Living systems are understood by their parts and their relationship to one another, how they interact and connect, and by their organizing features – they grow and are sustained by these scripts -Associated with the theory of interdependence – shifts the view of organizations away from a view of distinct parts of a system to acknowledging that relationships, interactions, and mutual influences emerge among and between people and their environments -Living systems theory is grounded in the perspective of deep ecology – patterns, connections, relationships, contexts and mutual influences become the defining scripts -It argues that all human life and activity is connected and that our organizations need to be life-enhancing and not life-destroying -In eco systems, nothing works in isolation -In living systems, the system is defined by its meaning and the meaning aligns activities and practices and shapes structures -The governing principles become guiding visions, strong values and organizational beliefs -“Replacing the old language of command and control is a language of meaning, patterns,
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	<p>predictable, hierarchical machines defined by rules, procedures, expectations, outcomes</p> <ul style="list-style-type: none"> -Results direct, control and manage teaching and learning within the school setting -The learning is scripted by bells, subjects, evaluations and examinations and is assessed by clear standards 	<p>purposes, influences, connections, and relationships”</p> <ul style="list-style-type: none"> -Living systems in education: honour the nonlinear character of learning – teachers are able to see students as having different learning styles -Teachers are more concerned with what and how their students are learning and not testing or producing
WHEATLEY	<ul style="list-style-type: none"> -Managed systems as command and control models -Command and control model is leaving devastating impacts on organizations – increase in employee disengagement, less successful problem solving, routine work assignments, power focused -Associated with policies, procedures, protocols, laws and regulations that govern managed organizations and paralyze employees -Less productive and centralized decision-making -Managed systems are Byzantine systems that increase risk and irresponsibility – they don’t control people or situations, they limit intelligent work -Leaders impose their power to change the organization -Power is only wielded by few people, which hinders productivity and efficiency 	<ul style="list-style-type: none"> -Presents the living systems model as a naturally occurring model found in all living things -People organize to accomplish more, not less -Self-managed systems are far more productive than any other form of organizing -Engages the intelligence of everyone in the organization, especially when risks are high in order to solve challenges and crises as they arise -Living systems develop shared understandings and meaning – they naturally develop lines of communication networks of workers and complex physical structures -Employees are more willing to do good work, contribute ideas and take responsibility -Workplaces are flexible, smart and resilient -“Effective organization occurs as people see what needs to happen, apply their experience and perceptions to the issue, find those who can help them, and use their own creativity to invent solutions” -Living systems theory promotes participation and self-organization

		<ul style="list-style-type: none">-When employee participate more in the organization they exhibit an inherent desire to contribute to their organizations-Under living systems theory organizations promote creativity, innovation and high levels of contribution-Effective leaders ensure that living systems how a good understanding of their organization – they call people together often and promote communication and information with all stakeholders-This brings more participative processes that are supportive and foster collaboration-Leaders create the mission statement for the organization – which breeds commitment and capacity within the employees-People love to work in organizations that have a sense of history, identity, and purpose
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Appendix B

Managed and Living Systems Summary

Managed Systems	Living Systems
<ol style="list-style-type: none"> 1. Functional departments 2. Centralized decision making/command & Control 3. Highly controlled and tested 4. Work is 'routinized' 5. Are efficient, orderly, reliable & predictable 6. Broken into parts & highly standardized 7. No relationship between parts 8. Hinder problem solving and engagement 9. Leaders impose power 10. Less productive 	<ol style="list-style-type: none"> 1. Self generating networks of communication 2. Communities of people interacting/making relationships 3. System of interconnected networks/formal structures and informal networks 4. Shared common organizational meaning 5. Ever changing along with environment/elements 6. Employees motivated by personal needs 7. Employees must feel valued & meaningful 8. Defined by relationships, mutual influences & interactions 9. Act autonomously 10. Promotes participation, creativity, innovation & collaboration